

UNCLASSIFIED

**Department of Defense  
Fiscal Year (FY) 2022 Budget Estimates**

May 2021



**Army**

*Justification Book of  
Missile Procurement, Army*

UNCLASSIFIED



**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement

**Table of Contents**

**Introduction and Explanation of Contents..... ii**

**Comptroller Exhibit P-1..... iv**

**Line Item Table of Contents (by Appropriation then Line Number)..... ix**

**Line Item Table of Contents (Alphabetically by Line Item Title)..... xii**

**Exhibit P-1M, Procurement Programs - Modification Summary..... xiv**

**Exhibit P-40s..... 1**



## Cost Statement

The following Justification Books were prepared at a cost of \$472,560: Aircraft (ACFT), Missile (MSLS), Weapons & Tracked Combat Vehicles (WTCV), Ammunition (AMMO), Other Procurement Army (OPA) 1 - Tactical & Support Vehicles, Other Procurement Army (OPA) 2 – Communications & Electronics, Other Procurement Army (OPA) 3 & 4 - Other Support Equipment & Spares, Research, Development, Test and Evaluation (RDTE) for: Budget Activity 1, Budget Activity 2, Budget Activity 3, Budget Activity 4, Budget Activity 5A, Budget Activity 5B, Budget Activity 5C, Budget Activity 6, Budget Activity 7, and Budget Activity 8.

# MISSILE PROCUREMENT, ARMY

## Appropriation Language

For construction, procurement, production, and modification of weapons and tracked combat vehicles, equipment, including ordnance, spare parts, and accessories therefore; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefore, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes, \$3,556.251,000 to remain available for obligation until September 30, 2024.

The FY 2022 Overseas Contingency Operations accounted for in the base budget are as follows:

- Direct War Costs accounted for in the Base Budget: \$374,693,000: Direct War costs are those combat or direct combat support costs that will not continue to be expended once combat operations end at major contingency locations.
- Enduring Costs accounted for in the Base Budget: \$266,420,000: Enduring Requirements are enduring in-theater and in CONUS costs that will likely remain after combat operations cease, and have previously been funded in OCO.

FY 2021 includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

FY 2020 includes Division A, Title IX ad X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

UNCLASSIFIED

Department of the Army  
 FY 2022 President's Budget  
 Exhibit P-1 FY 2022 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

11 May 2021

<u>Appropriation</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Missile Procurement, Army	4,342,797	4,017,140	3,556,251
Total Department of the Army	4,342,797	4,017,140	3,556,251

P-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 11, 2021 at 13:41:48

\*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-36)

\*\* Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-68).

UNCLASSIFIED

Department of the Army  
 FY 2022 President's Budget  
 Exhibit P-1 FY 2022 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

11 May 2021

Appropriation: Missile Procurement, Army

Budget Activity	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request
02. Other Missiles	3,451,759	3,154,390	3,038,309
03. Modification of Missiles	854,001	848,682	502,305
04. Spares and Repair Parts	26,444	5,090	5,019
05. Support Equipment and Facilities	10,593	8,978	10,618
Total Missile Procurement, Army	4,342,797	4,017,140	3,556,251

P-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 11, 2021 at 13:41:48

\*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-36)

\*\* Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-68).



UNCLASSIFIED

Department of the Army  
 FY 2022 President's Budget  
 Exhibit P-1 FY 2022 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

11 May 2021

Appropriation: 2032A Missile Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2020 Actual*		FY 2021 Enacted**		FY 2022 Request		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
<u>Budget Activity 02: Other Missiles</u>									
Surface-to-Air Missile System									
1	System Integration and Test Procurement	A		107,157					U
2	Lower Tier Air and Missile Defense (AMD) Sen	A					35,473		U
3	M-SHORAD - Procurement	A	28	233,300	59	517,287	37	331,575	U
4	MSE Missile		156	702,437	177	678,148	180	776,696	U
5	PRECISION STRIKE MISSILE (PRSM)	A			30	49,941	110	166,130	U
6	INDIRECT FIRE PROTECTION CAPABILITY INC 2-I	A		9,337		62,461		25,253	U
Air-To-Surface Missile System									
7	Hellfire Sys Summary	A	4581	425,549	3518	327,490	802	118,800	U
8	Joint Air-to-Ground MSLS (JAGM)		1067	199,295	537	196,548	386	152,177	U
9	Long Range Precision Munition	A			170	38,107	179	44,744	U
Anti-Tank/Assault Missile Sys									
10	Javelin (AAWS-M) System Summary		697	142,794	768	181,325	376	120,842	U
11	TOW 2 System Summary	A	1460	118,458	1231	112,974	887	104,412	U
12	Guided MLRS Rocket (GMLRS)		7878	1,136,794	5502	912,997	5817	935,917	U
13	MLRS Reduced Range Practice Rockets (RRPR)		2982	27,555	3330	30,836	3048	29,574	U
14	High Mobility Artillery Rocket System (HIMARS)				6	46,276	19	128,438	U
15	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM	B	282	300,783					U

P-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 11, 2021 at 13:41:48

\*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-36)

\*\* Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-68).

## UNCLASSIFIED

Department of the Army  
 FY 2022 President's Budget  
 Exhibit P-1 FY 2022 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

11 May 2021

Appropriation: 2032A Missile Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2020 Actual*		FY 2021 Enacted**		FY 2022 Request		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
16	LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)	A	425	48,300			900	68,278	U
Total Other Missiles				3,451,759		3,154,390		3,038,309	
Budget Activity 03: Modification of Missiles									
-----									
Modifications									
17	Patriot Mods			278,716		278,050		205,469	U
18	ATACMS MODS	A		80,320		214,524			U
19	GMLRS MOD	A		5,094					U
20	Stinger Mods			87,262					U
21	AVENGER MODS			14,107		13,942		11,227	U
22	ITAS/TOW Mods			3,469		5,666		4,561	U
23	MLRS Mods			372,550		330,419		273,856	U
24	HIMARS Modifications			12,483		6,081		7,192	U
Total Modification of Missiles				854,001		848,682		502,305	
Budget Activity 04: Spares and Repair Parts									
-----									
Spares and Repair Parts									
25	Spares And Repair Parts			26,444		5,090		5,019	U
Total Spares and Repair Parts				26,444		5,090		5,019	

P-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 11, 2021 at 13:41:48

\*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-36)

\*\* Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-68).

UNCLASSIFIED

Department of the Army  
 FY 2022 President's Budget  
 Exhibit P-1 FY 2022 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

11 May 2021

Appropriation: 2032A Missile Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2020 Actual*		FY 2021 Enacted**		FY 2022 Request		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
<u>Budget Activity 05: Support Equipment and Facilities</u>									
Support Equipment & Facilities									
26	Air Defense Targets			10,593		8,978		10,618	U
Total Support Equipment and Facilities				10,593		8,978		10,618	
Total Missile Procurement, Army				4,342,797		4,017,140		3,556,251	

P-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 11, 2021 at 13:41:48

\*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-36)

\*\* Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-68).



**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement

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

***Appropriation 2032A: Missile Procurement, Army***

<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Line Item Number</b>	<b>Line Item Title</b>	<b>Page</b>
1	02	10	7153C50016	System Integration and Test Procurement.....	1
2	02	10	7265C12000	Lower Tier Air and Missile Defense (AMD) Sensor.....	3
3	02	10	8082C14300	M-SHORAD - Procurement.....	6
4	02	10	8260C53101	MSE Missile.....	15
5	02	10	8540C29600	PRECISION STRIKE MISSILE (PRSM).....	20
6	02	10	8930C61001	INDIRECT FIRE PROTECTION CAPABILITY INC 2-I.....	29
7	02	20	1338C70000	Hellfire Sys Summary.....	33
8	02	20	2605C70302	Joint Air-to-Ground MSLS (JAGM).....	44
9	02	20	2607C71300	Long Range Precision Munition.....	54
10	02	30	0648CC0007	Javelin (AAWS-M) System Summary.....	61
11	02	30	2104C59300	TOW 2 System Summary.....	77
	02	30	2104C59300	TOW 2 System Summary, Advance Procurement.....	89
12	02	30	6005C64400	Guided MLRS Rocket (GMLRS).....	100
13	02	30	6060C65405	MLRS Reduced Range Practice Rockets (RRPR).....	110
14	02	30	6200C02901	High Mobility Artillery Rocket System (HIMARS).....	121
15	02	30	6472C98510	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM.....	123

**UNCLASSIFIED**

**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement

***Appropriation 2032A: Missile Procurement, Army***

---

<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Line Item Number</b>	<b>Line Item Title</b>	<b>Page</b>
16	02	30	6870C88001	LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS).....	131

***Appropriation 2032A: Missile Procurement, Army***

---

<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Line Item Number</b>	<b>Line Item Title</b>	<b>Page</b>
17	03	10	0962C50700	Patriot Mods.....	165
18	03	10	1823CA6700	ATACMS MODS.....	167
19	03	10	1824C57701	GMLRS MOD.....	169
20	03	10	2684C20000	Stinger Mods.....	171
21	03	10	2690CE8710	AVENGER MODS.....	184
22	03	10	3972C61700	ITAS/TOW Mods.....	186
23	03	10	6552C67500	MLRS Mods.....	196
24	03	10	6580C67501	HIMARS Modifications.....	202

**UNCLASSIFIED**

**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement

***Appropriation 2032A: Missile Procurement, Army***

---

<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Line Item Number</b>	<b>Line Item Title</b>	<b>Page</b>
25	04	10	1242CA0250	Spares And Repair Parts.....	205

***Appropriation 2032A: Missile Procurement, Army***

---

<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Line Item Number</b>	<b>Line Item Title</b>	<b>Page</b>
26	05	10	1242C93000	Air Defense Targets.....	





**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement

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

<b>Line Item Title</b>	<b>Line Item Number</b>	<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Page</b>
ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM	6472C98510	15	02	30.....	123
ATACMS MODS	1823CA6700	18	03	10.....	167
AVENGER MODS	2690CE8710	21	03	10.....	184
Air Defense Targets	1242C93000	26	05	10.....	
GMLRS MOD	1824C57701	19	03	10.....	169
Guided MLRS Rocket (GMLRS)	6005C64400	12	02	30.....	100
HIMARS Modifications	6580C67501	24	03	10.....	202
Hellfire Sys Summary	1338C70000	7	02	20.....	33
High Mobility Artillery Rocket System (HIMARS)	6200C02901	14	02	30.....	121
INDIRECT FIRE PROTECTION CAPABILITY INC 2-I	8930C61001	6	02	10.....	29
ITAS/TOW Mods	3972C61700	22	03	10.....	186
Javelin (AAWS-M) System Summary	0648CC0007	10	02	30.....	61
Joint Air-to-Ground MSLs (JAGM)	2605C70302	8	02	20.....	44
LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)	6870C88001	16	02	30.....	131
Long Range Precision Munition	2607C71300	9	02	20.....	54
Lower Tier Air and Missile Defense (AMD) Sensor	7265C12000	2	02	10.....	3
M-SHORAD - Procurement	8082C14300	3	02	10.....	6

**UNCLASSIFIED**

**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement

<b>Line Item Title</b>	<b>Line Item Number</b>	<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Page</b>
MLRS Mods	6552C67500	23	03	10.....	196
MLRS Reduced Range Practice Rockets (RRPR)	6060C65405	13	02	30.....	110
MSE Missile	8260C53101	4	02	10.....	15
PRECISION STRIKE MISSILE (PRSM)	8540C29600	5	02	10.....	20
Patriot Mods	0962C50700	17	03	10.....	165
Spares And Repair Parts	1242CA0250	25	04	10.....	205
Stinger Mods	2684C20000	20	03	10.....	171
System Integration and Test Procurement	7153C50016	1	02	10.....	1
TOW 2 System Summary	2104C59300	11	02	30.....	77
TOW 2 System Summary, Advance Procurement	2104C59300		02	30.....	89

**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement  
Exhibit P-1M, Procurement Programs - Modification Summary  
(Listing by Model)

**Lookup Matrix by Model**

<b>Model:</b> Various		
<b>P-3a Individual Modifications</b>		
Modification Number	Modification Title	Applies to Multiple Models
C50700	Patriot Mods	No

<b>Model:</b> Avenger Basic and Slew-to-Cue Systems		
<b>P-3a Individual Modifications</b>		
Modification Number	Modification Title	Applies to Multiple Models
CE8710	AVENGER MODS	No

<b>Model:</b> M270A1		
<b>P-3a Individual Modifications</b>		
Modification Number	Modification Title	Applies to Multiple Models
C67500	MLRS Mods	No

<b>Model:</b> M142 High Mobility Artillery Rocket System		
<b>P-3a Individual Modifications</b>		
Modification Number	Modification Title	Applies to Multiple Models
C67501	HIMARS Modifications	No

**UNCLASSIFIED**

**UNCLASSIFIED**

Army • Budget Estimates FY 2022 • Procurement  
 Exhibit P-1M, Procurement Programs - Modification Summary  
 (Funding for Modifications)

**Funding (\$ M)**

P-3a Modification Title	PYS	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
<b>Exhibit P-3a</b>										
Patriot Mods	4,485.842	278.716	278.050	205.469	-	205.469	-	-	-	-
AVENGER MODS	192.317	14.107	13.942	11.227	-	11.227	-	-	-	-
MLRS Mods	1,062.635	372.550	330.419	273.856	-	273.856	-	-	-	-
HIMARS Modifications	245.250	12.483	6.081	7.192	-	7.192	-	-	-	-
<b>Totals (Total Obligation Authority)</b>										
<b>Total Obligation Authority</b>	<b>5,986.044</b>	<b>677.856</b>	<b>628.492</b>	<b>497.744</b>	<b>0.000</b>	<b>497.744</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**UNCLASSIFIED**

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System

**P-1 Line Item Number / Title:**  
 7153C50016 / System Integration and Test Procurement

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	608.806	107.157	-	-	-	-	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	608.806	107.157	-	-	-	-	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>608.806</b>	<b>107.157</b>	-	-	-	-	-	-	-	-	-	-

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

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

**Description:**

- System Integration and Test Procurement line (formerly Lower Tier Air and Missile Defense (LTAMD)) supports the Field Surveillance Program (FSP), PAC-3 Missile Support Center (P3MSC), International Engineering Services Program (IESP), Integrated Logistics Support (ILS), US Unique Engineering Services (ES), and System Engineering Program Management (SEPM) activities. The mission of the PATRIOT Advanced Capability-3 (PAC-3) Missile Field Surveillance Program (FSP) is required to ensure that the reliability, performance, and safety of fielded PAC-3 missiles remain within the classified system specification for the life of the system. Initial FSP tasks confirm the quality of design, materials, procedures, and processes used in the manufacture of the system. After missile deployment, results from surveillance firings, inspections, functional tests, Storage and Aging Programs, and depot level missile maintenance processing provide the data required for the assessment of reliability, performance, and safety of the missile stockpile. This includes PAC-3 missile tooling and test equipment. The PAC-3 missile is fielded under the Certified Round Concept. Under this approved concept, the PAC-3 missile is capable of being placed in extended storage as part of war reserve stocks or deployed in operational units for variable periods and then fired without intervening tests or checkouts. In accordance with the Certified Round Concept, the reliability/performance of the missile is certified by the Lower Tier Project Office (LTPO) to be at an acceptable level for a stated period of time or corrective action is taken.
- The certification of reliability is made possible through the use of the PAC-3 Missile Support Center (P3MSC) contract to use technical support and knowledge of the testing of discrete lots of component parts, subassemblies and assemblies which the prime contractor Lockheed Martin Missiles and Fire Control (LMMFC) provides as the only source of technical knowledge, expertise, and facilities to perform FSP activities and process PAC-3 missiles.
- The PATRIOT International Engineering Services Program provides continuing engineering support for system software and hardware for the life of the PATRIOT Air Defense System for US and international partners. The Engineering Services Program is designed to standardize and improve the PATRIOT system within the performance envelope described in the system specification. The support provided under this program includes PATRIOT software maintenance, Post Deployment Build 8/8.x(PDB-8/8.x), engineering support for PATRIOT peculiar hardware, government furnished equipment, logistics, technical data package, trainers, US Unique ES, and integrated diagnostics support system. This is accomplished through the investigation, analysis, and development of solutions to identified problems. Modifications to hardware are engineered for manufacturing implementation and retrofit of fielded hardware through the modification process. The Dismounted Patriot Information Coordination Central (D-PICC) effort is an example of rehosting tactical Patriot software maintained via engineering services to a smaller, more mobile hardware configuration that will allow flexible, tailorable deployment options by freeing up Battalion level ICC's.
- Systems Engineering and Project Management support encompasses the overall planning, management, and control of the PATRIOT Weapon System. Includes all Engineering and Program Management disciplines and activities. Program office core employee labor costs moved from Procurement to OMA in FY19 as part of an OSD auditability directive.
- Logistics Recurring includes all aspects of Integrated Logistics Support (ILS) management, e.g., maintenance support, facilities, personnel, training, testing, and fielding.
- Supports procuring, fielding, and supporting materiel solutions to counter cybersecurity and electronic warfare shortcomings to all elements of the Lower Tier Battle Space.

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System	<b>P-1 Line Item Number / Title:</b> 7153C50016 / System Integration and Test Procurement
---	--

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

**Line Item MDAP/MAIS Code:** N/A

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	107.157	-	-	-	-	-	-	-	-
<b>Total:</b> Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	107.157	-	-	-	-	-	-	-	-

**Justification:**  
Beginning FY21, C50016 / System Integration and Test Procurement funding was realigned to C50700 / Patriot Mods.

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System  
**P-1 Line Item Number / Title:** 7265C12000 / Lower Tier Air and Missile Defense (AMD) Sensor

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	-	-	-	35.473	-	35.473	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	-	-	-	35.473	-	35.473	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	-	-	-	<b>35.473</b>	-	<b>35.473</b>	-	-	-	-	-	-

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

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

**Description:**

Lower Tier Air Missile Defense Sensor (LTAMDS) program will provide the required sensing capabilities, surveillance and fire control in the lower tier portion of the Army Integrated Air and Missile Defense (IAMD) of the ballistic missile defense battlespace. The LTAMDS capability increases sensor/radar performance to maximize the inherent PATRIOT Advanced Capability (PAC-3) Missile Segment Enhanced (MSE) Interceptor capabilities to engage threats. The initial LTAMDS baseline established by the LTAMDS Rapid Prototyping effort will include the procurement of 16 sensors planned for fielding in FY25 through FY28. The additional quantities supporting the Army Acquisition Objective shall be fielded in FY28 through FY34 subsequent to baseline changes identified through Pre-Planned Product Improvement activities.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	35.473	-	35.473	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	-	-	<b>35.473</b>	-	<b>35.473</b>	-	-	-	-

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System **P-1 Line Item Number / Title:** 7265C12000 / Lower Tier Air and Missile Defense (AMD) Sensor

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

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C12101 / Lower Tier Air and Missile Defense Sensor				- / -	- / -	- / -	- / 35.473	- / -	- / 35.473
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				- / -	- / -	- / -	- / 35.473	- / -	- / 35.473

\*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:**  
 FY22 base Procurement dollars in the amount of \$35.473 million supports Initial Production Facilitization (IPF) and Interim Contractor Support for fielding UMR capability.  
 This program supports the Air and Missile Defense Cross Functional Team (CFT).  
 Lower Tier Air and Missile Defense (AMD) Sensor is a new start in FY 2022.



**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 7265C12000 / Lower Tier Air and Missile Defense (AMD) Sensor	<b>Item Number / Title [DODIC]:</b> C12101 / Lower Tier Air and Missile Defense Sensor

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

<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	-	-	35.473	-	35.473
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	-	-	35.473	-	35.473
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
<b>Total Obligation Authority</b> <i>(\$ in Millions)</i>	-	-	-	<b>35.473</b>	-	<b>35.473</b>

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

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

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

<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2020</b>			<b>FY 2021</b>			<b>FY 2022 Base</b>			<b>FY 2022 OCO</b>			<b>FY 2022 Total</b>		
	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)
<b>Hardware Cost</b>																		
<b>Recurring Cost</b>																		
ICS (Interim Contractor Support)	-	-	-	-	-	-	-	-	-	-	-	6.573	-	-	-	-	-	6.573
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	6.573	-	-	-	-	-	6.573
<b>Non Recurring Cost</b>																		
IPF (Initial Production Facilitization)	-	-	-	-	-	-	-	-	-	-	-	28.900	-	-	-	-	-	28.900
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	28.900	-	-	-	-	-	28.900
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	-	-	-	-	-	-	35.473	-	-	-	-	-	35.473
<b>Gross/Weapon System Cost</b>	-	-	-	-	-	-	-	-	-	-	-	35.473	-	-	-	-	-	35.473

<b>Secondary Distribution</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	35.473	-	35.473
<b>Total:</b>	Quantity	-	-	-	-	-
<b>Secondary Distribution</b>	Total Obligation Authority	-	-	35.473	-	35.473

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System

**P-1 Line Item Number / Title:**  
8082C14300 / M-SHORAD - Procurement

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604117A

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	28	59	37	-	37	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	-	233.300	517.287	331.575	-	331.575	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	-	233.300	517.287	331.575	-	331.575	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	-	<b>233.300</b>	<b>517.287</b>	<b>331.575</b>	-	<b>331.575</b>	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	-	8,332.143	8,767.576	8,961.486	-	8,961.486	-	-	-	-	-	-

**Description:**

M-SHORAD is an Air Defense weapon system consisting of multiple ground-to-air missile launchers, sensors, and a gun integrated on a Stryker A1 combat vehicle providing the Army improved capabilities for defense of maneuver formations and other tactical echelons from low altitude air attack and surveillance. Adaptive threats have developed a suite of airborne threat capabilities, supported by an integrated mix of surface-to-air and surface-to-surface shooters that threaten the ability of maneuver forces to conduct operations. Specifically, maneuver formations require the improved M-SHORAD air defense identification and defeat capabilities to counter Fixed Wing (FW), Rotary Wing (RW), Unmanned Aircraft Systems (UAS) and Rocket, Artillery and Mortar (RAM) threats.

The M-SHORAD capability will be provided using an incremental approach as part of a Family of Systems (FoS) capable of operating individually and collectively to provide the scalability and flexibility to meet mission demands. The first increment is the rapidly fielded M-SHORAD Inc. 1 system supported by a Fiscal Year (FY) 2018 Army Approved Directed Requirement informed by a FY17 M-SHORAD demonstration. Follow-on increments to the M-SHORAD FoS will be supported by a Joint Requirements Oversight Council (JROC) approved Capability Development Document (CDD).

This program supports the Air and Missile Defense Cross Functional Team (CFT).

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	28	59	37	-	37	-	-	-	-
	Total Obligation Authority	233.300	517.287	331.575	-	331.575	-	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>28</b>	<b>59</b>	<b>37</b>	-	<b>37</b>	-	-	-	-
	<b>Total Obligation Authority</b>	<b>233.300</b>	<b>517.287</b>	<b>331.575</b>	-	<b>331.575</b>	-	-	-	-

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System **P-1 Line Item Number / Title:**  
 8082C14300 / M-SHORAD - Procurement

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604117A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C14301 / Maneuver - Short Range Air Defense (M-SHORAD)	P-5a, P-21	A		- / -	28 / 233.300	59 / 517.287	37 / 331.575	- / -	37 / 331.575
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				- / -	<b>28 / 233.300</b>	<b>59 / 517.287</b>	<b>37 / 331.575</b>	- / -	<b>37 / 331.575</b>

\*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 Army approved a Directed Requirement (DR) initiating the integration and procurement of an Initial M-SHORAD (now known as M-SHORAD Inc.1) capability on a Stryker combat vehicle on 21 January 2018. PEO MS awarded NTE FAR based Fixed Price Contract to GDLS on Sept 30, 2020. The Army plans on definitizing the contract by Aug 17, 2021 for procurement and fielding of 144 M-SHORAD Inc. 1 systems to include spares, engineering services and Logistics support.

FY 2022 Base procurement funding in the amount of \$331.575M.

The 37 M-SHORAD Inc.1 systems support 3rd Battalion and portion of 4th Battalion. These quantities are required in order to meet the Full Operational Capability requirement specified in the Directed Requirement.

This program supports the Air and Missile Defense Cross Functional Team (CFT).

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>													<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10						<b>P-1 Line Item Number / Title:</b> 8082C14300 / M-SHORAD - Procurement						<b>Item Number / Title [DODIC]:</b> C14301 / Maneuver - Short Range Air Defense (M-SHORAD)						
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A									<b>MDAP/MAIS Code:</b>									
<b>Resource Summary</b>				<b>Prior Years</b>		<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 Total</b>				
Procurement Quantity ( <i>Units in Each</i> )				-		28		59		37		-		37				
Gross/Weapon System Cost ( <i>\$ in Millions</i> )				-		233.300		517.287		331.575		-		331.575				
Less PY Advance Procurement ( <i>\$ in Millions</i> )				-		-		-		-		-		-				
Net Procurement (P-1) ( <i>\$ in Millions</i> )				-		233.300		517.287		331.575		-		331.575				
Plus CY Advance Procurement ( <i>\$ in Millions</i> )				-		-		-		-		-		-				
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )				-		<b>233.300</b>		<b>517.287</b>		<b>331.575</b>		-		<b>331.575</b>				
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																		
Initial Spares ( <i>\$ in Millions</i> )				-		-		-		-		-		-		-		
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )				-		8,332.143		8,767.576		8,961.486		-		8,961.486				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2020</b>			<b>FY 2021</b>			<b>FY 2022 Base</b>			<b>FY 2022 OCO</b>			<b>FY 2022 Total</b>		
	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)
Flyaway Cost																		
Recurring Cost																		
Initial M-SHORAD <sup>(†)</sup>	-	-	-	8,253.571	28	231.100	7,879.441	59	464.887	8,066.892	37	298.475	-	-	-	8,066.892	37	298.475
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	231.100	-	-	464.887	-	-	298.475	-	-	-	-	-	298.475
Non Recurring Cost																		
Engineering Sevices	-	-	-	-	-	-	-	-	12.500	-	-	5.700	-	-	-	-	-	5.700
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	12.500	-	-	5.700	-	-	-	-	-	5.700
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	231.100	-	-	477.387	-	-	304.175	-	-	-	-	-	304.175
Hardware Cost																		
Recurring Cost																		
GFE HDW	-	-	-	-	-	-	-	-	8.300	-	-	4.900	-	-	-	-	-	4.900
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	8.300	-	-	4.900	-	-	-	-	-	4.900
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	-	-	-	8.300	-	-	4.900	-	-	-	-	-	4.900
Package Fielding Cost																		
Recurring Cost																		
Fielding	-	-	-	-	-	-	-	-	-	-	-	8.100	-	-	-	-	-	8.100
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	8.100	-	-	-	-	-	8.100
<i>Subtotal: Package Fielding Cost</i>	-	-	-	-	-	-	-	-	-	-	-	8.100	-	-	-	-	-	8.100
Support - Initial Spares and Repair Parts Cost																		

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8082C14300 / M-SHORAD - Procurement	<b>Item Number / Title [DODIC]:</b> C14301 / Maneuver - Short Range Air Defense (M-SHORAD)

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

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Initial Spares and Repair Parts	-	-	-	-	-	-	-	-	25.300	-	-	8.400	-	-	-	-	-	8.400
<i>Subtotal: Support - Initial Spares and Repair Parts Cost</i>	-	-	-	-	-	-	-	-	<b>25.300</b>	-	-	<b>8.400</b>	-	-	-	-	-	<b>8.400</b>
Support - Logistics Cost																		
Integrated Logistics Support	-	-	-	-	-	-	-	-	3.500	-	-	3.800	-	-	-	-	-	3.800
<i>Subtotal: Support - Logistics Cost</i>	-	-	-	-	-	-	-	-	<b>3.500</b>	-	-	<b>3.800</b>	-	-	-	-	-	<b>3.800</b>
Support - Program Management Cost																		
Government Management	-	-	-	-	-	2.200	-	-	2.800	-	-	2.200	-	-	-	-	-	2.200
<i>Subtotal: Support - Program Management Cost</i>	-	-	-	-	-	<b>2.200</b>	-	-	<b>2.800</b>	-	-	<b>2.200</b>	-	-	-	-	-	<b>2.200</b>
<b>Gross/Weapon System Cost</b>	-	-	-	<b>8,332.143</b>	<b>28</b>	<b>233.300</b>	<b>8,767.576</b>	<b>59</b>	<b>517.287</b>	<b>8,961.486</b>	<b>37</b>	<b>331.575</b>	-	-	-	<b>8,961.486</b>	<b>37</b>	<b>331.575</b>

**Remarks:**  
FY 2022 Base procurement funding in the amount of \$331.575M procures 37 Systems.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	28	59	37	-	37
	Total Obligation Authority	233.300	517.287	331.575	-	331.575
<b>Total:</b>	<b>Quantity</b>	<b>28</b>	<b>59</b>	<b>37</b>	<b>-</b>	<b>37</b>
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>233.300</b>	<b>517.287</b>	<b>331.575</b>	<b>-</b>	<b>331.575</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army							<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10			<b>P-1 Line Item Number / Title:</b> 8082C14300 / M-SHORAD - Procurement				<b>Item Number / Title [DODIC]:</b> C14301 / Maneuver - Short Range Air Defense (M-SHORAD)					

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Initial M-SHORAD <sup>(†)</sup>		2020	GDLS / Sterling, MI	SS / FFP	TBD	Sep 2020	Jun 2022	28	8,253.571	N		
Initial M-SHORAD <sup>(†)</sup>		2021	GDLS / Sterling, MI	Option / FFP	HSV	Apr 2021	Dec 2022	59	7,879.441	N		
Initial M-SHORAD <sup>(†)</sup>		2022	GDLS / Sterling, MI	Option / FFP	HSV	Jun 2022	Mar 2024	37	8,066.892	N		

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

**Remarks:**  
FY 2022 Base procurement funding in the amount of \$331.575M procures 37 M-SHORAD Inc. 1 Systems.



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army															<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10										<b>P-1 Line Item Number / Title:</b> 8082C14300 / M-SHORAD - Procurement										<b>Item Number / Title [DODIC]:</b> C14301 / Maneuver - Short Range Air Defense (M-SHORAD)									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2022															Fiscal Year 2023															BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022															Calendar Year 2023															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P							
Initial M-SHORAD																																					
1		2020	ARMY	28	0	28	-	-	-	-	-	-	-	-	-	1	3	4	6	6	6	2													0		
1		2021	ARMY	59	0	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	4	6	6	6	6	6	6	6	6	6	6	7			
1		2022	ARMY	37	0	37										A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P							



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army															<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10										<b>P-1 Line Item Number / Title:</b> 8082C14300 / M-SHORAD - Procurement										<b>Item Number / Title [DODIC]:</b> C14301 / Maneuver - Short Range Air Defense (M-SHORAD)									

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2024												Fiscal Year 2025												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024												Calendar Year 2025												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Initial M-SHORAD																															
1		2020	ARMY	28	28	0																							0		
1		2021	ARMY	59	52	7	6	1																					0		
1		2022	ARMY	37	0	37	-	-	-	-	-	6	6	6	6	6	6												1		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10		<b>P-1 Line Item Number / Title:</b> 8082C14300 / M-SHORAD - Procurement
		<b>Item Number / Title [DODIC]:</b> C14301 / Maneuver - Short Range Air Defense (M-SHORAD)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)								
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	GDLS - Sterling, MI	3	4	6	0	0	0	0	0	0	0	21	21

**Remarks:**  
FY 2022 Base procurement funding in the amount of \$331.575M Procures 37 M-SHORAD Inc. 1 Systems.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System

**P-1 Line Item Number / Title:**  
8260C53101 / MSE Missile

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604865A, 0603869A, 0604869A, 0605456A

**Line Item MDAP/MAIS Code:** 492

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	1,278	156	177	180	-	180	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	5,223.015	702.437	678.148	776.696	-	776.696	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	5,223.015	702.437	678.148	776.696	-	776.696	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>5,223.015</b>	<b>702.437</b>	<b>678.148</b>	<b>776.696</b>	<b>-</b>	<b>776.696</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	4,086.866	4,502.801	3,831.345	4,314.978	-	4,314.978	-	-	-	-	-	-

**Description:**

THE P-40 QUANTITY FOR FY20 AND FY21 IS SUBJECT TO BE UPDATED WITH ACTUALS.

Note: Beginning FY21, funds from System Integration and Test Procurement / C50016 were realigned into MSE Missile / C53101.

The MSE Missile line supports the procurement of certified missile round and required ancillary hardware for production and fielding, Field Surveillance Program (FSP), PAC-3 Missile Support Center (P3MSC), Integrated Logistics Support (ILS), US Unique Engineering Services (ES), and System Engineering Program Management (SEPM) activities.

The PATRIOT Advanced Capability 3 (PAC-3) Missile Segment Enhancement (MSE) is a high velocity hit-to-kill, surface-to-air missile capable of intercepting tactical ballistic missiles, air breathing threats, cruise missiles, and unmanned aerial systems. The PAC-3 MSE represents the next generation PAC-3 missile which provides expanded battlespace performance against evolving threats and has been fully integrated into the PATRIOT system for US and international partners. The PAC-3 MSE is an agile, lethal interceptor providing substantial missile capabilities when combined with critical ground system improvements.

Additionally, the PAC-3 MSE enhances Insensitive Munitions (IM) through a less sensitive, increased performance lethality enhancer, the addition of armor and a thermally initiated venting system. A single canister design provides enhanced warfighter and logistics flexibility, and facilitates improved IM performance for greater warfighter safety. The PATRIOT Advanced Capability-3 (PAC-3) Missile Field Surveillance Program (FSP) is required to ensure that the reliability, performance, and safety of fielded missiles in the PATRIOT family remain within the classified system specification for the life of the system. Initial FSP tasks confirm the quality of design, materials, tooling and test equipment procedures, and processes used in the manufacture of the PATRIOT Family of Missiles (PFoM). After missile deployment, results from surveillance firings, inspections, functional tests, Storage and Aging Programs, and depot level missile maintenance processing provide the data required for the assessment of reliability, performance, and safety of the missile stockpile. The PFoM are fielded under the Certified Round Concept. Under this approved concept, the missiles are capable of being placed in extended storage as part of war reserve stocks or deployed in operational units for variable periods and then fired without intervening tests or checkouts. In accordance with the Certified Round Concept, the reliability/performance of the missile is certified by the Short and Intermediate Effectors for Layered Defense (SHIELD) Project Office to be at an acceptable level for a stated period of time or corrective action is taken.

The certification of reliability is made possible through the use of the PAC-3 Missile Support Center (P3MSC) contract to use technical support and knowledge of the testing of discrete lots of component parts, subassemblies and assemblies which the prime contractor Lockheed Martin Missiles and Fire Control (LMMFC) provides as the only source of technical knowledge, expertise, and facilities to perform FSP activities and process PFoM.

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System **P-1 Line Item Number / Title:**  
 8260C53101 / MSE Missile

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604865A, 0603869A, 0604869A, 0605456A

**Line Item MDAP/MAIS Code:** 492

Systems Engineering and Project Management support encompasses the overall planning, management, and control of the PATRIOT Weapon System. Includes all Engineering and Program Management disciplines and activities.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	156	177	180	-	180	-	-	-	-
	Total Obligation Authority	702.437	678.148	776.696	-	776.696	-	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>156</b>	<b>177</b>	<b>180</b>	-	<b>180</b>	-	-	-	-
	<b>Total Obligation Authority</b>	<b>702.437</b>	<b>678.148</b>	<b>776.696</b>	-	<b>776.696</b>	-	-	-	-

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System **P-1 Line Item Number / Title:** 8260C53101 / MSE Missile

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604865A, 0603869A, 0604869A, 0605456A

**Line Item MDAP/MAIS Code:** 492

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C53101 / MSE Missile				1,278 / 5,223.015	156 / 702.437	177 / 678.148	180 / 776.696	- / -	180 / 776.696
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>1,278 / 5,223.015</b>	<b>156 / 702.437</b>	<b>177 / 678.148</b>	<b>180 / 776.696</b>	<b>- / -</b>	<b>180 / 776.696</b>

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

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

**Justification:**  
 FY 2022 procurement dollars in the amount of \$776.696 million support the production of 180 Missile Segment Enhancement (MSE) missiles, 25 Launcher Mod Kits (LMK), Missile Round Trainers (MRT), Empty Round Trainers (ERT), Field Surveillance Program (FSP), supporting equipment, ancillary missile items, PAC-3 Missile Support Center (P3MSC), Obsolescence, System Engineering/Program Management (SE/PM), and Government/Software Engineering.

Army Acquisition Objective (AAO) is 3376.

\*Unit prices reflect an assessed yearly Foreign Military Sales (FMS) procurement of PAC-3 missile variants. In the event FMS procurements do not occur at this level, the budgeted missile unit price may not be achievable.

\*\*The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to increase the Army procurement MSE missiles.

\*\*\*Transitioned from Fixed Price Incentive (Firm Target) (FPIF) to Firm Fixed Price (FFP) in FY21 PAC-3 Production contract.

**UNCLASSIFIED**

**Exhibit P-5, Cost Analysis: PB 2022 Army** **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8260C53101 / MSE Missile	<b>Item Number / Title [DODIC]:</b> C53101 / MSE Missile
--	--	---

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	1,278	156	177	180	-	180
Gross/Weapon System Cost (\$ in Millions)	5,223.015	702.437	678.148	776.696	-	776.696
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5,223.015	702.437	678.148	776.696	-	776.696
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>5,223.015</b>	<b>702.437</b>	<b>678.148</b>	<b>776.696</b>	<b>-</b>	<b>776.696</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	4,086.866	4,502.801	3,831.345	4,314.978	-	4,314.978

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<b>Flyaway Cost</b>																		
<b>Recurring Cost</b>																		
Missile Hardware	3,929.334	1,143	4,491.229	4,117.265	147	605.238	3,813.760	146	556.809	3,795.933	180	683.268	-	-	-	3,795.933	180	683.268
Field Surveillance	-	-	47.959	-	-	5.949	-	-	18.732	-	-	18.169	-	-	-	-	-	18.169
PAC-3 Missile Support Center (P3MSC)	-	-	26.264	-	-	3.899	-	-	10.501	-	-	10.356	-	-	-	-	-	10.356
Obsolescence	-	-	106.774	-	-	8.597	-	-	15.307	-	-	21.007	-	-	-	-	-	21.007
Launcher Mod Kit (LMK)	1,824.700	40	72.988	247.585	41	10.151	253.094	32	8.099	255.960	25	6.399	-	-	-	255.960	25	6.399
Heater Kits	-	-	2.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Msl Round Trainer / Empty Round Trainer	-	-	166.138	-	-	45.695	-	-	44.601	-	-	14.599	-	-	-	-	-	14.599
Initial Production Facilitization	-	-	88.313	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Government/Software Engineering	-	-	41.140	-	-	9.701	-	-	9.699	-	-	9.299	-	-	-	-	-	9.299
Sys Engrg/Proj Mgmt (SE/PM) Contractor	-	-	179.710	-	-	13.207	-	-	13.401	-	-	13.599	-	-	-	-	-	13.599
<b>Subtotal: Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>5,223.015</b>	<b>-</b>	<b>-</b>	<b>702.437</b>	<b>-</b>	<b>-</b>	<b>677.149</b>	<b>-</b>	<b>-</b>	<b>776.696</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>776.696</b>
<b>Non Recurring Cost</b>																		
Organic	-	-	-	-	-	-	-	-	0.999	-	-	-	-	-	-	-	-	-
<b>Subtotal: Non Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.999</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subtotal: Flyaway Cost</b>	<b>-</b>	<b>-</b>	<b>5,223.015</b>	<b>-</b>	<b>-</b>	<b>702.437</b>	<b>-</b>	<b>-</b>	<b>678.148</b>	<b>-</b>	<b>-</b>	<b>776.696</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>776.696</b>

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>													<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10						<b>P-1 Line Item Number / Title:</b> 8260C53101 / MSE Missile						<b>Item Number / Title [DODIC]:</b> C53101 / MSE Missile						
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :											<b>MDAP/MAIS Code:</b>							

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	4,086.866	1,278	5,223.015	4,502.801	156	702.437	3,831.345	177	678.148	4,314.978	180	776.696	-	-	-	4,314.978	180	776.696

**Remarks:**  
Beginning FY21, funds from System Integration and Test Procurement / C50016 were realigned into MSE Missile / C53101.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	156	177	180	-	180
	Total Obligation Authority	702.437	678.148	776.696	-	776.696
<b>Total:</b> Secondary Distribution	Quantity	<b>156</b>	<b>177</b>	<b>180</b>	-	<b>180</b>
	Total Obligation Authority	<b>702.437</b>	<b>678.148</b>	<b>776.696</b>	-	<b>776.696</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System	<b>P-1 Line Item Number / Title:</b> 8540C29600 / PRECISION STRIKE MISSILE (PRSM)
---	--

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0607134A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	30	110	-	110	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	-	-	49.941	166.130	-	166.130	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	-	-	49.941	166.130	-	166.130	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	-	-	<b>49.941</b>	<b>166.130</b>	-	<b>166.130</b>	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	-	-	1,664.700	1,510.273	-	1,510.273	-	-	-	-	-	-

**Description:**

Precision Strike Missile (PrSM) is the Army's next generation surface-to-surface missile that replaces and improves upon Army Tactical Missile System (ATACMS) capabilities. PrSM requirements include: max range of greater than 400km, specified lethality against the designated target set, a Launch Pod Missile Container (LPMC) that holds two missiles, survivability in a threat environment, and compatibility with the existing launcher platforms (M270A2 Multiple Launch Rocket System (MLRS) and M142 High Mobility Artillery Rocket System (HIMARS)). PrSM will meet cluster and insensitive munition requirements and is being designed with an open system architecture that provides the capability for future growth to counter new and emerging threats. The mission of the PrSM System is to attack/neutralize/suppress/destroy targets using missile delivered indirect precision fires. PrSM will provide Joint Force Commanders with a 24/7, all- weather capability to attack critical and time sensitive area and point targets including threat air defense, missile launchers, command and control centers, assembly/ staging areas and high payoff targets at all depths of the multi-domain battlefield. PrSM will counter the enemy's ability to conduct combat maneuver and air defense operations.

The current Army Acquisition Objective (AAO) is 3,986 PrSM missiles. The Army Procurement Objective (APO) for PrSM will be determined at Milestone B.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army									
Quantity	-	30	110	-	110	-	-	-	-
Total Obligation Authority	-	49.941	166.130	-	166.130	-	-	-	-
<b>Total:</b>									
<b>Secondary Distribution</b>									
Quantity	-	<b>30</b>	<b>110</b>	-	<b>110</b>	-	-	-	-
Total Obligation Authority	-	<b>49.941</b>	<b>166.130</b>	-	<b>166.130</b>	-	-	-	-



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System **P-1 Line Item Number / Title:** 8540C29600 / PRECISION STRIKE MISSILE (PRSM)

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0607134A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C29850 / PrSM Baseline	P-5a, P-21			- / -	- / -	30 / 49.941	110 / 166.130	- / -	110 / 166.130
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				- / -	- / -	<b>30 / 49.941</b>	<b>110 / 166.130</b>	- / -	<b>110 / 166.130</b>

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

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

**Justification:**  
 FY 2022 Base procurement dollars in the amount of \$166.130M supports the production of 110 Early Operational Capability (EOC) PrSM missiles with Launch Pod Missile Containers (LPMC). FY 2022 procurement dollars support \$38.139M Base, \$0.000 Direct War, and \$127.991M Enduring costs.

FY21-24 procurement quantities support fielding an early operational PrSM capability under an Urgent Materiel Release (UMR) beginning in FY 2023. The UMR fielding is necessary to close the capability gap between the current capability and near-peer missile capabilities before the program transitions to Full Rate Production (FRP). On 3 FEB 2021 Army Futures Command, Commanding General signed a Directed Requirement for initial quantities of PrSM EOC. FY21-24 MIPA funds will initially support an EOC and then transition to Full Rate Production and achieve Initial Operational Capability (IOC) in FY 2025. EOC production begins in FY 2021 with fielding occurring in FY 2023.

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 supports the Long Range Precision Fires (LRPF) Cross Functional Team (CFT).

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>						<b>Date:</b> May 2021		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10			<b>P-1 Line Item Number / Title:</b> 8540C29600 / PRECISION STRIKE MISSILE (PRSM)			<b>Item Number / Title [DODIC]:</b> C29850 / PrSM Baseline		
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>				
<b>Resource Summary</b>			<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity ( <i>Units in Each</i> )			-	-	30	110	-	110
Gross/Weapon System Cost ( <i>\$ in Millions</i> )			-	-	49.941	166.130	-	166.130
Less PY Advance Procurement ( <i>\$ in Millions</i> )			-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )			-	-	49.941	166.130	-	166.130
Plus CY Advance Procurement ( <i>\$ in Millions</i> )			-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )			-	-	<b>49.941</b>	<b>166.130</b>	-	<b>166.130</b>
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>								
Initial Spares ( <i>\$ in Millions</i> )			-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )			-	-	1,664.700	1,510.273	-	1,510.273

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<b>Flyaway Cost</b>																		
Recurring Cost																		
Recurring Production <sup>(†)</sup>	-	-	-	-	-	-	1,457.567	30	43.727	1,322.364	110	145.460	-	-	-	1,322.364	110	145.460
Engineering Changes	-	-	-	-	-	-	-	-	1.898	-	-	6.314	-	-	-	-	-	6.314
<b>Subtotal: Recurring Cost</b>	-	-	-	-	-	-	-	-	45.625	-	-	151.774	-	-	-	-	-	151.774
Non Recurring Cost																		
Non-Recurring Production	-	-	-	-	-	-	-	-	1.651	-	-	5.491	-	-	-	-	-	5.491
<b>Subtotal: Non Recurring Cost</b>	-	-	-	-	-	-	-	-	1.651	-	-	5.491	-	-	-	-	-	5.491
<b>Subtotal: Flyaway Cost</b>	-	-	-	-	-	-	-	-	47.276	-	-	157.265	-	-	-	-	-	157.265
<b>Support - Common Support Equipment Cost</b>																		
Support and Handling Equipment	-	-	-	-	-	-	-	-	0.651	-	-	2.165	-	-	-	-	-	2.165
<b>Subtotal: Support - Common Support Equipment Cost</b>	-	-	-	-	-	-	-	-	0.651	-	-	2.165	-	-	-	-	-	2.165
<b>Support - Data Cost</b>																		
Technical Publications	-	-	-	-	-	-	-	-	0.470	-	-	1.563	-	-	-	-	-	1.563
<b>Subtotal: Support - Data Cost</b>	-	-	-	-	-	-	-	-	0.470	-	-	1.563	-	-	-	-	-	1.563
<b>Support - Initial Spares and Repair Parts Cost</b>																		
Initial Spares and Repair Parts	-	-	-	-	-	-	-	-	0.172	-	-	0.572	-	-	-	-	-	0.572

**UNCLASSIFIED**

**Exhibit P-5, Cost Analysis: PB 2022 Army** **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8540C29600 / PRECISION STRIKE MISSILE (PRSM)	<b>Item Number / Title [DODIC]:</b> C29850 / PrSM Baseline
--	--	---

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

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Initial Spares and Repair Parts Cost</i>	-	-	-	-	-	-	-	-	0.172	-	-	0.572	-	-	-	-	-	0.572
<b>Support - Program Management Cost</b>																		
Government Management	-	-	-	-	-	-	-	-	0.794	-	-	2.641	-	-	-	-	-	2.641
<i>Subtotal: Support - Program Management Cost</i>	-	-	-	-	-	-	-	-	0.794	-	-	2.641	-	-	-	-	-	2.641
<b>Support - Training Cost</b>																		
Services	-	-	-	-	-	-	-	-	0.578	-	-	1.924	-	-	-	-	-	1.924
<i>Subtotal: Support - Training Cost</i>	-	-	-	-	-	-	-	-	0.578	-	-	1.924	-	-	-	-	-	1.924
<b>Gross/Weapon System Cost</b>	-	-	-	-	-	-	1,664.700	30	49.941	1,510.273	110	166.130	-	-	-	1,510.273	110	166.130

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	-	30	110	-	110
	Total Obligation Authority	-	49.941	166.130	-	166.130
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	<b>30</b>	<b>110</b>	-	<b>110</b>
	<b>Total Obligation Authority</b>	-	<b>49.941</b>	<b>166.130</b>	-	<b>166.130</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army	<b>Date:</b> May 2021
---	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8540C29600 / PRECISION STRIKE MISSILE (PRSM)	<b>Item Number / Title [DODIC]:</b> C29850 / PrSM Baseline
--	--	---

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Recurring Production <sup>(†)</sup>		2021	Lockheed Martin / M.&F.C. Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	Aug 2021	Feb 2023	30	1,457.567	N		Jul 2020
Recurring Production <sup>(†)</sup>		2022	Lockheed Martin / M.&F.C. Sys. / Dallas, TX	SS / FFP	Aviation and Missile Command	Jun 2022	Dec 2023	110	1,322.364	N		Jul 2021

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

**Remarks:**  
 The FY 2021 Lockheed Martin EOC-1 contract plans to be awarded as an option on the Engineering and Manufacturing Development (EMD) contract.  
 The FY 2022 Lockheed Martin EOC-2 contract will be awarded as a separate IDIQ effort with options for EOC-3 and EOC-4.



**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 10 **P-1 Line Item Number / Title:** 8540C29600 / PRECISION STRIKE MISSILE (PRSM) **Item Number / Title [DODIC]:** C29850 / PrSM Baseline

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2023												Fiscal Year 2024												BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023												Calendar Year 2024												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Recurring Production																															
	1	2021	ARMY	30	0	30	-	-	-	-	2	2	2	4	4	4	4	4	2	2									0		
	1	2022	ARMY	110	0	110	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	10	10	10	10	20		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8540C29600 / PRECISION STRIKE MISSILE (PRSM)	<b>Item Number / Title [DODIC]:</b> C29850 / PrSM Baseline
--	--	---

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2025												Fiscal Year 2026												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025												Calendar Year 2026												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Recurring Production																															
	1	2021	ARMY	30	30	0																							0		
	1	2022	ARMY	110	90	20	10	10																					0		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army	<b>Date:</b> May 2021
--	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8540C29600 / PRECISION STRIKE MISSILE (PRSM)	<b>Item Number / Title [DODIC]:</b> C29850 / PrSM Baseline
--	--	---

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Martin - M.&F.C. Sys. / Dallas, TX	36	120	180	0	8	18	26	0	8	18	26

"A" in the Delivery Schedule indicates the Contract Award Date.

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



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System	<b>P-1 Line Item Number / Title:</b> 8930C61001 / INDIRECT FIRE PROTECTION CAPABILITY INC 2-I
---	--

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

**Line Item MDAP/MAIS Code:** 473

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	0.000	40.623	62.461	25.253	-	25.253	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	31.286	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	0.000	9.337	62.461	25.253	-	25.253	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	31.286	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>31.286</b>	<b>9.337</b>	<b>62.461</b>	<b>25.253</b>	<b>-</b>	<b>25.253</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

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

**Description:**

The Indirect Fire Protection Capability Increment 2 (IFPC Inc 2) will provide a ground-based weapon system designed to acquire, track, engage, and defeat Cruise Missiles (CM), Unmanned Aircraft Systems (UAS), and Rocket, Artillery, and Mortar (RAM) threats. The IFPC Inc 2 system consists of a launcher and interceptor integrated with the Army Integrated Air and Missile Defense (AIAMD) open systems architecture, IAMD Battle Command System (IBCS), and the Sentinel sensor to support the Threshold CM and UAS defeat mission. The Objective counter-RAM mission employs both alternative kinetic and non-kinetic defeat solutions.

In Fiscal Year (FY) 2018, the Army evaluated alternative strategies to address an Army interim CM defense (CMD) capability at critical strategic fixed site locations while continuing the development of an IFPC capability. In FY 2019, the Army signed a contract with the Israeli Missile Defense Organization (IMDO) for two Interim CMD (Iron Dome Defense System - Army (IDDS-A)) Batteries. For each of the interim capability's IDDS-A Batteries, the Army intends to employ a configuration that matches the Israeli Firing Unit (6 launchers per battery).

IFPC's Interim CMD (IDDS-A) systems were delivered to the Army in FY 2021. Following prerequisite events, the batteries will be available for deployment to meet the Army's requirements starting in FY 2022.

Concurrently, the Army is pursuing a Competitive strategy with Industry participating in a "Shoot Off" demonstration using Industries' proposed launcher and missile solutions integrated with the Army's IBCS and Sentinel radar. The Army will evaluate Industry proposals informed by models and simulations, hardware-in-the-loop, and live fire data, to make a Best Value recommendation to proceed to a single vendor to deliver the Enduring IFPC Inc 2 prototype solution. The Army will use a Middle Tier Acquisition (MTA) Rapid Prototyping approach to evaluate new capability, provide residual operational capability in FY 2023, then transition into procurement and field by FY 2026.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.337	62.461	25.253	-	25.253	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>9.337</b>	<b>62.461</b>	<b>25.253</b>	<b>-</b>	<b>25.253</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 10: Surface-to-Air Missile System

**P-1 Line Item Number / Title:**  
 8930C61001 / INDIRECT FIRE PROTECTION CAPABILITY INC 2-I

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

**Line Item MDAP/MAIS Code:** 473

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C62002 / IFPC INC 2-I BLOCK 1 SYSTEM				- / 0.000	- / 40.623	- / 62.461	- / 25.253	- / -	- / 25.253
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 0.000</b>	<b>- / 40.623</b>	<b>- / 62.461</b>	<b>- / 25.253</b>	<b>- / -</b>	<b>- / 25.253</b>

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

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

**Justification:**

FY 2022 Base dollars in the amount of \$25.253 million are designated for procurement of Integrated Logistics Support for the Interim CMD (IDDS-A) batteries.

In response to National Defense Authorization Act for 2019, the Army approved a Directed Requirement to initiate procurement of the Israeli Iron Dome Missile System for an Interim CMD capability on 9 Feb 2019. To support the Interim CMD requirement, the Army procured two interim Iron Dome batteries from the Israeli Ministry of Defense. Following prerequisite events, the batteries will be available for deployment to meet the Army's requirements starting in FY 2022. The Army will continue to provide interim Integrated Logistical Support for these assets.

Concurrently, the Army will integrate an enduring IFPC capability of a launcher and interceptor leveraging the Army Integrated Air and Missile Defense (AIAMD) open systems architecture and IAMD Battle Command System (IBCS) as the Fire Control component, and US sensor (Sentinel) with initial system procurements starting in FY 2024 for fielding in FY 2026.

This program supports the Air and Missile Defense Cross Functional Team (CFT).

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8930C61001 / INDIRECT FIRE PROTECTION CAPABILITY INC 2-I	<b>Item Number / Title [DODIC]:</b> C62002 / IFPC INC 2-I BLOCK 1 SYSTEM

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	40.623	62.461	25.253	-	25.253
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	31.286	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	0.000	9.337	62.461	25.253	-	25.253
Plus CY Advance Procurement <i>(\$ in Millions)</i>	31.286	-	-	-	-	-
<b>Total Obligation Authority</b> <i>(\$ in Millions)</i>	<b>31.286</b>	<b>9.337</b>	<b>62.461</b>	<b>25.253</b>	-	<b>25.253</b>

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

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

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<b>Hardware Cost</b>																		
<b>Non Recurring Cost</b>																		
TAMIR Missiles and Associated Magazines (Reload - 120 EO / 120 EM)	-	-	-	-	-	-	180.763	240	43.383	-	-	-	-	-	-	-	-	-
TAMIR Missiles and Associated Magazines (Training - EM)	-	-	-	188.525	40	7.541	-	-	-	-	-	-	-	-	-	-	-	-
Interim CMD (IDDS-A) Battle Management Center (BMC) Server Replacement	-	-	-	898.000	2	1.796	-	-	-	-	-	-	-	-	-	-	-	-
Interim CMD (IDDS-A) - ATR realigned FY2019 Advanced Procurement funding to Base to Procure IDDS-A	-	-	-	-	-	31.286	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	40.623	-	-	43.383	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	40.623	-	-	43.383	-	-	-	-	-	-	-	-	-
<b>Support - Logistics Cost</b>																		
Integrated Logistics Support	-	-	-	-	-	-	-	-	19.078	-	-	25.253	-	-	-	-	-	25.253

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 10	<b>P-1 Line Item Number / Title:</b> 8930C61001 / INDIRECT FIRE PROTECTION CAPABILITY INC 2-I	<b>Item Number / Title [DODIC]:</b> C62002 / IFPC INC 2-I BLOCK 1 SYSTEM
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Logistics Cost</i>	-	-	-	-	-	-	-	-	19.078	-	-	25.253	-	-	-	-	-	25.253
<b>Gross/Weapon System Cost</b>	-	-	0.000	-	-	40.623	-	-	62.461	-	-	25.253	-	-	-	-	-	25.253

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	9.337	62.461	25.253	-	25.253
<b>Total:</b> Secondary Distribution	Quantity	-	-	-	-	-
	Total Obligation Authority	9.337	62.461	25.253	-	25.253

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 20: Air-To-Surface Missile System

**P-1 Line Item Number / Title:**  
1338C70000 / Hellfire Sys Summary

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0203802A, 0210109A

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	76,861	4,581	3,518	900	-	900	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	4,630.438	425.549	327.490	118.800	-	118.800	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	4,630.438	425.549	327.490	118.800	-	118.800	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>4,630.438</b>	<b>425.549</b>	<b>327.490</b>	<b>118.800</b>	<b>-</b>	<b>118.800</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	60.244	92.894	93.090	132.000	-	132.000	-	-	-	-	-	-

**Description:**

The HELLFIRE II and Longbow family of air-to-ground missiles (all variants) provide attack helicopters and unmanned aircraft systems (UAS) with point-target precision strike capability to defeat heavy, advanced armor, individual hard point and non-traditional targets. HELLFIRE II Missiles use a semi-active laser terminal guidance and are the primary armaments of the AH-64 Apache, Army UAS and Special Operations aircraft. The HELLFIRE II includes Electro-Optical Countermeasure capability, warhead improvements and an updated electronic fuze. The AGM-114R HELLFIRE II family of missiles replaces all other HELLFIRE II missile configurations (K/N/M/P) except HELLFIRE II Longbow. HELLFIRE II procurement funding supports the entire HELLFIRE II and HELLFIRE II Longbow systems to include resolution of obsolescence, end-of-life buys, safety, insensitive munitions, reliability, weapon integration activities, test sets, engineering changes, facilitization, production ramp-up activities and production issues. This missile is compatible on all current force UAS and rotary wing platforms.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	4,581	3,518	900	-	900	-	-	-	-
	Total Obligation Authority	425.549	327.490	118.800	-	118.800	-	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>4,581</b>	<b>3,518</b>	<b>900</b>	<b>-</b>	<b>900</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>425.549</b>	<b>327.490</b>	<b>118.800</b>	<b>-</b>	<b>118.800</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 20: Air-To-Surface Missile System **P-1 Line Item Number / Title:**  
 1338C70000 / Hellfire Sys Summary

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0203802A, 0210109A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)	P-5a, P-21			76,861 / 4,630.438	4,581 / 425.549	3,518 / 327.490	900 / 118.800	- / -	900 / 118.800
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>76,861 / 4,630.438</b>	<b>4,581 / 425.549</b>	<b>3,518 / 327.490</b>	<b>900 / 118.800</b>	<b>- / -</b>	<b>900 / 118.800</b>

\*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:**  
 FY2022 All-up Round Unit Cost is based on a total qty of 3,937 missiles across all Customers. The Air-to-Ground Missile Systems (AGMS) Family of Munitions Production Capacity of 11,000 is shared by all customers (Army, AF, Navy, & FMS) and all AGMS missile variants (HF, JAGM, & Trainers). FY2022 has an available capacity of 7,811 AGMS missiles.  
  
 FY2022 Direct War dollars in the amount of \$118.8M will procure 900 HELLFIRE missiles for the Army..  
  
 The Army intends to convert any price advantage created through contract negotiations, other service procurement and/or Foreign Military sales (FMS) to increase the Army procurement of HELLFIRE II missiles.  
  
 The historical Army Acquisition Objective was 34,292. HELLFIRE will achieve TMR in FY22 with the delivery of missiles procured in FY19.  
  
 HELLFIRE Product Office is the Procuring Agency for all Services.  
  
 HELLFIRE is reliant on other services and FMS to meet the Minimum Sustainment Rate (MSR) of 1200 missiles.  
  
 In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20		<b>P-1 Line Item Number / Title:</b> 1338C70000 / Hellfire Sys Summary
		<b>Item Number / Title [DODIC]:</b> C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	76,861	4,581	3,518	900	-	900
Gross/Weapon System Cost (\$ in Millions)	4,630.438	425.549	327.490	118.800	-	118.800
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	4,630.438	425.549	327.490	118.800	-	118.800
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>4,630.438</b>	<b>425.549</b>	<b>327.490</b>	<b>118.800</b>	<b>-</b>	<b>118.800</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	60.244	92.894	93.090	132.000	-	132.000

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
All-up Rounds <sup>(†)</sup>	46.413	76,513	3,551.183	71.444	5,112	365.220	76.461	3,518	268.990	88.743	900	79.869	-	-	-	88.743	900	79.869
Engineering Services	-	-	484.422	-	-	31.806	-	-	29.387	-	-	21.099	-	-	-	-	-	21.099
Acceptance Testing	-	-	88.749	-	-	2.086	-	-	1.499	-	-	1.535	-	-	-	-	-	1.535
<i>Subtotal: Recurring Cost</i>	-	-	<i>4,124.354</i>	-	-	<i>399.112</i>	-	-	<i>299.876</i>	-	-	<i>102.503</i>	-	-	-	-	-	<i>102.503</i>
<i>Subtotal: Flyaway Cost</i>	-	-	<i>4,124.354</i>	-	-	<i>399.112</i>	-	-	<i>299.876</i>	-	-	<i>102.503</i>	-	-	-	-	-	<i>102.503</i>
Support - Fielding Cost																		
Fielding	-	-	45.486	-	-	4.982	-	-	5.141	-	-	6.466	-	-	-	-	-	6.466
<i>Subtotal: Support - Fielding Cost</i>	-	-	<i>45.486</i>	-	-	<i>4.982</i>	-	-	<i>5.141</i>	-	-	<i>6.466</i>	-	-	-	-	-	<i>6.466</i>
Support - Production Engineering Cost																		
Production Engineering	-	-	208.806	-	-	11.047	-	-	15.502	-	-	4.390	-	-	-	-	-	4.390
<i>Subtotal: Support - Production Engineering Cost</i>	-	-	<i>208.806</i>	-	-	<i>11.047</i>	-	-	<i>15.502</i>	-	-	<i>4.390</i>	-	-	-	-	-	<i>4.390</i>
Support - Program Management Cost																		
Government Management	-	-	251.777	-	-	10.406	-	-	6.971	-	-	5.441	-	-	-	-	-	5.441
<i>Subtotal: Support - Program Management Cost</i>	-	-	<i>251.777</i>	-	-	<i>10.406</i>	-	-	<i>6.971</i>	-	-	<i>5.441</i>	-	-	-	-	-	<i>5.441</i>
<b>Gross/Weapon System Cost</b>	<b>60.244</b>	<b>76,861</b>	<b>4,630.438</b>	<b>92.894</b>	<b>4,581</b>	<b>425.549</b>	<b>93.090</b>	<b>3,518</b>	<b>327.490</b>	<b>132.000</b>	<b>900</b>	<b>118.800</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>132.000</b>	<b>900</b>	<b>118.800</b>

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20	<b>P-1 Line Item Number / Title:</b> 1338C70000 / Hellfire Sys Summary	<b>Item Number / Title [DODIC]:</b> C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)

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

**Remarks:**  
Fixed Price Incentive Fee (FPIF)

The production unit cost is based on all Services' base and Direct War and Enduring quantity requirements known at this time. Above quantities are Army only. Total quantities include procurement by US Air Force, US Navy, US Army and FMS cases. Excess capacity will determine future FMS quantity availability. All procurement of Hellfire II AGM-114R missiles are reflected on the P21.

Exhibit P-5: While the Laser HELLFIRE overall Program Management Administration (PMA) and Production Engineering Support (PES) costs maintain a consistent level of effort each year, these costs are allocated to all services on a pro-rata share of quantities procured. This can result in a year-to-year fluctuation of the Army's share.

Based on contract structure, all customers pay the same Unit Cost for the same configuration.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	4,581	3,518	900	-	900
	Total Obligation Authority	425.549	327.490	118.800	-	118.800
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>4,581</b>	<b>3,518</b>	<b>900</b>	-	<b>900</b>
	<b>Total Obligation Authority</b>	<b>425.549</b>	<b>327.490</b>	<b>118.800</b>	-	<b>118.800</b>

(†) indicates the presence of a P-5a



**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning: PB 2022 Army</b>							<b>Date: May 2021</b>				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20			<b>P-1 Line Item Number / Title:</b> 1338C70000 / Hellfire Sys Summary				<b>Item Number / Title [DODIC]:</b> C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
All-up Rounds <sup>(†)</sup>		2017	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	Sep 2017	Oct 2019	4,362	74.160	Y		Dec 2013
All-up Rounds <sup>(†)</sup>	✓	2017	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	Sep 2017	Oct 2019	1,323	74.160	Y		Dec 2013
All-up Rounds <sup>(†)</sup>		2018	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	Sep 2018	Oct 2020	5,233	69.764	Y		Dec 2016
All-up Rounds <sup>(†)</sup>	✓	2019	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	Apr 2019	Oct 2021	2,034	78.228	Y		Dec 2016
All-up Rounds <sup>(†)</sup>		2020	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	Mar 2021	Oct 2022	5,112	71.444	Y		Dec 2016
All-up Rounds <sup>(†)</sup>		2021	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	May 2021	Oct 2023	3,518	76.461	Y		Dec 2016
All-up Rounds <sup>(†)</sup>		2022	Lockheed Missile and Fire Ctrl / Orlando	SS / FPIF	Redstone Arsenal, AL	Jun 2022	Oct 2024	900	88.743	Y		Dec 2020

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

**Remarks:**  
Fixed Price Incentive Fee (FPIF)

The production unit cost is based on all Services' quantity requirements known at this time. Above quantities are Army only. Total quantities include procurement by US Air Force, US Navy, US Army and FMS cases. Excess capacity will determine future FMS quantity availability. All procurement of Hellfire II AGM-114R missiles are reflected on the P21.

Exhibit P-5: While the Laser HELLFIRE overall Program Management Administration (PMA) and Production Engineering Support (PES) costs maintain a consistent level of effort each year, these costs are allocated to all services on a pro-rata share of quantities procured. This can result in a year-to-year fluctuation of the Army's share.

Based on contract structure, all customers pay the same Unit Cost for the same configuration.



**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																				Date: May 2021																	
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 02 / 20										P-1 Line Item Number / Title: 1338C70000 / Hellfire Sys Summary										Item Number / Title [DODIC]: C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)																	
Cost Elements <i>(Units in Thousands)</i>					Fiscal Year 2019															Fiscal Year 2020															B A L A N C E		
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019															Calendar Year 2020															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P							
All-up Rounds																																					
Prior Years Deliveries: 63561																																					
1	2017	AF (+)	1.131	.000	1.131	-	-	-	-	-	-	-	-	-	-	-	-	.095	.095	.095	.094	.094	.094	.094	.094	.094	.094	.094	.094	.094	.094	.094	.094	.000			
1	2017	ARMY	4.362	.000	4.362	-	-	-	-	-	-	-	-	-	-	-	-	.364	.364	.364	.364	.364	.364	.364	.364	.364	.364	.364	.364	.364	.363	.359	.000				
1	2017	FMS (+)	.965	.000	.965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.965				
<b>1</b>	<b>2017</b>	<b>Total</b>	<b>6.458</b>	<b>.000</b>	<b>6.458</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>.459</b>	<b>.459</b>	<b>.459</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.458</b>	<b>.457</b>	<b>.453</b>	<b>.965</b>					
✓ 1	2017	ARMY	1.323	.000	1.323	-	-	-	-	-	-	-	-	-	-	-	-	.111	.111	.111	.111	.111	.111	.111	.111	.111	.111	.111	.111	.111	.102	.000					
1	2018	AF (+)	5.158	.000	5.158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.158					
1	2018	ARMY	5.233	.000	5.233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.233					
1	2018	FMS (+)	.071	.000	.071	-	-	-	-	-	-	-	-	-	-	-	-	.006	.006	.006	.006	.006	.006	.006	.006	.006	.006	.006	.006	.006	.005	.000					
<b>1</b>	<b>2018</b>	<b>Total</b>	<b>10.462</b>	<b>.000</b>	<b>10.462</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.006</b>	<b>.005</b>	<b>10.391</b>					
✓ 1	2019	ARMY	2.034	.000	2.034																												2.034				
1	2020	AF (+)	3.859	.000	3.859																												3.859				
1	2020	ARMY	5.112	.000	5.112																												5.112				
1	2020	FMS (+)	.681	.000	.681																												.681				
<b>1</b>	<b>2020</b>	<b>Total</b>	<b>9.652</b>	<b>.000</b>	<b>9.652</b>																												<b>9.652</b>				
1	2021	AF (+)	2.687	.000	2.687																												2.687				
1	2021	ARMY	3.518	.000	3.518																												3.518				
1	2021	FMS (+)	2.541	.000	2.541																												2.541				
<b>1</b>	<b>2021</b>	<b>Total</b>	<b>8.746</b>	<b>.000</b>	<b>8.746</b>																												<b>8.746</b>				
1	2022	AF (+)	1.175	.000	1.175																												1.175				
1	2022	ARMY	.900	.000	.900																												.900				
1	2022	FMS (+)	.523	.000	.523																												.523				
<b>1</b>	<b>2022</b>	<b>Total Base</b>	<b>2.598</b>	<b>.000</b>	<b>2.598</b>																												<b>2.598</b>				
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								

**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																							Date: May 2021										
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 02 / 20										P-1 Line Item Number / Title: 1338C70000 / Hellfire Sys Summary										Item Number / Title [DODIC]: C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)													
Cost Elements (Units in Thousands)						Fiscal Year 2021													Fiscal Year 2022													BALANCE	
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021													Calendar Year 2022													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
All-up Rounds																																	
Prior Years Deliveries: 63561																																	
1	2017	AF (+)	1.131	1.131	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.000				
1	2017	ARMY	4.362	4.362	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.000				
1	2017	FMS (+)	.965	.000	.965	.081	.081	.081	.081	.081	.080	.080	.080	.080	.080	.080	.080	-	-	-	-	-	-	-	-	-	-	-	.000				
<b>1</b>	<b>2017</b>	<b>Total</b>	<b>6.458</b>	<b>5.493</b>	<b>.965</b>	<b>.081</b>	<b>.081</b>	<b>.081</b>	<b>.081</b>	<b>.081</b>	<b>.080</b>	<b>.080</b>	<b>.080</b>	<b>.080</b>	<b>.080</b>	<b>.080</b>	<b>.080</b>	-	-	-	-	-	-	-	-	-	-	-	<b>.000</b>				
✓ 1	2017	ARMY	1.323	1.323	.000																								.000				
1	2018	AF (+)	5.158	.000	5.158	.430	.430	.430	.430	.430	.430	.430	.430	.430	.429	.429													.000				
1	2018	ARMY	5.233	.000	5.233	.437	.436	.436	.436	.436	.436	.436	.436	.436	.436	.436													.000				
1	2018	FMS (+)	.071	.071	.000	-	-	-	-	-	-	-	-	-	-	-													.000				
<b>1</b>	<b>2018</b>	<b>Total</b>	<b>10.462</b>	<b>.071</b>	<b>10.391</b>	<b>.867</b>	<b>.866</b>	<b>.866</b>	<b>.866</b>	<b>.866</b>	<b>.866</b>	<b>.866</b>	<b>.866</b>	<b>.866</b>	<b>.865</b>	<b>.865</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>.000</b>				
✓ 1	2019	ARMY	2.034	.000	2.034	-	-	-	-	-	-	-	-	-	-	-	.170	.170	.170	.170	.170	.170	.169	.169	.169	.169	.169	.169	.000				
1	2020	AF (+)	3.859	.000	3.859						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.859					
1	2020	ARMY	5.112	.000	5.112						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.112					
1	2020	FMS (+)	.681	.000	.681						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.681					
<b>1</b>	<b>2020</b>	<b>Total</b>	<b>9.652</b>	<b>.000</b>	<b>9.652</b>						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>9.652</b>					
1	2021	AF (+)	2.687	.000	2.687						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.687					
1	2021	ARMY	3.518	.000	3.518						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.518					
1	2021	FMS (+)	2.541	.000	2.541						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.541					
<b>1</b>	<b>2021</b>	<b>Total</b>	<b>8.746</b>	<b>.000</b>	<b>8.746</b>						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>8.746</b>					
1	2022	AF (+)	1.175	.000	1.175																				A -	-	-	1.175					
1	2022	ARMY	.900	.000	.900																				A -	-	-	.900					
1	2022	FMS (+)	.523	.000	.523																				A -	-	-	.523					
<b>1</b>	<b>2022</b>	<b>Total Base</b>	<b>2.598</b>	<b>.000</b>	<b>2.598</b>																				-	-	-	<b>2.598</b>					
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																							Date: May 2021										
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 02 / 20										P-1 Line Item Number / Title: 1338C70000 / Hellfire Sys Summary										Item Number / Title [DODIC]: C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)													
Cost Elements <i>(Units in Thousands)</i>						Fiscal Year 2023													Fiscal Year 2024													BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023													Calendar Year 2024													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
All-up Rounds																																	
Prior Years Deliveries: 63561																																	
	1	2017	AF (+)	1.131	1.131	.000																							.000				
	1	2017	ARMY	4.362	4.362	.000																							.000				
	1	2017	FMS (+)	.965	.965	.000																							.000				
	<b>1</b>	<b>2017</b>	<b>Total</b>	<b>6.458</b>	<b>6.458</b>	<b>.000</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>.000</b>				
✓	1	2017	ARMY	1.323	1.323	.000																							.000				
	1	2018	AF (+)	5.158	5.158	.000																							.000				
	1	2018	ARMY	5.233	5.233	.000																							.000				
	1	2018	FMS (+)	.071	.071	.000																							.000				
	<b>1</b>	<b>2018</b>	<b>Total</b>	<b>10.462</b>	<b>10.462</b>	<b>.000</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>.000</b>				
✓	1	2019	ARMY	2.034	2.034	.000																							.000				
	1	2020	AF (+)	3.859	.000	3.859	.322	.322	.322	.322	.322	.322	.321	.321	.321	.321													.000				
	1	2020	ARMY	5.112	.000	5.112	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426													.000				
	1	2020	FMS (+)	.681	.000	.681	.057	.057	.057	.057	.057	.057	.057	.057	.056	.056													.000				
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>9.652</b>	<b>.000</b>	<b>9.652</b>	<b>.805</b>	<b>.805</b>	<b>.805</b>	<b>.805</b>	<b>.805</b>	<b>.805</b>	<b>.804</b>	<b>.804</b>	<b>.803</b>	<b>.803</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>.000</b>				
	1	2021	AF (+)	2.687	.000	2.687	-	-	-	-	-	-	-	-	-	-	.224	.224	.224	.224	.224	.224	.224	.224	.224	.224	.224	.223	.000				
	1	2021	ARMY	3.518	.000	3.518	-	-	-	-	-	-	-	-	-	-	.294	.294	.294	.294	.294	.294	.294	.294	.294	.294	.294	.284	.000				
	1	2021	FMS (+)	2.541	.000	2.541	-	-	-	-	-	-	-	-	-	-	.212	.212	.212	.212	.212	.212	.212	.212	.212	.212	.209	.000					
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>8.746</b>	<b>.000</b>	<b>8.746</b>	-	-	-	-	-	-	-	-	-	-	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.730</b>	<b>.716</b>	<b>.000</b>					
	1	2022	AF (+)	1.175	.000	1.175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.175					
	1	2022	ARMY	.900	.000	.900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.900					
	1	2022	FMS (+)	.523	.000	.523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.523					
	<b>1</b>	<b>2022</b>	<b>Total Base</b>	<b>2.598</b>	<b>.000</b>	<b>2.598</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>2.598</b>					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20		<b>P-1 Line Item Number / Title:</b> 1338C70000 / Hellfire Sys Summary
		<b>Item Number / Title [DODIC]:</b> C70100 / LASER HELLFIRE MSL (BASIC/IHW/HFII)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Missile and Fire Ctrl - Orlando	1,200	6,000	11,000	5	12	24	36	5	12	24	36

**Remarks:**

While production lead time is 24 months, the ordering window for contract awards may extend up to six months after award. Production does not begin until the ordering window is closed.

Production contracts include a clause that precludes concurrent delivery of successive contract or contract option awards.

(†) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 20: Air-To-Surface Missile System  
**P-1 Line Item Number / Title:** 2605C70302 / Joint Air-to-Ground MSLS (JAGM)

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0605450A

**Line Item MDAP/MAIS Code:** 355

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	2,004	1,067	537	386	-	386	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	568.727	199.295	196.548	152.177	-	152.177	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	64.456	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	504.271	199.295	196.548	152.177	-	152.177	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	64.456	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>568.727</b>	<b>199.295</b>	<b>196.548</b>	<b>152.177</b>	<b>-</b>	<b>152.177</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	283.796	186.781	366.011	394.241	-	394.241	-	-	-	-	-	-

**Description:**

The JAGM program is an Army-led, Acquisition Category (ACAT) 1C Major Defense Acquisition Program (MDAP) with joint interest with the Navy, Marine Corps, and Air Force. JAGM is the next generation, multi-mode, air-to-ground munition replacing legacy HELLFIRE (HF) and HF Longbow munitions. JAGM will be used for destruction of high-value land and maritime targets, moving or stationary, and is capable of being fired from any platform currently firing HF from a US Army-issued M299 launcher. JAGM utilizes a HF back-end (propulsion, warhead and control system) with a new-design, Millimeter Wave (MMW) and Semi-Active Laser (SAL), multi-mode guidance section. The multi-mode capability provides fire-and-forget and precision-point targeting as well as unique, blended modes of each, for improved capability over legacy munitions.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army									
Quantity	1,067	537	386	-	386	-	-	-	-
Total Obligation Authority	199.295	196.548	152.177	-	152.177	-	-	-	-
<b>Total:</b>									
<b>Secondary Distribution</b>									
Quantity	<b>1,067</b>	<b>537</b>	<b>386</b>	<b>-</b>	<b>386</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Total Obligation Authority	<b>199.295</b>	<b>196.548</b>	<b>152.177</b>	<b>-</b>	<b>152.177</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 20: Air-To-Surface Missile System **P-1 Line Item Number / Title:** 2605C70302 / Joint Air-to-Ground MSLS (JAGM)

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0605450A

**Line Item MDAP/MAIS Code:** 355

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C70302 / Joint Air-to-Ground MSLS (JAGM)	P-5a, P-21			2,004 / 568.727	1,067 / 199.295	537 / 196.548	386 / 152.177	- / -	386 / 152.177
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>2,004 / 568.727</b>	<b>1,067 / 199.295</b>	<b>537 / 196.548</b>	<b>386 / 152.177</b>	<b>- / -</b>	<b>386 / 152.177</b>

\*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 P-40 quantity of 1067 in FY20 is incorrect and the correct quantity of 494 is reflected in the P-5 and P-21 forms. The Prior Years Total is incorrect and the correct quantity of 1,993 is reflected in the P-5 and P-21 forms.

FY 2022 procurement dollars in the amount of \$152.177M supports the procurement of 386 missiles, 8 Captive Air Training Missiles (CATM), Project Management Cost and Engineering Services funding.

The Army intends to convert any price advantage created through contract negotiations and/or other service procurement to increase the Army procurement of JAGM missiles.

The Air-to-Ground Missile Systems Product Office is the procurement agent for all services.

The Army Acquisition Objective is 20,303.

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

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20	<b>P-1 Line Item Number / Title:</b> 2605C70302 / Joint Air-to-Ground MSLS (JAGM)	<b>Item Number / Title [DODIC]:</b> C70302 / Joint Air-to-Ground MSLS (JAGM)

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	2,004	1,067	537	386	-	386
Gross/Weapon System Cost (\$ in Millions)	568.727	199.295	196.548	152.177	-	152.177
Less PY Advance Procurement (\$ in Millions)	64.456	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	504.271	199.295	196.548	152.177	-	152.177
Plus CY Advance Procurement (\$ in Millions)	64.456	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>568.727</b>	<b>199.295</b>	<b>196.548</b>	<b>152.177</b>	<b>-</b>	<b>152.177</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	283.796	186.781	366.011	394.241	-	394.241

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
All Up Rounds (AUR) <sup>(†)</sup>	192.801	1,993	384.252	212.043	494	104.749	211.778	537	113.725	242.821	386	93.729	-	-	-	242.821	386	93.729
Engineering Services	-	-	36.647	-	-	28.539	-	-	21.033	-	-	14.471	-	-	-	-	-	14.471
Guidance Section Long Lead Items	-	-	38.600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acceptance Testing	-	-	1.224	-	-	1.915	-	-	1.967	-	-	2.006	-	-	-	-	-	2.006
<b>Subtotal: Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>460.723</b>	<b>-</b>	<b>-</b>	<b>135.203</b>	<b>-</b>	<b>-</b>	<b>136.725</b>	<b>-</b>	<b>-</b>	<b>110.206</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>110.206</b>
Non Recurring Cost																		
HELLFIRE Backend Long Lead Items	-	-	25.856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tooling and Test Equipment	-	-	6.785	-	-	7.046	-	-	6.066	-	-	4.412	-	-	-	-	-	4.412
<b>Subtotal: Non Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>32.641</b>	<b>-</b>	<b>-</b>	<b>7.046</b>	<b>-</b>	<b>-</b>	<b>6.066</b>	<b>-</b>	<b>-</b>	<b>4.412</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.412</b>
<b>Subtotal: Flyaway Cost</b>	<b>-</b>	<b>-</b>	<b>493.364</b>	<b>-</b>	<b>-</b>	<b>142.249</b>	<b>-</b>	<b>-</b>	<b>142.791</b>	<b>-</b>	<b>-</b>	<b>114.618</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>114.618</b>
Support - Fielding Cost																		
Fielding	-	-	0.890	-	-	0.906	-	-	0.902	-	-	0.261	-	-	-	-	-	0.261
<b>Subtotal: Support - Fielding Cost</b>	<b>-</b>	<b>-</b>	<b>0.890</b>	<b>-</b>	<b>-</b>	<b>0.906</b>	<b>-</b>	<b>-</b>	<b>0.902</b>	<b>-</b>	<b>-</b>	<b>0.261</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.261</b>
Support - Initial Spares and Repair Parts Cost																		

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20	<b>P-1 Line Item Number / Title:</b> 2605C70302 / Joint Air-to-Ground MSLS (JAGM)	<b>Item Number / Title [DODIC]:</b> C70302 / Joint Air-to-Ground MSLS (JAGM)

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

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Initial Spares and Repair Parts	-	-	-	-	-	1.926	-	-	1.221	-	-	1.981	-	-	-	-	-	1.981
<i>Subtotal: Support - Initial Spares and Repair Parts Cost</i>	-	-	-	-	-	<b>1.926</b>	-	-	<b>1.221</b>	-	-	<b>1.981</b>	-	-	-	-	-	<b>1.981</b>
<b>Support - Non-Recurring Support Cost</b>																		
Facilitization	-	-	19.459	-	-	20.273	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Non-Recurring Support Cost</i>	-	-	<b>19.459</b>	-	-	<b>20.273</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Support - Production Engineering Cost</b>																		
Production Engineering	-	-	32.684	-	-	11.277	-	-	19.916	-	-	16.159	-	-	-	-	-	16.159
<i>Subtotal: Support - Production Engineering Cost</i>	-	-	<b>32.684</b>	-	-	<b>11.277</b>	-	-	<b>19.916</b>	-	-	<b>16.159</b>	-	-	-	-	-	<b>16.159</b>
<b>Support - Program Management Cost</b>																		
Government Management	-	-	18.415	-	-	15.579	-	-	14.432	-	-	14.123	-	-	-	-	-	14.123
<i>Subtotal: Support - Program Management Cost</i>	-	-	<b>18.415</b>	-	-	<b>15.579</b>	-	-	<b>14.432</b>	-	-	<b>14.123</b>	-	-	-	-	-	<b>14.123</b>
<b>Support - System Test and Evaluation Cost</b>																		
Test and Evaluation Support	-	-	3.915	-	-	7.085	-	-	17.286	-	-	5.035	-	-	-	-	-	5.035
<i>Subtotal: Support - System Test and Evaluation Cost</i>	-	-	<b>3.915</b>	-	-	<b>7.085</b>	-	-	<b>17.286</b>	-	-	<b>5.035</b>	-	-	-	-	-	<b>5.035</b>
<b>Gross/Weapon System Cost</b>	<b>283.796</b>	<b>2,004</b>	<b>568.727</b>	<b>186.781</b>	<b>1,067</b>	<b>199.295</b>	<b>366.011</b>	<b>537</b>	<b>196.548</b>	<b>394.241</b>	<b>386</b>	<b>152.177</b>	-	-	-	<b>394.241</b>	<b>386</b>	<b>152.177</b>

**Remarks:**  
Due to efficiencies obtained by concurrent resolution of JAGM and HELLFIRE obsolescence issues, reduction of HELLFIRE funding will increase unit cost of JAGM AUR.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	1,067	537	386	-	386
	Total Obligation Authority	199.295	196.548	152.177	-	152.177
<b>Total:</b>	<b>Quantity</b>	<b>1,067</b>	<b>537</b>	<b>386</b>	-	<b>386</b>
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>199.295</b>	<b>196.548</b>	<b>152.177</b>	-	<b>152.177</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning: PB 2022 Army</b>							<b>Date: May 2021</b>				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20			<b>P-1 Line Item Number / Title:</b> 2605C70302 / Joint Air-to-Ground MSLS (JAGM)				<b>Item Number / Title [DODIC]:</b> C70302 / Joint Air-to-Ground MSLS (JAGM)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
All Up Rounds (AUR) <sup>(†)</sup>		2017	Lockheed Martin / Orlando	C / FPIF	Redstone Arsenal, AL	Aug 2018	Dec 2018	373	165.980	Y		Feb 2015
All Up Rounds (AUR) <sup>(†)</sup>		2018	Lockheed Martin / Orlando	C / FPIF	Redstone Arsenal, AL	Sep 2018	Mar 2020	899	170.284	Y		Feb 2015
All Up Rounds (AUR) <sup>(†)</sup>		2019	Lockheed Martin / Orlando	C / FPIF	Redstone Arsenal, AL	Nov 2019	Mar 2022	721	223.569	Y		Aug 2018
All Up Rounds (AUR) <sup>(†)</sup>		2020	Lockheed Martin / Orlando	SS / FPIF	Redstone Arsenal, AL	Mar 2021	May 2023	494	212.043	Y		Jun 2019
All Up Rounds (AUR) <sup>(†)</sup>		2021	Lockheed Martin / Orlando	SS / FPIF	Redstone Arsenal, AL	May 2021	Mar 2024	537	211.778	Y		Jun 2019
All Up Rounds (AUR) <sup>(†)</sup>		2022	Lockheed Martin / Orlando	SS / FPIF	Redstone Arsenal, AL	Jun 2022	Oct 2024	386	242.821	Y		Sep 2020

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



**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																							Date: May 2021							
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 02 / 20										P-1 Line Item Number / Title: 2605C70302 / Joint Air-to-Ground MSLS (JAGM)										Item Number / Title [DODIC]: C70302 / Joint Air-to-Ground MSLS (JAGM)										
Cost Elements (Units in Each)						Fiscal Year 2020										Fiscal Year 2021										BALANCE				
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020										Calendar Year 2021													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R		M A Y	J U N	J U L	A U G
All Up Rounds (AUR)																														
1	2017	ARMY	373	220	153	30	-	62	34	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
1	2017	NAVY (+)	104	0	104	-	-	-	-	-	-	-	-	51	31	16	6	-	-	-	-	-	-	-	-	-	-	-	0	
<b>1</b>	<b>2017</b>	<b>Total</b>	<b>477</b>	<b>220</b>	<b>257</b>	<b>30</b>	<b>-</b>	<b>62</b>	<b>34</b>	<b>27</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51</b>	<b>31</b>	<b>16</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>		
1	2018	ARMY	899	0	899	-	-	-	-	-	50	-	-	-	2	70	30	82	45	-	47	38	44	44	50	50	40	34	46	227
1	2019	ARMY	721	0	721	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	721	
1	2019	NAVY (+)	75	0	75	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	
<b>1</b>	<b>2019</b>	<b>Total</b>	<b>796</b>	<b>0</b>	<b>796</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>796</b>	
1	2020	AF (+)	43	0	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	43	
1	2020	ARMY	494	0	494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	494	
1	2020	FMS (+)	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	1	
1	2020	NAVY (+)	320	0	320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	320	
<b>1</b>	<b>2020</b>	<b>Total</b>	<b>858</b>	<b>0</b>	<b>858</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>858</b>	
1	2021	AF (+)	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
1	2021	ARMY	537	0	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	537	
1	2021	NAVY (+)	161	0	161	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161	
<b>1</b>	<b>2021</b>	<b>Total</b>	<b>700</b>	<b>0</b>	<b>700</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>700</b>	
1	2022	ARMY	386	0	386	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	386	
1	2022	NAVY (+)	164	0	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	164	
<b>1</b>	<b>2022</b>	<b>Total</b>	<b>550</b>	<b>0</b>	<b>550</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>550</b>	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P

**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																							Date: May 2021						
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 02 / 20						P-1 Line Item Number / Title: 2605C70302 / Joint Air-to-Ground MSLS (JAGM)										Item Number / Title [DODIC]: C70302 / Joint Air-to-Ground MSLS (JAGM)													
Cost Elements (Units in Each)						Fiscal Year 2022										Fiscal Year 2023										BALANCE			
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022										Calendar Year 2023												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R		M A Y	J U N	J U L
All Up Rounds (AUR)																													
1	2017	ARMY	373	373	0																								0
1	2017	NAVY (+)	104	104	0																								0
<b>1</b>	<b>2017</b>	<b>Total</b>	<b>477</b>	<b>477</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
1	2018	ARMY	899	672	227	45	45	45	40	40	12																		0
1	2019	ARMY	721	0	721	-	-	-	-	-	43	44	44	44	43	44	69	69	68	94	94	65							0
1	2019	NAVY (+)	75	0	75	-	-	-	-	-	7	6	6	6	7	6	6	6	7	6	6	6							0
<b>1</b>	<b>2019</b>	<b>Total</b>	<b>796</b>	<b>0</b>	<b>796</b>	-	-	-	-	-	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>71</b>	-	-	-	-	-	-	<b>0</b>	
1	2020	AF (+)	43	0	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43	-	-	0	
1	2020	ARMY	494	0	494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	66	68	68	200
1	2020	FMS (+)	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
1	2020	NAVY (+)	320	0	320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	34	32	32	157
<b>1</b>	<b>2020</b>	<b>Total</b>	<b>858</b>	<b>0</b>	<b>858</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>358</b>
1	2021	AF (+)	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
1	2021	ARMY	537	0	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	537	
1	2021	NAVY (+)	161	0	161	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161	
<b>1</b>	<b>2021</b>	<b>Total</b>	<b>700</b>	<b>0</b>	<b>700</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>700</b>	
1	2022	ARMY	386	0	386									A	-	-	-	-	-	-	-	-	-	-	-	-	-	386	
1	2022	NAVY (+)	164	0	164									A	-	-	-	-	-	-	-	-	-	-	-	-	-	164	
<b>1</b>	<b>2022</b>	<b>Total</b>	<b>550</b>	<b>0</b>	<b>550</b>									-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>550</b>	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P





**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20		<b>P-1 Line Item Number / Title:</b> 2605C70302 / Joint Air-to-Ground MSLS (JAGM)
		<b>Item Number / Title [DODIC]:</b> C70302 / Joint Air-to-Ground MSLS (JAGM)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Martin - Orlando	600	1,200	1,200	5	12	24	36	5	12	24	36

**Remarks:**

FY 2021 and FY 2022 total quantities include Navy purchases.

While production lead time is 24 months, the ordering window for contract awards may extend up to six months after award. Production does not begin until the ordering window is closed.

Production contracts include a clause that precludes concurrent delivery of successive contract or contract option awards.

(±) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 20: Air-To-Surface Missile System **P-1 Line Item Number / Title:** 2607C71300 / Long Range Precision Muniton

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	170	179	-	179	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	-	-	38.107	44.744	-	44.744	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	-	-	38.107	44.744	-	44.744	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	-	-	<b>38.107</b>	<b>44.744</b>	-	<b>44.744</b>	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	-	-	224.159	249.966	-	249.966	-	-	-	-	-	-

**Description:**

The LRPM will provide Army Aviation with improved and longer range weapons, sub-systems, and munitions that can rapidly respond in a combat environment improving the survivability of the warfighters and weapon systems in an anti-access/area denial (A2/AD) and positioning, navigation, and timing (PNT) denied environment. The ability to interoperate and coordinate with other weapon systems and munitions at long ranges and adapt to changing threats is a core concept of the Army Aviation Weapons Sub-Systems and Munitions (AAWSSM) program.

The Spike Non-line of Sight (NLOS) directed requirement will federate an existing production system to the Apache AH-64 as an interim solution that will provide longer stand-off ranges in an anti-access/area denial (A2/AD) environment until a more effective integrated Army Aviation Weapons Sub-Systems and Munitions (AAWSSM) LRPM solution can be developed.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	170	179	-	179	-	-	-	-
	Total Obligation Authority	-	38.107	44.744	-	44.744	-	-	-	-
<b>Total:</b> Secondary Distribution	Quantity	-	<b>170</b>	<b>179</b>	-	<b>179</b>	-	-	-	-
	Total Obligation Authority	-	<b>38.107</b>	<b>44.744</b>	-	<b>44.744</b>	-	-	-	-

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 20: Air-To-Surface Missile System **P-1 Line Item Number / Title:** 2607C71300 / Long Range Precision Muniton

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

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C71304 / LRPM-INTERIM	P-5a, P-21			- / -	- / -	170 / 38.107	179 / 44.744	- / -	179 / 44.744
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				- / -	- / -	<b>170 / 38.107</b>	<b>179 / 44.744</b>	- / -	<b>179 / 44.744</b>

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

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

**Justification:**  
 FY 2022 Base procurement dollars in the amount of \$44.744 million supports the Army Directed Requirement, Spike Non-Line of Sight (NLOS), for Army AH-64D/E: procurement of 179 missiles, Project Management Cost, and Engineering Services funding.

The Army intends to convert any price advantage created through contract negotiations and/or other service procurement to increase the Army procurement of Spike Non-Line of Sight (SPIKE NLOS) Missiles.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20		<b>P-1 Line Item Number / Title:</b> 2607C71300 / Long Range Precision Munition
		<b>Item Number / Title [DODIC]:</b> C71304 / LRPM-INTERIM

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	-	-	170	179	-	179
Gross/Weapon System Cost (\$ in Millions)	-	-	38.107	44.744	-	44.744
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	38.107	44.744	-	44.744
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	-	-	<b>38.107</b>	<b>44.744</b>	-	<b>44.744</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	224.159	249.966	-	249.966

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
All Up Rounds <sup>(†)</sup>	-	-	-	-	-	-	232.758	153	35.612	237.419	179	42.498	-	-	-	237.419	179	42.498
Recurring Engineering	-	-	-	-	-	-	-	-	0.558	-	-	0.570	-	-	-	-	-	0.570
Acceptance Testing	-	-	-	-	-	-	-	-	0.026	-	-	0.027	-	-	-	-	-	0.027
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	<b>36.196</b>	-	-	<b>43.095</b>	-	-	-	-	-	<b>43.095</b>
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	-	-	-	<b>36.196</b>	-	-	<b>43.095</b>	-	-	-	-	-	<b>43.095</b>
Support - Program Management Cost																		
Government Management	-	-	-	-	-	-	-	-	1.911	-	-	1.649	-	-	-	-	-	1.649
<i>Subtotal: Support - Program Management Cost</i>	-	-	-	-	-	-	-	-	<b>1.911</b>	-	-	<b>1.649</b>	-	-	-	-	-	<b>1.649</b>
<b>Gross/Weapon System Cost</b>	-	-	-	-	-	-	<b>224.159</b>	<b>170</b>	<b>38.107</b>	<b>249.966</b>	<b>179</b>	<b>44.744</b>	-	-	-	<b>249.966</b>	<b>179</b>	<b>44.744</b>

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	-	170	179	-	179
Total Obligation Authority	-	38.107	44.744	-	44.744
<b>Total: Secondary Distribution</b>	-	<b>170</b>	<b>179</b>	-	<b>179</b>
Total Obligation Authority	-	38.107	44.744	-	44.744

(†) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army	<b>Date:</b> May 2021
---	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20	<b>P-1 Line Item Number / Title:</b> 2607C71300 / Long Range Precision Munition	<b>Item Number / Title [DODIC]:</b> C71304 / LRPM-INTERIM
--	--	--

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
All Up Rounds <sup>(†)</sup>		2021	Lockheed Martin / Orlando, FL	C / CPFF	Redstone Arsenal	Jun 2021	Feb 2023	153	232.758	N		Apr 2020
All Up Rounds <sup>(†)</sup>		2022	Lockheed Martin / Orlando, FL	Option / CPFF	Redstone Arsenal	Jan 2022	Jul 2023	179	237.419	N		Apr 2020

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



**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 20 **P-1 Line Item Number / Title:** 2607C71300 / Long Range Precision Munition **Item Number / Title [DODIC]:** C71304 / LRPM-INTERIM

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2023													Fiscal Year 2024											BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023													Calendar Year 2024											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
All Up Rounds																															
1		2021	ARMY	153	0	153	-	-	-	-	20	20	20	20	20	20	20	13											0		
1		2022	ARMY	179	0	179	-	-	-	-	-	-	-	-	20	20	20	20	20	20	20	20	19						0		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army	<b>Date:</b> May 2021
--	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 20	<b>P-1 Line Item Number / Title:</b> 2607C71300 / Long Range Precision Munition	<b>Item Number / Title [DODIC]:</b> C71304 / LRPM-INTERIM
--	--	--

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Martin - Orlando, FL	20	220	240	0	0	18	18	0	0	18	18

"A" in the Delivery Schedule indicates the Contract Award Date.

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



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/  
Assault Missile Sys **P-1 Line Item Number / Title:**  
0648CC0007 / Javelin (AAWS-M) System Summary

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604611A

**Line Item MDAP/MAIS Code:** 280

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	33,089	697	768	376	-	376	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	5,336.132	142.794	181.325	120.842	-	120.842	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	100.622	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	5,235.510	142.794	181.325	120.842	-	120.842	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	100.622	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>5,336.132</b>	<b>142.794</b>	<b>181.325</b>	<b>120.842</b>	<b>-</b>	<b>120.842</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	161.266	204.869	236.100	321.388	-	321.388	-	-	-	-	-	-

**Description:**

Javelin is a man-portable, fire-and-forget, medium-range missile with enhanced situational awareness and precision direct-fire effects to defeat armored vehicles, fortifications, and soft targets in a range of military operations. Javelin has a high kill rate against a variety of targets at extended ranges under day/night, battlefield obscurants, adverse weather and multiple counter-measure conditions. The system's soft launch feature permits firing from a fighting position or an enclosure. Javelin uses a modular design to allow the system to evolve to meet changing threats and requirements via both software and hardware upgrades. The system consists of a reusable Command Launch Unit (CLU) with a built-in-test (BIT), and a modular missile encased in a disposable launch tube assembly. The system also includes training devices for tactical training and classroom training. Javelin's fire-and-forget technology allows the gunner to fire and immediately take cover, to move to another fighting position, or to reload. The Javelin provides enhanced lethality through the use of a tandem multi-purpose warhead which will defeat all known armor threats. It is effective against both stationary and moving targets. This system also provides defensive capability against attacking/hovering helicopters. In current conflicts the CLU is being used as a stand-alone surveillance and target acquisition asset. The Javelin weapon system is an Army-led, Acquisition Category (ACAT) IC Major Defense Acquisition Program (MDAP) that has joint interest with the U.S. Marine Corps, U.S. Navy, and U.S. Air Force.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	697	768	376	-	376	-	-	-	-
	Total Obligation Authority	142.794	181.325	120.842	-	120.842	-	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>697</b>	<b>768</b>	<b>376</b>	<b>-</b>	<b>376</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>142.794</b>	<b>181.325</b>	<b>120.842</b>	<b>-</b>	<b>120.842</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys **P-1 Line Item Number / Title:** 0648CC0007 / Javelin (AAWS-M) System Summary

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604611A

**Line Item MDAP/MAIS Code:** 280

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	H06102 / JAVELIN (AAWS-M)	P-5a, P-21			33,089 / 5,336.132	697 / 142.794	763 / 165.355	290 / 76.648	- / -	290 / 76.648
P-5	H06103 / Javelin Lightweight Command Launch Unit (CLU)	P-5a, P-21			- / -	- / -	5 / 15.970	86 / 44.194	- / -	86 / 44.194
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>33,089 / 5,336.132</b>	<b>697 / 142.794</b>	<b>768 / 181.325</b>	<b>376 / 120.842</b>	<b>- / -</b>	<b>376 / 120.842</b>

\*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:**  
H06102 FY2022 Base procurement dollars in the amount of \$76.648 million supports the production of 290 missiles.  
H06103 FY2022 Base procurement dollars in the amount of \$44.194 million supports initial production facilitization and low-rate initial production of 86 Lightweight CLUs.

The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to increase the Army procurement of Javelin missiles and/or Lightweight CLUs, and/or address safety, reliability, affordability, producibility, and/or obsolescence.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary	<b>Item Number / Title [DODIC]:</b> H06102 / JAVELIN (AAWS-M)

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	33,089	697	763	290	-	290
Gross/Weapon System Cost (\$ in Millions)	5,336.132	142.794	165.355	76.648	-	76.648
Less PY Advance Procurement (\$ in Millions)	100.622	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5,235.510	142.794	165.355	76.648	-	76.648
Plus CY Advance Procurement (\$ in Millions)	100.622	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>5,336.132</b>	<b>142.794</b>	<b>165.355</b>	<b>76.648</b>	<b>-</b>	<b>76.648</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	161.266	204.869	216.717	264.303	-	264.303

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<b>Flyaway Cost</b>																		
<b>Recurring Cost</b>																		
All Up Round <sup>(1)</sup>	107.492	32,142	3,455.008	143.150	672	96.197	175.203	763	133.680	192.772	290	55.904	-	-	-	192.772	290	55.904
Engineering Services	-	-	188.236	-	-	8.121	-	-	8.248	-	-	9.860	-	-	-	-	-	9.860
Acceptance Testing	-	-	59.223	-	-	1.043	-	-	1.161	-	-	1.608	-	-	-	-	-	1.608
Production Engineering	-	-	117.648	-	-	4.837	-	-	4.934	-	-	5.048	-	-	-	-	-	5.048
CLU Retrofits	117.203	1,048	122.829	170.000	25	4.250	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Change Orders	-	-	-	-	-	1.008	-	-	0.101	-	-	-	-	-	-	-	-	-
Publications/Technical Data	-	-	-	-	-	0.078	-	-	0.079	-	-	-	-	-	-	-	-	-
<b>Subtotal: Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>3,942.944</b>	<b>-</b>	<b>-</b>	<b>115.534</b>	<b>-</b>	<b>-</b>	<b>148.203</b>	<b>-</b>	<b>-</b>	<b>72.420</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>72.420</b>
<b>Non Recurring Cost</b>																		
Obsolescence and Cost Reduction	-	-	-	-	-	23.127	-	-	-	-	-	-	-	-	-	-	-	-
G-Model Production Facilitization	-	-	-	-	-	-	-	-	9.908	-	-	-	-	-	-	-	-	-
IM Compliance	-	-	-	-	-	-	-	-	3.172	-	-	-	-	-	-	-	-	-
<b>Subtotal: Non Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23.127</b>	<b>-</b>	<b>-</b>	<b>13.080</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subtotal: Flyaway Cost</b>	<b>-</b>	<b>-</b>	<b>3,942.944</b>	<b>-</b>	<b>-</b>	<b>138.661</b>	<b>-</b>	<b>-</b>	<b>161.283</b>	<b>-</b>	<b>-</b>	<b>72.420</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>72.420</b>
<b>Support - Program Management Cost</b>																		

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>												<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30						<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary						<b>Item Number / Title [DODIC]:</b> H06102 / JAVELIN (AAWS-M)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :												<b>MDAP/MAIS Code:</b>					

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Government Management	-	-	1,393.188	-	-	4.133	-	-	4.072	-	-	4.228	-	-	-	-	-	4.228
<i>Subtotal: Support - Program Management Cost</i>	-	-	<b>1,393.188</b>	-	-	<b>4.133</b>	-	-	<b>4.072</b>	-	-	<b>4.228</b>	-	-	-	-	-	<b>4.228</b>
<b>Gross/Weapon System Cost</b>	<b>161.266</b>	<b>33,089</b>	<b>5,336.132</b>	<b>204.869</b>	<b>697</b>	<b>142.794</b>	<b>216.717</b>	<b>763</b>	<b>165.355</b>	<b>264.303</b>	<b>290</b>	<b>76.648</b>	-	-	-	<b>264.303</b>	<b>290</b>	<b>76.648</b>

**Remarks:**

Due to reduced total program funding, the estimated missile unit price in FY22 is based on combined US Army, other services and FMS procurements of 650 missiles per year, which is below the Minimum Sustaining Rate (MSR) of 850. The estimated missile unit price for FY20 and FY21 is based on combined procurement of 850 missiles per year. If cost savings can be generated in FY22, funds will be used to continue G-model production facilitization..

Beginning in FY22, Engineering Change Orders and Publications/Technical Data costs are rolled into the Engineering Services cost element to better align with how the project office tracks actuals.<https://pandr.altess.army.mil/#/item/H06102/type/BABY/itemDashboard>

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	697	763	290	-	290
	Total Obligation Authority	142.794	165.355	76.648	-	76.648
<b>Total:</b>	<b>Quantity</b>	<b>697</b>	<b>763</b>	<b>290</b>	<b>-</b>	<b>290</b>
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>142.794</b>	<b>165.355</b>	<b>76.648</b>	<b>-</b>	<b>76.648</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

**Exhibit P-5a, Procurement History and Planning:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary	<b>Item Number / Title [DODIC]:</b> H06102 / JAVELIN (AAWS-M)
--	--	--

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
All Up Round <sup>(†)</sup>		2020	JJV All Up Round / Tucson AZ Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Jul 2020	Jun 2022	672	143.150	Y		Aug 2018
All Up Round <sup>(†)</sup>		2021	JJV All Up Round / Tucson AZ Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Apr 2021	Mar 2023	763	175.203	Y		Oct 2019
All Up Round <sup>(†)</sup>		2022	JJV All Up Round / Tucson AZ Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Apr 2022	Mar 2024	290	192.772	Y		Oct 2019

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

**Remarks:**

JJV: Javelin Joint Venture (includes Raytheon in Tucson, AZ and Lockheed Martin in Orlando, FL)  
 SS: Sole Source  
 FFP: Firm Fixed Price  
 AMCOM: Aviation and Missile Command

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule: PB 2022 Army** **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 0648CC0007 / Javelin (AAWS-M) System Summary **Item Number / Title [DODIC]:** H06102 / JAVELIN (AAWS-M)

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2020													Fiscal Year 2021													BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020													Calendar Year 2021													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
All Up Round																																	
Prior Years Deliveries: 32142																																	
1	2020	ARMY	672	0	672																								672				
1	2020	FMS (+)	507	0	507																								507				
1	2020	MC (+)	123	0	123																								123				
1	2020	NAVY (+)	13	0	13																								13				
1	2020	OTH (+)	391	0	391																								391				
<b>1</b>	<b>2020</b>	<b>Total</b>	<b>1,706</b>	<b>0</b>	<b>1,706</b>																								<b>1,706</b>				
1	2021	ARMY	763	0	763																								763				
1	2021	FMS (+)	193	0	193																								193				
1	2021	MC (+)	99	0	99																								99				
1	2021	NAVY (+)	3	0	3																								3				
<b>1</b>	<b>2021</b>	<b>Total</b>	<b>1,058</b>	<b>0</b>	<b>1,058</b>																								<b>1,058</b>				
1	2022	ARMY	290	0	290																								290				
1	2022	FMS (+)	359	0	359																								359				
1	2022	MC (+)	1	0	1																								1				
<b>1</b>	<b>2022</b>	<b>Total</b>	<b>650</b>	<b>0</b>	<b>650</b>																								<b>650</b>				

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule: PB 2022 Army** **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 0648CC0007 / Javelin (AAWS-M) System Summary **Item Number / Title [DODIC]:** H06102 / JAVELIN (AAWS-M)

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2022														Fiscal Year 2023														BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022														Calendar Year 2023														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
All Up Round																																			
Prior Years Deliveries: 32142																																			
	1	2020	ARMY	672	0	672	-	-	-	-	-	-	-	-	142	142	142	142	104	-	-	-	-	-	-	-	-	-	-	-	0				
	1	2020	FMS (†)	507	0	507	-	-	-	-	-	-	-	-	-	-	-	-	38	142	142	142	43	-	-	-	-	-	-	-	0				
	1	2020	MC (†)	123	0	123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	23	-	-	-	-	-	-	0				
	1	2020	NAVY (‡)	13	0	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	0				
	1	2020	OTH (†)	391	0	391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	142	142	-	-	-	-	0				
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>1,706</b>	<b>0</b>	<b>1,706</b>	-	-	-	-	-	-	-	-	<b>142</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>143</b>	<b>143</b>	<b>142</b>	<b>142</b>	-	-	-	-	<b>0</b>				
	1	2021	ARMY	763	0	763	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	88	88	88	88	88	88	88	147				
	1	2021	FMS (†)	193	0	193	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	193				
	1	2021	MC (†)	99	0	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99				
	1	2021	NAVY (‡)	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>1,058</b>	<b>0</b>	<b>1,058</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>442</b>			
	1	2022	ARMY	290	0	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	290				
	1	2022	FMS (†)	359	0	359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	359				
	1	2022	MC (†)	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
	<b>1</b>	<b>2022</b>	<b>Total</b>	<b>650</b>	<b>0</b>	<b>650</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>650</b>				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule: PB 2022 Army** **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 0648CC0007 / Javelin (AAWS-M) System Summary **Item Number / Title [DODIC]:** H06102 / JAVELIN (AAWS-M)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2024													Fiscal Year 2025													BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024													Calendar Year 2025													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
All Up Round																																	
Prior Years Deliveries: 32142																																	
	1	2020	ARMY	672	672	0																							0				
	1	2020	FMS (+)	507	507	0																							0				
	1	2020	MC (+)	123	123	0																							0				
	1	2020	NAVY (+)	13	13	0																							0				
	1	2020	OTH (+)	391	391	0																							0				
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>1,706</b>	<b>1,706</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>				
	1	2021	ARMY	763	616	147	88	59	-	-	-																		0				
	1	2021	FMS (+)	193	0	193	-	29	88	76	-																		0				
	1	2021	MC (+)	99	0	99	-	-	-	13	86																		0				
	1	2021	NAVY (+)	3	0	3	-	-	-	-	3																		0				
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>1,058</b>	<b>616</b>	<b>442</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>89</b>	<b>89</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>					
	1	2022	ARMY	290	0	290	-	-	-	-	-	54	54	54	54	54	20	-	-	-	-	-	-						0				
	1	2022	FMS (+)	359	0	359	-	-	-	-	-	-	-	-	-	34	54	54	54	54	54	54	55						0				
	1	2022	MC (+)	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1						0				
	<b>1</b>	<b>2022</b>	<b>Total</b>	<b>650</b>	<b>0</b>	<b>650</b>	-	-	-	-	-	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>56</b>	-	-	-	-	-	<b>0</b>					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary
		<b>Item Number / Title [DODIC]:</b> H06102 / JAVELIN (AAWS-M)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	JJV All Up Round - Tucson AZ Orlando FL	850	3,960	6,480	4	7	23	30	6	3	29	32

**Remarks:**  
 FY20 OTH are Army Funded Reimbursable Authority (FRA) missiles. In FY20, Army was able to buy back 391 additional missiles using FRA funds generated by the prior sale of older missiles from existing US Army stockpile to FMS customers.

Javelin relies on the combined United States Army, other services, and FMS procurements to reach MSR.

Contract currently caps production at 2,100 missiles annually.

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

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

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary	<b>Item Number / Title [DODIC]:</b> H06103 / Javelin Lightweight Command Launch Unit (CLU)

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>					
Resource Summary				Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)				-	-	5	86	-	86
Gross/Weapon System Cost (\$ in Millions)				-	-	15.970	44.194	-	44.194
Less PY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)				-	-	15.970	44.194	-	44.194
Plus CY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>				-	-	<b>15.970</b>	<b>44.194</b>	-	<b>44.194</b>
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>									
Initial Spares (\$ in Millions)				-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)				-	-	3,194.000	513.884	-	513.884

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Light Weight CLU Production <sup>(†)</sup>	-	-	-	-	-	-	442.600	5	2.213	350.698	86	30.160	-	-	-	350.698	86	30.160
Engineering Services	-	-	-	-	-	-	-	-	1.377	-	-	1.713	-	-	-	-	-	1.713
Acceptance Testing	-	-	-	-	-	-	-	-	0.400	-	-	0.529	-	-	-	-	-	0.529
Production Engineering	-	-	-	-	-	-	-	-	0.875	-	-	1.088	-	-	-	-	-	1.088
Fielding	-	-	-	-	-	-	-	-	0.173	-	-	1.059	-	-	-	-	-	1.059
<b>Subtotal: Recurring Cost</b>	-	-	-	-	-	-	-	-	<b>5.038</b>	-	-	<b>34.549</b>	-	-	-	-	-	<b>34.549</b>
Non Recurring Cost																		
Initial Production Facilitization	-	-	-	-	-	-	-	-	10.932	-	-	8.369	-	-	-	-	-	8.369
<b>Subtotal: Non Recurring Cost</b>	-	-	-	-	-	-	-	-	<b>10.932</b>	-	-	<b>8.369</b>	-	-	-	-	-	<b>8.369</b>
<b>Subtotal: Flyaway Cost</b>	-	-	-	-	-	-	-	-	<b>15.970</b>	-	-	<b>42.918</b>	-	-	-	-	-	<b>42.918</b>
Support - Program Management Cost																		
Government Management	-	-	-	-	-	-	-	-	-	-	-	1.276	-	-	-	-	-	1.276
<b>Subtotal: Support - Program Management Cost</b>	-	-	-	-	-	-	-	-	-	-	-	<b>1.276</b>	-	-	-	-	-	<b>1.276</b>
<b>Gross/Weapon System Cost</b>	-	-	-	-	-	-	<b>3,194.000</b>	<b>5</b>	<b>15.970</b>	<b>513.884</b>	<b>86</b>	<b>44.194</b>	-	-	-	<b>513.884</b>	<b>86</b>	<b>44.194</b>

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary	<b>Item Number / Title [DODIC]:</b> H06103 / Javelin Lightweight Command Launch Unit (CLU)

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

**Remarks:**  
 Lightweight CLU unit prices will be reduced significantly once full-rate production is achieved, and will be further reduced by combining Army procurement quantities with other U.S. services and foreign military sales quantities.

Procurement funding reduction in FY21 & FY22 decreases FY21 quantity from 10 to 5 and FY22 quantity from 212 to 86.

Beginning in FY2022, the project office will start appropriately allocating some Government Support costs to the Javelin Lightweight CLU Funding line (H06103) for personnel and government agencies that support the Lightweight CLU procurement efforts. No allocation was made for Government Support costs in FY21 because the majority of funds were for Initial Production Facilitization.

Fielding costs include initial consumables including Battery Coolant Units (BCU).

Facilitization costs include cost to set up a new production line for Lightweight CLU builds. LW CLU initial LRIP of 5 units is planned for FY2021, with a ramp-up to a second LRIP of 86 units in FY2022 prior to reaching Full Rate Production (FRP) of ~300/year in FY2023. First Unit Equipped (FUE) is planned for 4QFY2024.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	-	5	86	-	86
	Total Obligation Authority	-	15.970	44.194	-	44.194
<b>Total:</b>	<b>Quantity</b>	-	5	86	-	86
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	-	15.970	44.194	-	44.194

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army							<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30			<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary				<b>Item Number / Title [DODIC]:</b> H06103 / Javelin Lightweight Command Launch Unit (CLU)					

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Light Weight CLU Production <sup>(†)</sup>		2021	JJV Lightweight CLU / Tucson AZ Orlando FL	SS / FFP	AMCOM, Redstone Arsenal AL	Jun 2021	Jun 2023	5	442.600	N		Oct 2019
Light Weight CLU Production <sup>(†)</sup>		2022	JJV Lightweight CLU / Tucson AZ Orlando FL	SS / FFP	AMCOM, Redstone Arsenal AL	Jun 2022	Jun 2024	86	350.698	N		Oct 2020

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

**Remarks:**

JJV: Javelin Joint Venture (includes Raytheon in Tucson, AZ and Lockheed Martin in Orlando, FL)  
 SS: Sole Source  
 FFP: Firm Fixed Price  
 AMCOM: Aviation and Missile Command



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army															<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary										<b>Item Number / Title [DODIC]:</b> H06103 / Javelin Lightweight Command Launch Unit (CLU)									

O C C O		M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Fiscal Year 2023												Fiscal Year 2024												B A L A N C E
								Calendar Year 2023												Calendar Year 2024												
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
Light Weight CLU Production																																
1	2021	ARMY	5	0	5	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	0			
1	2022	ARMY	86	0	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	7	7	56	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army															<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary										<b>Item Number / Title [DODIC]:</b> H06103 / Javelin Lightweight Command Launch Unit (CLU)									

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2025										Fiscal Year 2026										BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025										Calendar Year 2026										
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R		M A Y

Light Weight CLU Production																															
1	2021	ARMY		5	5	0																									0
1	2022	ARMY		86	30	56	7	7	7	7	7	7	7																		0

							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P
--	--	--	--	--	--	--	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 0648CC0007 / Javelin (AAWS-M) System Summary
		<b>Item Number / Title [DODIC]:</b> H06103 / Javelin Lightweight Command Launch Unit (CLU)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	JJV Lightweight CLU - Tucson AZ Orlando FL	120	480	780	3	9	24	33	1	1	22	23

"A" in the Delivery Schedule indicates the Contract Award Date.

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



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/  
Assault Missile Sys **P-1 Line Item Number / Title:**  
2104C59300 / TOW 2 System Summary

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	174,157	1,460	1,231	887	-	887	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	3,630.112	127.907	123.474	104.412	-	104.412	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	207.598	19.949	10.500	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	3,422.514	107.958	112.974	104.412	-	104.412	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	227.547	10.500	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>3,650.061</b>	<b>118.458</b>	<b>112.974</b>	<b>104.412</b>	<b>-</b>	<b>104.412</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	20.844	87.608	100.304	117.714	-	117.714	-	-	-	-	-	-

**Description:**

Tube launched, Optically tracked, Wire - less guided (TOW) missiles (BGM-71 Series) are combat proven munitions that provide heavy anti-armor/assault capability to the Army's Infantry Brigade Combat Teams (IBCT), Stryker Brigade Combat Teams (SBCT) and Armor Brigade Combat Teams (ABCT). TOW missiles continue to be used as the weapon of choice in precision combat engagements. TOW missiles are also the primary heavy anti-armor/ assault missile for the U.S. Marine Corps (USMC) and more than 43 allied nations. Warfighters also employ TOW missiles against buildings and field fortifications, taking advantage of the missile's precision assault capabilities.

The TOW Weapon System includes the ITAS launcher, TOW missiles, and associated tactical training aids/devices. The Improved Target Acquisition System (ITAS) is a combat proven TOW missile launcher that provides long-range, lethal anti-armor and precision assault fires capability for Active, Reserve, and National Guard component Infantry and SBCT across a spectrum of operational environments. The USMC employs the TOW missile from its ITAS derived M41A7 Saber launchers, and Anti-Tank Guided Missile (ATGM) vehicles.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army									
Quantity	1,460	1,231	887	-	887	-	-	-	-
Total Obligation Authority	118.458	112.974	104.412	-	104.412	-	-	-	-
<b>Total:</b>									
<b>Secondary Distribution</b>									
Quantity	<b>1,460</b>	<b>1,231</b>	<b>887</b>	<b>-</b>	<b>887</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Total Obligation Authority	<b>118.458</b>	<b>112.974</b>	<b>104.412</b>	<b>-</b>	<b>104.412</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys **P-1 Line Item Number / Title:** 2104C59300 / TOW 2 System Summary

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

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C59403 / TOW Family of Missiles	P-5a, P-21			174,157 / 3,630.112	1,460 / 127.907	1,231 / 123.474	887 / 104.412	- / -	887 / 104.412
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>174,157 / 3,630.112</b>	<b>1,460 / 127.907</b>	<b>1,231 / 123.474</b>	<b>887 / 104.412</b>	<b>- / -</b>	<b>887 / 104.412</b>

\*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:**

FY22 funding in the amount of \$104.412 million procures 887 TOW 2B Aero missiles and provides combat inventory at levels required by the US Army's Total Munitions Requirement.

The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to increase the Army procurement of TOW missiles and to mitigate safety and obsolescence issues.

In accordance with Section 1815 of the FY08 National Defense Authorization Act, this item is necessary for use by the active components and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>														<b>Date: May 2021</b>				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30				<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary						<b>Item Number / Title [DODIC]:</b> C59403 / TOW Family of Missiles								
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :							<b>MDAP/MAIS Code:</b>											
<b>Resource Summary</b>				<b>Prior Years</b>		<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 Total</b>				
Procurement Quantity ( <i>Units in Each</i> )				174,157		1,460		1,231		887		-		887				
Gross/Weapon System Cost ( <i>\$ in Millions</i> )				3,630.112		127.907		123.474		104.412		-		104.412				
Less PY Advance Procurement ( <i>\$ in Millions</i> )				207.598		19.949		10.500		-		-		-				
Net Procurement (P-1) ( <i>\$ in Millions</i> )				3,422.514		107.958		112.974		104.412		-		104.412				
Plus CY Advance Procurement ( <i>\$ in Millions</i> )				227.547		10.500		-		-		-		-				
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )				<b>3,650.061</b>		<b>118.458</b>		<b>112.974</b>		<b>104.412</b>		<b>-</b>		<b>104.412</b>				
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																		
Initial Spares ( <i>\$ in Millions</i> )				-		-		-		-		-		-		-		
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )				20.844		87.608		100.304		117.714		-		117.714				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2020</b>			<b>FY 2021</b>			<b>FY 2022 Base</b>			<b>FY 2022 OCO</b>			<b>FY 2022 Total</b>		
	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)
Flyaway Cost																		
Recurring Cost																		
Missile Contract <sup>(†)</sup>	20.333	173,632	3,530.459	77.317	1,460	112.883	90.480	1,231	111.381	95.682	887	84.870	-	-	-	95.682	887	84.870
Engineering Services	-	-	-	-	-	-	-	-	-	-	-	3.432	-	-	-	-	-	3.432
Acceptance Testing	-	-	-	-	-	-	-	-	-	-	-	3.114	-	-	-	-	-	3.114
<b>Subtotal: Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>3,530.459</b>	<b>-</b>	<b>-</b>	<b>112.883</b>	<b>-</b>	<b>-</b>	<b>111.381</b>	<b>-</b>	<b>-</b>	<b>91.416</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>91.416</b>
Non Recurring Cost																		
Counter Active Protection System (CAPS) Obsolescence	-	-	-	-	-	-	-	-	2.375	-	-	6.076	-	-	-	-	-	6.076
<b>Subtotal: Non Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.375</b>	<b>-</b>	<b>-</b>	<b>6.076</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.076</b>
<b>Subtotal: Flyaway Cost</b>	<b>-</b>	<b>-</b>	<b>3,530.459</b>	<b>-</b>	<b>-</b>	<b>112.883</b>	<b>-</b>	<b>-</b>	<b>113.756</b>	<b>-</b>	<b>-</b>	<b>97.492</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>97.492</b>
Support - Acceptance Testing Cost																		
Acceptance Test	-	-	17.491	-	-	4.650	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal: Support - Acceptance Testing Cost</b>	<b>-</b>	<b>-</b>	<b>17.491</b>	<b>-</b>	<b>-</b>	<b>4.650</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Support - Production Engineering Cost																		
Production Engineering	-	-	-	-	-	-	-	-	-	-	-	4.875	-	-	-	-	-	4.875
<b>Subtotal: Support - Production Engineering Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.875</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.875</b>
Support - Program Management Cost																		
Government Management	-	-	53.040	-	-	7.595	-	-	6.224	-	-	2.045	-	-	-	-	-	2.045

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>												<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30						<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary						<b>Item Number / Title [DODIC]:</b> C59403 / TOW Family of Missiles					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :												<b>MDAP/MAIS Code:</b>					

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Program Management Cost</i>	-	-	53.040	-	-	7.595	-	-	6.224	-	-	2.045	-	-	-	-	-	2.045
<i>Support - System Engineering Cost</i>																		
System Engineering	-	-	29.122	-	-	2.779	-	-	3.494	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - System Engineering Cost</i>	-	-	29.122	-	-	2.779	-	-	3.494	-	-	-	-	-	-	-	-	-
<b>Gross/Weapon System Cost</b>	<b>20.844</b>	<b>174,157</b>	<b>3,630.112</b>	<b>87.608</b>	<b>1,460</b>	<b>127.907</b>	<b>100.304</b>	<b>1,231</b>	<b>123.474</b>	<b>117.714</b>	<b>887</b>	<b>104.412</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>117.714</b>	<b>887</b>	<b>104.412</b>

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

Cost Element Breakout	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Missile Contract	20.333	173,632	3,530.459	77.317	1,460	112.883	90.480	1,231	111.381	95.682	887	84.870	-	-	-	95.682	887	84.870
All configurations (FY 19 and prior)	20.333	173,632	3,530.459	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2B Aero	-	-	-	89.695	960	86.107	114.778	731	83.903	95.682	887	84.870	-	-	-	95.682	887	84.870
Bunker Buster	-	-	-	53.552	500	26.776	54.956	500	27.478	-	-	-	-	-	-	-	-	-

**Remarks:**

The P-5 Cost Elements for FY22 were restructured and cost estimates were updated and realigned to improve tracking and reporting of actuals. This update also increases consistency in P-5 reporting across the Tactical Aviation and Ground Munitions portfolio.

- Support Element "System Engineering" is now under Recurring Cost and is labeled "Engineering Services"
- Support Element "Acceptance Test" is now under Recurring Cost
- Support Element "Government Management" was split into "Production Engineering" and "Government Management"; increase in funding facilitates mitigation of obsolescence and safety concerns to production missile variants.

FY22 funding in the amount of \$104.412 million procures 887 TOW 2B Aero missiles and provides combat inventory at levels required by the US Army's Total Munitions Requirement.

FY22 TOW 2B unit price estimate assumes additional customer procurement of missiles to reach Minimum Sustaining Rate.

FY22 procurement of \$6.076M procures CAPS hardware for component and system tests and conducts the component level qualification of the CAPS hardware.

The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to increase the Army procurement of TOW missiles and to mitigate safety and obsolescence issues.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>	<b>Date:</b> May 2021
---	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary	<b>Item Number / Title [DODIC]:</b> C59403 / TOW Family of Missiles
--	---	--

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

IAW Section 1815 of the FY08 NDAA, this item is necessary for use by the active components and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	1,460	1,231	887	-	887
	Total Obligation Authority	118.458	112.974	104.412	-	104.412
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>1,460</b>	<b>1,231</b>	<b>887</b>	<b>-</b>	<b>887</b>
	<b>Total Obligation Authority</b>	<b>118.458</b>	<b>112.974</b>	<b>104.412</b>	<b>-</b>	<b>104.412</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army	<b>Date:</b> May 2021
---	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary	<b>Item Number / Title [DODIC]:</b> C59403 / TOW Family of Missiles
--	---	--

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Missile Contract <sup>(†)</sup>		2020	Raytheon / Tucson	SS / FPIF	AMCOM, Redstone Arsenal, AL	Mar 2020	Jul 2021	1,460	77.317	Y		
Missile Contract <sup>(†)</sup>		2021	Raytheon / Tucson	SS / FPIF	AMCOM, Redstone Arsenal, AL	Mar 2021	Jan 2023	1,231	90.480	Y		
Missile Contract <sup>(†)</sup>		2022	Raytheon / Tucson	SS / FPIF	AMCOM, Redstone Arsenal, AL	Jun 2022	Dec 2023	887	95.682	Y		Aug 2020

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

**Remarks:**

Raytheon is the only industry source that is both facilitized and qualified to produce TOW missiles.

AMCOM   Aviation and Missile Command  
 FFP      Firm Fixed Price  
 FPIF     Fixed Price Incentive Firm Target  
 SS        Sole Source

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule: PB 2022 Army** **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 2104C59300 / TOW 2 System Summary **Item Number / Title [DODIC]:** C59403 / TOW Family of Missiles

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2020													Fiscal Year 2021													BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020													Calendar Year 2021													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Missile Contract																																	
Prior Years Deliveries: 173632																																	
	1	2020	ARMY	1,460	0	1,460																											
	1	2020	FMS (†)	1,254	0	1,254																											
	1	2020	MC (†)	500	0	500																											
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>3,214</b>	<b>0</b>	<b>3,214</b>																											
	1	2021	ARMY	1,231	0	1,231																											
	1	2021	FMS (†)	427	0	427																											
	1	2021	MC (†)	448	0	448																											
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>2,106</b>	<b>0</b>	<b>2,106</b>																											
	1	2022	ARMY	887	0	887																											
	1	2022	FMS (†)	1,278	0	1,278																											
	1	2022	MC (†)	463	0	463																											
	<b>1</b>	<b>2022</b>	<b>Total</b>	<b>2,628</b>	<b>0</b>	<b>2,628</b>																											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule: PB 2022 Army** **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 2104C59300 / TOW 2 System Summary **Item Number / Title [DODIC]:** C59403 / TOW Family of Missiles

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2022														Fiscal Year 2023														BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022														Calendar Year 2023														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
Missile Contract																																			
Prior Years Deliveries: 173632																																			
	1	2020	ARMY	1,460	525	935	175	175	175	175	175	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0			
	1	2020	FMS (†)	1,254	0	1,254	-	-	-	-	-	-	-	-	145	175	175	175	175	175	175	175	59	-	-	-	-	-	-	-	-	-	0		
	1	2020	MC (†)	500	0	500	-	-	-	-	-	120	175	175	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0			
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>3,214</b>	<b>525</b>	<b>2,689</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>180</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>59</b>	-	-	-	-	-	-	-	-	<b>0</b>				
	1	2021	ARMY	1,231	0	1,231	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	176	176	176	176	176	175	-	-	0			
	1	2021	FMS (†)	427	0	427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	427				
	1	2021	MC (†)	448	0	448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	175	97					
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>2,106</b>	<b>0</b>	<b>2,106</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>176</b>	<b>176</b>	<b>176</b>	<b>176</b>	<b>176</b>	<b>176</b>	<b>175</b>	<b>176</b>	<b>175</b>	<b>524</b>				
	1	2022	ARMY	887	0	887	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	887				
	1	2022	FMS (†)	1,278	0	1,278	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,278				
	1	2022	MC (†)	463	0	463	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	463				
	<b>1</b>	<b>2022</b>	<b>Total</b>	<b>2,628</b>	<b>0</b>	<b>2,628</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>2,628</b>				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					



**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 2104C59300 / TOW 2 System Summary **Item Number / Title [DODIC]:** C59403 / TOW Family of Missiles

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2024													Fiscal Year 2025													BALANCE				
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T O 1 O C T 2 0 2 3	BAL D U E A S O F 1 O C T	Calendar Year 2024													Calendar Year 2025																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P						
Missile Contract																																				
Prior Years Deliveries: 173632																																				
	1	2020	ARMY	1,460	1,460	0																														0
	1	2020	FMS (+)	1,254	1,254	0																														0
	1	2020	MC (+)	500	500	0																														0
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>3,214</b>	<b>3,214</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
	1	2021	ARMY	1,231	1,231	0	-	-	-																											0
	1	2021	FMS (+)	427	0	427	77	175	175																											0
	1	2021	MC (+)	448	351	97	97	-	-																											0
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>2,106</b>	<b>1,582</b>	<b>524</b>	<b>174</b>	<b>175</b>	<b>175</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
	1	2022	ARMY	887	0	887	-	-	189	240	240	218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		0	
	1	2022	FMS (+)	1,278	0	1,278	-	-	-	-	-	-	-	-	215	215	215	213	210	210																0
	1	2022	MC (+)	463	0	463	-	-	-	-	-	-	198	240	25	-	-	-	-	-																0
	<b>1</b>	<b>2022</b>	<b>Total</b>	<b>2,628</b>	<b>0</b>	<b>2,628</b>	-	-	<b>189</b>	<b>240</b>	<b>240</b>	<b>218</b>	<b>198</b>	<b>240</b>	<b>240</b>	<b>215</b>	<b>215</b>	<b>213</b>	<b>210</b>	<b>210</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-		<b>0</b>
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P						

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary
		<b>Item Number / Title [DODIC]:</b> C59403 / TOW Family of Missiles

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Raytheon - Tucson	2,880	9,600	24,000	3	2	18	20	3	2	18	20

**Remarks:**  
The Program Office plans to mitigate potential challenges of procuring missiles at less than the Minimum Sustaining Rate through active management of industrial base production activities.

(†) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

**Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification):** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary	<b>P-5 Number / Title:</b> C59403 / TOW Family of Missiles
--	---	---

<b>First System (2022) Award Date:</b> March 2022	<b>First System (2022) Completion Date:</b> July 2023	<b>Interval Between Systems:</b> Months
--	--	--

TOW Family of Missiles	Production Leadtime <i>(Months)</i>	Prior Years <i>(Each)</i>	FY 2020 <i>(Each)</i>	FY 2021 <i>(Each)</i>	FY 2022 <i>(Each)</i>
Quantity		174,157	1,460	1,231	887

Cost Elements	When Required <i>(Months)</i>	Prior Years <i>(\$ M)</i>	FY 2020 <i>(\$ M)</i>	FY 2021 <i>(\$ M)</i>	FY 2022 <i>(\$ M)</i>
---------------	----------------------------------	------------------------------	--------------------------	--------------------------	--------------------------

<b>Other</b>					
Warhead	14	102.284	6.923	-	-
Launch Motor	14	12.237	0.730	-	-
Flight Motor	12	3.457	0.138	-	-
2B Sensor	14	65.045	-	-	-
Gyro	13	20.480	1.249	-	-
Flight Motor Case Kit	10	4.644	0.283	-	-
Control Surface Actuator	14	12.119	0.739	-	-
Beacon Shutter Actuator	11	7.281	0.438	-	-
<i>Total: Other</i>		<i>227.547</i>	<i>10.500</i>	-	-
<b>Total Advance Procurement/Obligation Authority</b>		<b>227.547</b>	<b>10.500</b>	-	-

**UNCLASSIFIED**

**Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification):** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 2104C59300 / TOW 2 System Summary	<b>P-5 Number / Title:</b> C59403 / TOW Family of Missiles
--	---	---

Cost Elements	QPA <i>(Each)</i>	FY 2022					Total Cost Request <i>(\$ M)</i>
		Production Leadtime <i>(Months)</i>	Unit Cost <i>(\$ K)</i>	Contract Forecast Date	2022 Qty <i>(Each)</i>	For FY	
<b>Other</b>							
Warhead	1						-
Launch Motor	1						-
Flight Motor	1						-
2B Sensor	1						-
Gyro	1						-
Flight Motor Case Kit	1						-
Control Surface Actuator	1						-
Beacon Shutter Actuator	1						-
<i>Total: Other</i>							-
<b>Total Advance Procurement/Obligation Authority</b>							-

**Description:**  
FY22 Economic Order Quantity funding supports the TOW Contract.

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys	<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0603778A, 0205778A
--	---	---

**Line Item MDAP/MAIS Code:** 260

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	42,238	7,878	5,502	5,886	-	5,886	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	5,342.163	1,136.794	912.997	935.917	-	935.917	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	5,342.163	1,136.794	912.997	935.917	-	935.917	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>5,342.163</b>	<b>1,136.794</b>	<b>912.997</b>	<b>935.917</b>	<b>-</b>	<b>935.917</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	126.478	144.300	165.939	159.007	-	159.007	-	-	-	-	-	-

**Description:**

NOTE:

P-40 Quantity:

FY 2021: Actual quantity is 5,796.

FY 2022: P40 Quantity is correct vice the P1 5817 quantity.

Guided Multiple Launch Rocket System (GMLRS) rockets are surface-to-surface artillery rockets fired from the Multiple Launch Rocket System (MLRS) and High Mobility Artillery Rocket System (HIMARS) launchers. GMLRS rockets provide 24/7, all-weather precision fires to engage both area and point targets at short, medium, and long ranges. The U.S. Marine Corps also procures GMLRS rockets through the Army project office.

The GMLRS Program currently consists of multiple variants: GMLRS Dual Purpose Improved Conventional Munition (DPICM) is a cluster munition that replaced the shorter range MLRS rockets to engage area or imprecisely located targets. GMLRS DPICM Production was terminated in response to the June 2008 Department of Defense (DoD) Cluster Munitions Policy. GMLRS Unitary utilizes a 200 pound high explosive warhead to engage point targets with limited collateral damage. GMLRS Alternative Warhead (AW) was developed as a non-cluster munition to engage the same target sets as DPICM. GMLRS Unitary and AW are currently in full rate production. An Engineering Change Proposal (ECP) is currently in process to extend the range of GMLRS rockets and, upon completion of key development tests, the ER GMLRS will be considered for cut-in to the GMLRS production efforts as early as FY22. Range extension will allow GMLRS to reach targets formerly serviced by the more expensive Army Tactical Missile System (ATACMS).

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	7,878	5,502	5,886	-	5,886	-	-	-
	Total Obligation Authority	1,136.794	912.997	935.917	-	935.917	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>7,878</b>	<b>5,502</b>	<b>5,886</b>	<b>-</b>	<b>5,886</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>1,136.794</b>	<b>912.997</b>	<b>935.917</b>	<b>-</b>	<b>935.917</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:**  
2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/  
Assault Missile Sys **P-1 Line Item Number / Title:**  
6005C64400 / Guided MLRS Rocket (GMLRS)

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603778A, 0205778A

**Line Item MDAP/MAIS Code:** 260

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C65404 / GUIDED MLRS ROCKET (GMLRS)	P-5a, P-21			42,238 / 5,338.646	7,878 / 1,136.794	5,502 / 912.501	5,886 / 935.428	- / -	5,886 / 935.428
P-5	C65406 / GMLRS Training Devices				- / 3.517	- / -	- / 0.496	- / 0.489	- / -	- / 0.489
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>42,238 / 5,342.163</b>	<b>7,878 / 1,136.794</b>	<b>5,502 / 912.997</b>	<b>5,886 / 935.917</b>	<b>- / -</b>	<b>5,886 / 935.917</b>

\*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 FY 2022 Base procurement dollars in the amount of \$747.813 million support the procurement of 4,650 rockets. The FY 2022 Direct War procurement dollars in the amount of \$187.615 million support the procurement of 1,236 rockets. \$0.489 million of Base procurement dollars support the acquisition of equipment and support to ensure Guided Multiple Launch Rocket Common Training Device alignment with the production configuration. The actual missile buy quantities are subject to the mix between AW and Unitary warheads, Standard (regular range) versus Extended Range configurations, replacement pod cut-in, and replacement pod/Extended Range ECP tooling capacity ramp-up. In FY 2022, Army guidance is to procure 600 Standard Unitary and 5,286 Standard Alternative Warhead (AW) in support of the Army's Total Munitions Requirement (TMR). The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to support procurement of additional GMLRS rockets. TMR quantities are evaluated and adjusted annually. As of May, 2020, the TMR showed requirements for Unitary of 18,423 and for AW of 66,289.

Since program inception, GMLRS has benefited from the availability of 30 year old M-26 pods that are repurposed for current GMLRS production. Due to dwindling supply of these pods, procurement of replacement pods must begin in FY 2022.

The AAO is 140,004.

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

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>													<b>Date:</b> May 2021						
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30						<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)						<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)							
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :										<b>MDAP/MAIS Code:</b>									
<b>Resource Summary</b>				<b>Prior Years</b>		<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 Total</b>					
Procurement Quantity (Units in Each)				42,238		7,878		5,502		5,886		-		5,886					
Gross/Weapon System Cost (\$ in Millions)				5,338.646		1,136.794		912.501		935.428		-		935.428					
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-					
Net Procurement (P-1) (\$ in Millions)				5,338.646		1,136.794		912.501		935.428		-		935.428					
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-					
<b>Total Obligation Authority (\$ in Millions)</b>				<b>5,338.646</b>		<b>1,136.794</b>		<b>912.501</b>		<b>935.428</b>		<b>-</b>		<b>935.428</b>					
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																			
Initial Spares (\$ in Millions)				-		-		-		-		-		-		-			
Gross/Weapon System Unit Cost (\$ in Thousands)				126.394		144.300		165.849		158.924		-		158.924					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																			
<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2020</b>			<b>FY 2021</b>			<b>FY 2022 Base</b>			<b>FY 2022 OCO</b>			<b>FY 2022 Total</b>			
	<b>Unit Cost (\$ K)</b>	<b>Qty (Each)</b>	<b>Total Cost (\$ M)</b>	<b>Unit Cost (\$ K)</b>	<b>Qty (Each)</b>	<b>Total Cost (\$ M)</b>	<b>Unit Cost (\$ K)</b>	<b>Qty (Each)</b>	<b>Total Cost (\$ M)</b>	<b>Unit Cost (\$ K)</b>	<b>Qty (Each)</b>	<b>Total Cost (\$ M)</b>	<b>Unit Cost (\$ K)</b>	<b>Qty (Each)</b>	<b>Total Cost (\$ M)</b>	<b>Unit Cost (\$ K)</b>	<b>Qty (Each)</b>	<b>Total Cost (\$ M)</b>	
Flyaway Cost																			
Recurring Cost																			
Tactical GMLRS Hardware <sup>(†)</sup>	112.081	42,238	4,734.076	139.725	7,878	1,100.753	148.543	5,796	860.955	150.431	5,886	885.434	-	-	-	150.431	5,886	885.434	
Ind Maint/Init Prod Fac	-	-	116.721	-	-	4.950	-	-	20.000	-	-	17.665	-	-	-	-	-	17.665	
Production Verification Testing	-	-	75.407	-	-	6.798	-	-	6.962	-	-	7.240	-	-	-	-	-	7.240	
First Destination Transportation	-	-	6.392	-	-	1.106	-	-	0.838	-	-	0.869	-	-	-	-	-	0.869	
Production Engineering Support	-	-	193.153	-	-	13.130	-	-	13.446	-	-	13.715	-	-	-	-	-	13.715	
Spares	-	-	2.913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Subtotal: Recurring Cost</i>	-	-	<i>5,128.662</i>	-	-	<i>1,126.737</i>	-	-	<i>902.201</i>	-	-	<i>924.923</i>	-	-	-	-	-	<i>924.923</i>	
<i>Subtotal: Flyaway Cost</i>	-	-	<i>5,128.662</i>	-	-	<i>1,126.737</i>	-	-	<i>902.201</i>	-	-	<i>924.923</i>	-	-	-	-	-	<i>924.923</i>	
Support - Engineering Change Proposals Cost																			
Engineering Change Proposals	-	-	114.747	-	-	6.150	-	-	6.298	-	-	6.424	-	-	-	-	-	6.424	
<i>Subtotal: Support - Engineering Change Proposals Cost</i>	-	-	<i>114.747</i>	-	-	<i>6.150</i>	-	-	<i>6.298</i>	-	-	<i>6.424</i>	-	-	-	-	-	<i>6.424</i>	
Support - Program Management Cost																			
Government Management	-	-	95.238	-	-	3.907	-	-	4.001	-	-	4.081	-	-	-	-	-	4.081	

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)	<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Program Management Cost</i>	-	-	95.238	-	-	3.907	-	-	4.001	-	-	4.081	-	-	-	-	-	4.081
<b>Gross/Weapon System Cost</b>	126.394	42,238	5,338.646	144.300	7,878	1,136.794	165.849	5,502	912.501	158.924	5,886	935.428	-	-	-	158.924	5,886	935.428

**Remarks:**

The Army fully transitioned to Insensitive Munitions Propulsion System Motors (IMPS) for all rockets in FY 2020. Procurement of tooling for Extended Range GMLRS and for manufacture of pods was previously scheduled for FY 2021, however, it has since become necessary to implement a Life Time Buy of Application-Specific Integrated Circuit (ASIC) chips in order to assure continuing supply of Guidance Sets. Due to this development, the Extended Range GMLRS tooling has been shifted into FY 2022. The cost to procure the ASIC chips is estimated to be \$60M and will enable production to continue through FY 2026, at which time a replacement shall become available.

FY 2022 is the first year that shall require the production of pods for the GMLRS program rather than making use of repurposed M26 pods that were freely available in past years. These factors, coupled with increased procurement of the more expensive AW variant to support the Army's TMR, lead to an overall unit cost growth.

Costs for Engineering Change Proposals covers activities associated with resolving manufacturing-related changes that arise due to emerging statutory and regulatory requirements, planned and unplanned parts unavailability, supply chain disruptions, cost reduction initiatives, quality improvement, and studies and investigations. Some of the currently known issues that must be resolved include obsolescence of certain components within the safe arm fuze, proximity sensor, guidance set, and motor material.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	7,878	5,502	5,886	-	5,886
	Total Obligation Authority	1,136.794	912.501	935.428	-	935.428
<b>Total:</b>	<b>Quantity</b>	<b>7,878</b>	<b>5,502</b>	<b>5,886</b>	<b>-</b>	<b>5,886</b>
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>1,136.794</b>	<b>912.501</b>	<b>935.428</b>	<b>-</b>	<b>935.428</b>

(t) indicates the presence of a P-5a



**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army							<b>Date:</b> May 2021				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30			<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)				<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
Tactical GMLRS Hardware <sup>(†)</sup>		2017	Lockheed Martin M.&F.C Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	May 2017	Jul 2018	2,970	112.270	N		Feb 2016
Tactical GMLRS Hardware <sup>(†)</sup>		2018	Lockheed Martin M.&F.C Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	Apr 2018	Aug 2019	6,528	151.746	N		Feb 2017
Tactical GMLRS Hardware <sup>(†)</sup>		2019	Lockheed Martin M.&F.C Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	Mar 2019	Aug 2020	7,668	122.689	N		Feb 2017
Tactical GMLRS Hardware <sup>(†)</sup>		2020	Lockheed Martin M.&F.C Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	Mar 2020	Aug 2021	7,878	139.725	N		Feb 2017
Tactical GMLRS Hardware <sup>(†)</sup>		2021	Lockheed Martin M.&F.C Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	Mar 2021	Aug 2022	5,796	148.543	N		May 2019
Tactical GMLRS Hardware <sup>(†)</sup>		2022	Lockheed Martin M.&F.C Sys. / Dallas, TX	SS / FPIF	Aviation and Missile Command	Mar 2022	Aug 2023	5,886	150.431	N		May 2019

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

**Remarks:**

Lockheed Martin is currently the industry source that is both facilitated and qualified to produce the GMLRS rocket. FY19 and FY20 annual production contracts are options on the FY18 base contract. FY21 annual production is planned to be an Indefinite Delivery Indefinite Quantity (IDIQ) contract type. FY22 annual production is planned to be a lot buy against the FY21 contract.

\*Sole Source/Fixed Price Incentive Firm

\*\*Aviation and Missile Command, Redstone Arsenal, Alabama



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army															<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)										<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2019												Fiscal Year 2020												BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019												Calendar Year 2020												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
Tactical GMLRS Hardware																															
Prior Years Deliveries: 25072																															
1	2017	ARMY		2,970	756	2,214	246	246	246	246	246	246	246	246															0		
1	2017	FMS (+)		60	60	0	-	-	-	-	-	-	-	-															0		
1	2017	MC (+)		336	72	264	24	30	30	30	30	30	30	30															0		
<b>1</b>	<b>2017</b>	<b>Total</b>		<b>3,366</b>	<b>888</b>	<b>2,478</b>	<b>270</b>	<b>276</b>	<b>276</b>	<b>276</b>	<b>276</b>	<b>276</b>	<b>276</b>	<b>276</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>		
1	2018	ARMY		6,528	0	6,528	-	-	-	-	-	-	-	-		546	546	546	546	546	546	546	540	540	540	540			0		
1	2018	FMS (+)		96	0	96	-	-	-	-	-	-	-	-		12	12	12	12	6	6	6	6	6	6	6			0		
1	2018	MC (+)		372	0	372	-	-	-	-	-	-	-	-		36	36	30	30	30	30	30	30	30	30	30			0		
<b>1</b>	<b>2018</b>	<b>Total</b>		<b>6,996</b>	<b>0</b>	<b>6,996</b>	-	-	-	-	-	-	-	-		<b>594</b>	<b>594</b>	<b>588</b>	<b>588</b>	<b>582</b>	<b>582</b>	<b>582</b>	<b>576</b>	<b>576</b>	<b>576</b>	<b>576</b>	-	-	<b>0</b>		
1	2019	ARMY		7,668	0	7,668																					642	642	6,384		
1	2019	FMS (+)		462	0	462																					30	36	396		
1	2019	MC (+)		222	0	222																					24	18	180		
<b>1</b>	<b>2019</b>	<b>Total</b>		<b>8,352</b>	<b>0</b>	<b>8,352</b>																					<b>696</b>	<b>696</b>	<b>6,960</b>		
1	2020	ARMY		7,878	0	7,878																							7,878		
1	2021	ARMY		5,796	0	5,796																							5,796		
1	2021	FMS (+)		2,142	0	2,142																							2,142		
1	2021	MC (+)		330	0	330																							330		
<b>1</b>	<b>2021</b>	<b>Total</b>		<b>8,148</b>	<b>0</b>	<b>8,148</b>																							<b>8,148</b>		
1	2022	ARMY		5,886	0	5,886																							5,886		

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule: PB 2022 Army</b>															<b>Date: May 2021</b>														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)										<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)									

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2021														Fiscal Year 2022														BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021														Calendar Year 2022														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
Tactical GMLRS Hardware																																			
Prior Years Deliveries: 25072																																			
1	2017	ARMY		2,970	2,970	0																													0
1	2017	FMS (+)		60	60	0																													0
1	2017	MC (+)		336	336	0																													0
<b>1</b>	<b>2017</b>	<b>Total</b>		<b>3,366</b>	<b>3,366</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
1	2018	ARMY		6,528	6,528	0																													0
1	2018	FMS (+)		96	96	0																													0
1	2018	MC (+)		372	372	0																													0
<b>1</b>	<b>2018</b>	<b>Total</b>		<b>6,996</b>	<b>6,996</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
1	2019	ARMY		7,668	1,284	6,384	642	642	642	642	636	636	636	636	636																				0
1	2019	FMS (+)		462	66	396	36	36	36	36	42	42	42	42	42																			0	
1	2019	MC (+)		222	42	180	18	18	18	18	18	18	18	18	18																			0	
<b>1</b>	<b>2019</b>	<b>Total</b>		<b>8,352</b>	<b>1,392</b>	<b>6,960</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>		
1	2020	ARMY		7,878	0	7,878	-	-	-	-	-	-	-	-	-	654	654	660	654	660	654	654	660	654	660	660	654							0	
1	2021	ARMY		5,796	0	5,796					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	486	486	4,824		
1	2021	FMS (+)		2,142	0	2,142					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180	180	1,782			
1	2021	MC (+)		330	0	330					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	30	270			
<b>1</b>	<b>2021</b>	<b>Total</b>		<b>8,148</b>	<b>0</b>	<b>8,148</b>					<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>696</b>	<b>696</b>	<b>6,756</b>					
1	2022	ARMY		5,886	0	5,886																												5,886	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)
		<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2023														Fiscal Year 2024														BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023														Calendar Year 2024														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
Tactical GMLRS Hardware																																			
Prior Years Deliveries: 25072																																			
1	2017	ARMY		2,970	2,970	0																													0
1	2017	FMS (†)		60	60	0																													0
1	2017	MC (†)		336	336	0																													0
<b>1</b>	<b>2017</b>	<b>Total</b>		<b>3,366</b>	<b>3,366</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
1	2018	ARMY		6,528	6,528	0																													0
1	2018	FMS (†)		96	96	0																													0
1	2018	MC (†)		372	372	0																													0
<b>1</b>	<b>2018</b>	<b>Total</b>		<b>6,996</b>	<b>6,996</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
1	2019	ARMY		7,668	7,668	0																													0
1	2019	FMS (†)		462	462	0																													0
1	2019	MC (†)		222	222	0																													0
<b>1</b>	<b>2019</b>	<b>Total</b>		<b>8,352</b>	<b>8,352</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
1	2020	ARMY		7,878	7,878	0																													0
1	2021	ARMY		5,796	972	4,824	486	486	486	486	480	456	456	456	456	456																		120	
1	2021	FMS (†)		2,142	360	1,782	180	180	180	180	180	180	180	174	174	174																		0	
1	2021	MC (†)		330	60	270	30	30	30	30	30	24	24	24	24	24																		0	
<b>1</b>	<b>2021</b>	<b>Total</b>		<b>8,148</b>	<b>1,392</b>	<b>6,756</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>696</b>	<b>690</b>	<b>660</b>	<b>660</b>	<b>654</b>	<b>654</b>	<b>654</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>		
1	2022	ARMY		5,886	0	5,886	-	-	-	-	-	-	-	-	-	-	1,476	-	-	-	1,470	-	-	1,470	-	-	1,470	-	-	1,470				0	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)
		<b>Item Number / Title [DODIC]:</b> C65404 / GUIDED MLRS ROCKET (GMLRS)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Martin M.&F.C Sys. - Dallas, TX	2,160	10,002	10,002	0	2	16	18	0	5	15	20

**Remarks:**  
 In the years prior to FY 2020, the GMLRS program shares a production line with Low Cost Reduced Range Practice Rockets (LCRRPR). Any months that show production gaps in years prior to FY 2020 were utilized to manufacture LCRRPR. After FY 2020, LCRRPR will move to its own production line and GMLRS will be delivered on a monthly schedule with no gaps.

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6005C64400 / Guided MLRS Rocket (GMLRS)	<b>Item Number / Title [DODIC]:</b> C65406 / GMLRS Training Devices

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	3.517	-	0.496	0.489	-	0.489
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	3.517	-	0.496	0.489	-	0.489
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
<b>Total Obligation Authority <i>(\$ in Millions)</i></b>	<b>3.517</b>	<b>-</b>	<b>0.496</b>	<b>0.489</b>	<b>-</b>	<b>0.489</b>

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

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

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
GMLRS TRAINING DEVICES	-	-	3.517	-	-	-	-	-	0.496	-	-	0.489	-	-	-	-	-	0.489
<i>Subtotal: Recurring Cost</i>	-	-	3.517	-	-	-	-	-	0.496	-	-	0.489	-	-	-	-	-	0.489
<i>Subtotal: Flyaway Cost</i>	-	-	3.517	-	-	-	-	-	0.496	-	-	0.489	-	-	-	-	-	0.489
<b>Gross/Weapon System Cost</b>	-	-	3.517	-	-	-	-	-	0.496	-	-	0.489	-	-	-	-	-	0.489

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army					
Quantity	-	-	-	-	-
Total Obligation Authority	-	0.496	0.489	-	0.489
<b>Total: Secondary Distribution</b>					
Quantity	-	-	-	-	-
Total Obligation Authority	-	0.496	0.489	-	0.489

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys	<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0210602A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	50,199	2,982	3,330	3,048	-	3,048	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	303.328	27.555	30.836	29.574	-	29.574	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	303.328	27.555	30.836	29.574	-	29.574	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>303.328</b>	<b>27.555</b>	<b>30.836</b>	<b>29.574</b>	<b>-</b>	<b>29.574</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	6.043	9.240	9.260	9.703	-	9.703	-	-	-	-	-	-

**Description:**

The Multiple Launch Rocket System (MLRS) Low Cost Reduced Range Practice Rocket (LCRRPR) is the only live training rocket that meets the annual certification and pre-deployment requirements for Active and National Guard High Mobility Artillery Rocket System (HIMARS) and M270/M270A1 MLRS launcher units. The critical validated requirement for launcher units ensures units can achieve and maintain combat readiness. HIMARS and M270A1 Battalions are organic and attached to modular Fires Brigades supporting Brigade Combat Teams (BCTs), Joint Expeditionary Force, and Joint Special Operations Force combatant commanders. The training rocket has an inert payload section and blunt nose for inducing reduced range for use at multiple facilities in the United States and foreign countries.

LCRRPRs are manufactured by Lockheed Martin in Camden, Arkansas and Letterkenny Munitions Center (LEMC) in Chambersburg, Pennsylvania. LEMC provides an organic dual source. The LCRRPR program includes the cost to Download/Demate (DL/DM) the M26 pod and rocket motor for production reuse. Total cost also includes Bunker Storage and the procurement of Performance Oriented Packaging (POP) boxes, Inert Warheads, Reworked Igniters, M-26 Rocket Motor Reclamation contract, and RRPR obsolescence.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	2,088	2,334	2,034	-	2,034	-	-	-
	Total Obligation Authority	19.294	21.504	19.772	-	19.772	-	-	-
ANG	Quantity	894	996	1,014	-	1,014	-	-	-
	Total Obligation Authority	8.261	9.332	9.802	-	9.802	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>2,982</b>	<b>3,330</b>	<b>3,048</b>	<b>-</b>	<b>3,048</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>27.555</b>	<b>30.836</b>	<b>29.574</b>	<b>-</b>	<b>29.574</b>	<b>-</b>	<b>-</b>	<b>-</b>



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys **P-1 Line Item Number / Title:** 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0210602A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C65405 / MLRS Reduced Range Practice Rockets (RRPR)	P-5a, P-21			50,199 / 303.328	2,982 / 27.555	3,330 / 30.836	3,048 / 29.574	- / -	3,048 / 29.574
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>50,199 / 303.328</b>	<b>2,982 / 27.555</b>	<b>3,330 / 30.836</b>	<b>3,048 / 29.574</b>	<b>- / -</b>	<b>3,048 / 29.574</b>

\*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:**  
 FY2022 Base procurement dollars in the amount of \$29.574 million support the procurement of 3,048 LCRRPRs which are required to maintain the practice rocket inventory for Standards in Training Commission (STRC) 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.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)	<b>Item Number / Title [DODIC]:</b> C65405 / MLRS Reduced Range Practice Rockets (RRPR)

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	50,199	2,982	3,330	3,048	-	3,048
Gross/Weapon System Cost (\$ in Millions)	303.328	27.555	30.836	29.574	-	29.574
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	303.328	27.555	30.836	29.574	-	29.574
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>303.328</b>	<b>27.555</b>	<b>30.836</b>	<b>29.574</b>	<b>-</b>	<b>29.574</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	6.043	9.240	9.260	9.703	-	9.703

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Reduced Range Practice Rocket (LCRRPR) <sup>(f)</sup>	4.659	50,199	233.869	7.481	2,982	22.307	7.737	3,252	25.162	7.879	3,048	24.015	-	-	-	7.879	3,048	24.015
Warheads Govt Furnished Equip (GFE)	-	-	26.598	-	-	2.638	-	-	2.947	-	-	2.817	-	-	-	-	-	2.817
Production Verification Testing	-	-	3.795	-	-	0.077	-	-	0.079	-	-	0.081	-	-	-	-	-	0.081
First Destination Transportation	-	-	1.520	-	-	0.200	-	-	0.221	-	-	0.213	-	-	-	-	-	0.213
Production Engineering Support	-	-	19.166	-	-	1.731	-	-	1.811	-	-	1.820	-	-	-	-	-	1.820
<b>Subtotal: Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>284.948</b>	<b>-</b>	<b>-</b>	<b>26.953</b>	<b>-</b>	<b>-</b>	<b>30.220</b>	<b>-</b>	<b>-</b>	<b>28.946</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28.946</b>
<b>Subtotal: Flyaway Cost</b>	<b>-</b>	<b>-</b>	<b>284.948</b>	<b>-</b>	<b>-</b>	<b>26.953</b>	<b>-</b>	<b>-</b>	<b>30.220</b>	<b>-</b>	<b>-</b>	<b>28.946</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28.946</b>
Support - Production Engineering Cost																		
Production Engineering	-	-	6.774	-	-	0.510	-	-	0.522	-	-	0.532	-	-	-	-	-	0.532
<b>Subtotal: Support - Production Engineering Cost</b>	<b>-</b>	<b>-</b>	<b>6.774</b>	<b>-</b>	<b>-</b>	<b>0.510</b>	<b>-</b>	<b>-</b>	<b>0.522</b>	<b>-</b>	<b>-</b>	<b>0.532</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.532</b>
Support - Program Management Cost																		
Government Management	-	-	11.607	-	-	0.092	-	-	0.094	-	-	0.096	-	-	-	-	-	0.096

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)	<b>Item Number / Title [DODIC]:</b> C65405 / MLRS Reduced Range Practice Rockets (RRPR)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Program Management Cost</i>	-	-	11.607	-	-	0.092	-	-	0.094	-	-	0.096	-	-	-	-	-	0.096
<b>Gross/Weapon System Cost</b>	6.043	50,199	303.328	9.240	2,982	27.555	9.260	3,330	30.836	9.703	3,048	29.574	-	-	-	9.703	3,048	29.574

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	2,088	2,334	2,034	-	2,034
	Total Obligation Authority	19.294	21.504	19.772	-	19.772
ANG	Quantity	894	996	1,014	-	1,014
	Total Obligation Authority	8.261	9.332	9.802	-	9.802
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>2,982</b>	<b>3,330</b>	<b>3,048</b>	<b>-</b>	<b>3,048</b>
	<b>Total Obligation Authority</b>	<b>27.555</b>	<b>30.836</b>	<b>29.574</b>	<b>-</b>	<b>29.574</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

**Exhibit P-5a, Procurement History and Planning: PB 2022 Army** **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)	<b>Item Number / Title [DODIC]:</b> C65405 / MLRS Reduced Range Practice Rockets (RRPR)
--	---	--

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2017	Lockheed Martin / Dallas, TX	SS / FPIF	AMCOM,RSA,AL	May 2017	Jul 2018	1,362	8.660	Y		Feb 2016
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2017	Letterkenny Munitions Center / Chambersburg, PA	MIPR	LEMC, PA	Mar 2018	Apr 2018	342	5.850	Y		
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2018	Lockheed Martin / Dallas, TX	SS / FPIF	AMCOM,RSA,AL	Apr 2018	Aug 2019	3,078	8.770	Y		Feb 2017
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2018	Letterkenny Munitions Center / Chambersburg, PA	MIPR	LEMC, PA	Mar 2019	Apr 2019	342	5.920	Y		
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2019	Lockheed Martin / Dallas, TX	SS / FPIF	AMCOM,RSA,AL	Mar 2019	Aug 2020	1,542	8.900	Y		Feb 2018
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2019	Letterkenny Munitions Center / Chambersburg, PA	MIPR	LEMC, PA	Feb 2019	Apr 2020	672	6.040	Y		
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2020	Lockheed Martin / Dallas, TX	SS / FPIF	AMCOM,RSA,AL	Mar 2020	Aug 2021	1,446	9.080	Y		Feb 2019
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2020	Letterkenny Munitions Center / Chambersburg, PA	MIPR	LEMC, PA	Mar 2020	Apr 2021	1,536	6.160	Y		
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2021	Lockheed Martin / Dallas, TX	SS / FPIF	AMCOM, RSA, AL	Mar 2021	Aug 2022	2,910	9.260	Y		Feb 2020
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2021	Letterkenny Munitions Center / Chambersburg, PA	MIPR	LEMC, PA	Mar 2021	Apr 2022	342	6.280	Y		
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2022	Lockheed Martin / Dallas, TX	SS / IDIQ	AMCOM, RSA, AL	Mar 2022	Aug 2023	2,706	0.000	Y		Feb 2020
Reduced Range Practice Rocket (LCRRPR) <sup>(†)</sup>		2022	Letterkenny Munitions Center / Chambersburg, PA	MIPR	LEMC, PA	Mar 2022	Apr 2023	342	0.000	Y		

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

**Remarks:**  
Lockheed Martin is currently the industry source that is both facilitized and qualified to produce the Low Cost Reduced Range Practice Rocket (LCRRPR). Letterkenny Munitions Center (LEMC) has been established as the organic source that is both facilitized and qualified to produce the LCRRPR.

\* SS (Sole Source) / FPIF (Fixed Price Incentive Firm)  
\*\* AMCOM (Aviation and Missile Command), RSA (Redstone Arsenal), AL

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule: PB 2022 Army</b>																							<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)										<b>Item Number / Title [DODIC]:</b> C65405 / MLRS Reduced Range Practice Rockets (RRPR)																	
<b>Cost Elements (Units in Each)</b>					<b>Fiscal Year 2017</b>															<b>Fiscal Year 2018</b>															<b>B A L A N C E</b>		
<b>O C C O</b>	<b>M F R #</b>	<b>FY</b>	<b>SERVICE</b>	<b>PROC QTY</b>	<b>ACCEPT PRIOR TO 1 OCT 2016</b>	<b>BAL DUE AS OF 1 OCT</b>	<b>Calendar Year 2017</b>															<b>Calendar Year 2018</b>															
							<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>	<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>							
Reduced Range Practice Rocket (LCRRPR)																																					
Prior Years Deliveries: 42861																																					
	1	2017	ARMY	1,362	0	1,362								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113	113	113	1,023					
	1	2017	MC (†)	648	0	648								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	54	54	486					
	<b>1</b>	<b>2017</b>	<b>Total</b>	<b>2,010</b>	<b>0</b>	<b>2,010</b>								-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>167</b>	<b>167</b>	<b>167</b>	<b>1,509</b>						
	2	2017	ARMY	342	0	342																					A -	28	28	29	29	29	29	170			
	1	2018	ARMY	3,078	0	3,078																						A -	-	-	-	-	-	-	3,078		
	1	2018	MC (†)	648	0	648																						A -	-	-	-	-	-	-	648		
	<b>1</b>	<b>2018</b>	<b>Total</b>	<b>3,726</b>	<b>0</b>	<b>3,726</b>																						-	-	-	-	-	-	<b>3,726</b>			
	2	2018	ARMY	342	0	342																												342			
	1	2019	ARMY	1,542	0	1,542																												1,542			
	1	2019	MC (†)	648	0	648																												648			
	<b>1</b>	<b>2019</b>	<b>Total</b>	<b>2,190</b>	<b>0</b>	<b>2,190</b>																												<b>2,190</b>			
	2	2019	ARMY	672	0	672																												672			
	1	2020	ARMY	1,446	0	1,446																												1,446			
	1	2020	MC (†)	648	0	648																												648			
	<b>1</b>	<b>2020</b>	<b>Total</b>	<b>2,094</b>	<b>0</b>	<b>2,094</b>																												<b>2,094</b>			
	2	2020	ARMY	1,536	0	1,536																												1,536			
	1	2021	ARMY	2,910	0	2,910																												2,910			
	2	2021	ARMY	342	0	342																												342			
	1	2022	ARMY	2,706	0	2,706																												2,706			
	2	2022	ARMY	342	0	342																												342			
	2	2022	MC (†)	792	0	792																												792			
	<b>2</b>	<b>2022</b>	<b>Total</b>	<b>1,134</b>	<b>0</b>	<b>1,134</b>																												<b>1,134</b>			
							<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>	<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>							

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule: PB 2022 Army</b>															<b>Date: May 2021</b>														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)										<b>Item Number / Title [DODIC]:</b> C65405 / MLRS Reduced Range Practice Rockets (RRPR)									

Cost Elements (Units in Each)					Fiscal Year 2019													Fiscal Year 2020													B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 8	BAL D U E A S O F 1 O C T	Calendar Year 2019													Calendar Year 2020														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
Reduced Range Practice Rocket (LCRRPR)																																		
Prior Years Deliveries: 42861																																		
1	2017	ARMY		1,362	339	1,023	114	114	114	114	114	114	113	113																				0
1	2017	MC (+)		648	162	486	54	54	54	54	54	54	54	54																				0
<b>1</b>	<b>2017</b>	<b>Total</b>		<b>2,010</b>	<b>501</b>	<b>1,509</b>	<b>168</b>	<b>168</b>	<b>168</b>	<b>168</b>	<b>168</b>	<b>168</b>	<b>167</b>	<b>167</b>																			<b>0</b>	
2	2017	ARMY		342	172	170	29	29	28	28	28																							0
1	2018	ARMY		3,078	0	3,078	-	-	-	-	-	-	-	-	256	256	256	257	257	257	257	257	257	256	256	256							0	
1	2018	MC (+)		648	0	648	-	-	-	-	-	-	-	-	54	54	54	54	54	54	54	54	54	54	54	54	54						0	
<b>1</b>	<b>2018</b>	<b>Total</b>		<b>3,726</b>	<b>0</b>	<b>3,726</b>	-	-	-	-	-	-	-	-	<b>310</b>	<b>310</b>	<b>310</b>	<b>311</b>	<b>311</b>	<b>311</b>	<b>311</b>	<b>311</b>	<b>311</b>	<b>310</b>	<b>310</b>	<b>310</b>						<b>0</b>		
2	2018	ARMY		342	0	342									A -	28	28	28	29	29	29	29	29	29	29	28	28						0	
1	2019	ARMY		1,542	0	1,542									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	129	129	1,284	
1	2019	MC (+)		648	0	648									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	54	54	432	
<b>1</b>	<b>2019</b>	<b>Total</b>		<b>2,190</b>	<b>0</b>	<b>2,190</b>																							<b>54</b>	<b>54</b>	<b>183</b>	<b>183</b>	<b>1,716</b>	
2	2019	ARMY		672	0	672									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	336	
1	2020	ARMY		1,446	0	1,446																											1,446	
1	2020	MC (+)		648	0	648																											648	
<b>1</b>	<b>2020</b>	<b>Total</b>		<b>2,094</b>	<b>0</b>	<b>2,094</b>																											<b>2,094</b>	
2	2020	ARMY		1,536	0	1,536																											1,536	
1	2021	ARMY		2,910	0	2,910																											2,910	
2	2021	ARMY		342	0	342																											342	
1	2022	ARMY		2,706	0	2,706																											2,706	
2	2022	ARMY		342	0	342																											342	
2	2022	MC (+)		792	0	792																											792	
<b>2</b>	<b>2022</b>	<b>Total</b>		<b>1,134</b>	<b>0</b>	<b>1,134</b>																											<b>1,134</b>	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																							Date: May 2021										
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 02 / 30										P-1 Line Item Number / Title: 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)										Item Number / Title [DODIC]: C65405 / MLRS Reduced Range Practice Rockets (RRPR)													
Cost Elements (Units in Each)						Fiscal Year 2021													Fiscal Year 2022													BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021													Calendar Year 2022													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Reduced Range Practice Rocket (LCRRPR)																																	
Prior Years Deliveries: 42861																																	
1	2017	ARMY		1,362	1,362	0																							0				
1	2017	MC (+)		648	648	0																							0				
<b>1</b>	<b>2017</b>	<b>Total</b>		<b>2,010</b>	<b>2,010</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>				
2	2017	ARMY		342	342	0																							0				
1	2018	ARMY		3,078	3,078	0																							0				
1	2018	MC (+)		648	648	0																							0				
<b>1</b>	<b>2018</b>	<b>Total</b>		<b>3,726</b>	<b>3,726</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>				
2	2018	ARMY		342	342	0																							0				
1	2019	ARMY		1,542	258	1,284	129	129	129	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	0				
1	2019	MC (+)		648	216	432	54	54	54	54	54	54	54	54	-	-													0				
<b>1</b>	<b>2019</b>	<b>Total</b>		<b>2,190</b>	<b>474</b>	<b>1,716</b>	<b>183</b>	<b>183</b>	<b>183</b>	<b>182</b>	<b>182</b>	<b>182</b>	<b>182</b>	<b>182</b>	<b>128</b>	<b>129</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>				
2	2019	ARMY		672	336	336	56	56	56	56	56																		0				
1	2020	ARMY		1,446	0	1,446	-	-	-	-	-	-	-	-	120	121	121	121	121	121	121	120	120	120	120	120			0				
1	2020	MC (+)		648	0	648	-	-	-	-	-	-	54	54	54	54	54	54	54	54	54	54	54	54	-	-	-		0				
<b>1</b>	<b>2020</b>	<b>Total</b>		<b>2,094</b>	<b>0</b>	<b>2,094</b>	-	-	-	-	-	-	<b>54</b>	<b>54</b>	<b>54</b>	<b>174</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>175</b>	<b>174</b>	<b>174</b>	<b>120</b>	<b>120</b>	<b>120</b>	-	-	<b>0</b>				
2	2020	ARMY		1,536	0	1,536	-	-	-	-	-	128	128	128	128	128	128	128	128	128	128	128							0				
1	2021	ARMY		2,910	0	2,910																					240	246	2,424				
2	2021	ARMY		342	0	342																				30	30	168					
1	2022	ARMY		2,706	0	2,706																						2,706					
2	2022	ARMY		342	0	342																						342					
2	2022	MC (+)		792	0	792																						792					
<b>2</b>	<b>2022</b>	<b>Total</b>		<b>1,134</b>	<b>0</b>	<b>1,134</b>																						<b>1,134</b>					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

**UNCLASSIFIED**

Exhibit P-21, Production Schedule: PB 2022 Army																							Date: May 2021							
Appropriation / Budget Activity / Budget Sub Activity:						P-1 Line Item Number / Title:										Item Number / Title [DODIC]:														
2032A / 02 / 30						6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)										C65405 / MLRS Reduced Range Practice Rockets (RRPR)														
Cost Elements (Units in Each)						Fiscal Year 2023										Fiscal Year 2024							BALANCE							
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023										Calendar Year 2024													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N		F E B	M A R	A P R	M A Y	J U N	J U L	A U G
Reduced Range Practice Rocket (LCRRPR)																														
Prior Years Deliveries: 42861																														
1	2017	ARMY	1,362	1,362	0																									0
1	2017	MC (+)	648	648	0																								0	
<b>1</b>	<b>2017</b>	<b>Total</b>	<b>2,010</b>	<b>2,010</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
2	2017	ARMY	342	342	0																								0	
1	2018	ARMY	3,078	3,078	0																								0	
1	2018	MC (+)	648	648	0																								0	
<b>1</b>	<b>2018</b>	<b>Total</b>	<b>3,726</b>	<b>3,726</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
2	2018	ARMY	342	342	0																								0	
1	2019	ARMY	1,542	1,542	0																								0	
1	2019	MC (+)	648	648	0																								0	
<b>1</b>	<b>2019</b>	<b>Total</b>	<b>2,190</b>	<b>2,190</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
2	2019	ARMY	672	672	0																								0	
1	2020	ARMY	1,446	1,446	0																								0	
1	2020	MC (+)	648	648	0																								0	
<b>1</b>	<b>2020</b>	<b>Total</b>	<b>2,094</b>	<b>2,094</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>	
2	2020	ARMY	1,536	1,536	0																								0	
1	2021	ARMY	2,910	486	2,424	240	246	240	246	240	246	240	246	240	240														0	
2	2021	ARMY	342	174	168	24	30	30	24	30	30																		0	
1	2022	ARMY	2,706	0	2,706	-	-	-	-	-	-	-	-	-	228	228	222	228	222	228	222	228	222	228	222	228	222	228	0	
2	2022	ARMY	342	0	342	-	-	-	-	-	-	30	30	24	30	30	24	30	30	24	30	30							0	
2	2022	MC (+)	792	0	792	-	-	-	-	-	-	66	66	66	66	66	66	66	66	66	66	66							0	
<b>2</b>	<b>2022</b>	<b>Total</b>	<b>1,134</b>	<b>0</b>	<b>1,134</b>	-	-	-	-	-	-	<b>96</b>	<b>96</b>	<b>90</b>	<b>96</b>	<b>96</b>	<b>90</b>	<b>96</b>	<b>96</b>	<b>90</b>	<b>96</b>	<b>96</b>	-	-	-	-	-	<b>0</b>		
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 6060C65405 / MLRS Reduced Range Practice Rockets (RRPR)
		<b>Item Number / Title [DODIC]:</b> C65405 / MLRS Reduced Range Practice Rockets (RRPR)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Martin - Dallas, TX	504	3,072	4,200	0	4	16	20	0	4	16	20
2	Letterkenny Munitions Center - Chambersburg, PA	504	1,500	1,968	0	2	12	14	0	4	12	16

**Remarks:**  
Continued production of LCRRPRs at Camden, Arkansas mitigates shared production costs with GMLRS and Army Tactical Missile System (ATACMS). Relocation of LCRRPR production to M33 results in LCRRPR no longer sharing a production line with GMLRS.

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys	<b>P-1 Line Item Number / Title:</b> 6200C02901 / High Mobility Artillery Rocket System (HIMARS)
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0210608A, 0603778A
--	---	---

**Line Item MDAP/MAIS Code:** 367

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	416	0	6	19	-	19	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	2,031.716	-	46.276	128.438	-	128.438	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	2,031.716	-	46.276	128.438	-	128.438	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>2,031.716</b>	<b>-</b>	<b>46.276</b>	<b>128.438</b>	<b>-</b>	<b>128.438</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	4,883.933	-	7,712.667	6,759.895	-	6,759.895	-	-	-	-	-	-

**Description:**

The M142 High Mobility Artillery Rocket System (HIMARS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. HIMARS provides critical missile precision strike, operational shaping fires, counter-fire, and close support destructive and suppressive fires. HIMARS is a C-130 or C-17 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing one pod of precision rockets/missiles from the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System-Unitary (GMLRS-U), GMLRS Alternative Warhead, the Army Tactical Missile System (ATACMS) and future MFOM to include the Extended Range (ER) GMLRS, and the Precision Strike Missile (PrSM). In FY2017, the Army directed the program office to produce additional HIMARS launchers in an effort called HIMARS Fleet Expansion.

The Army currently has 363 HIMARS launchers on hand and is increasing the Army Acquisition Objective to 547 to support the Army Structure Memorandum 2022-2026 decision.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	6	19	-	19	-	-	-
	Total Obligation Authority	-	46.276	128.438	-	128.438	-	-	-
<b>Total:</b> Secondary Distribution	Quantity	-	<b>6</b>	<b>19</b>	-	<b>19</b>	-	-	-
	Total Obligation Authority	-	<b>46.276</b>	<b>128.438</b>	-	<b>128.438</b>	-	-	-

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys **P-1 Line Item Number / Title:** 6200C02901 / High Mobility Artillery Rocket System (HIMARS)

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0210608A, 0603778A

**Line Item MDAP/MAIS Code:** 367

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C03000 / HIMARS LAUNCHER	P-5a, P-21			416 / 2,031.716	0 / -	6 / 46.276	19 / 128.438	- / -	19 / 128.438
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>416 / 2,031.716</b>	<b>0 / -</b>	<b>6 / 46.276</b>	<b>19 / 128.438</b>	<b>- / -</b>	<b>19 / 128.438</b>

\*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:**

FY2022 procurement dollars support \$128.438M Base, \$0.000M Direct War, and \$0.000M Enduring costs.

FY2022 Base procurement dollars in the amount of \$128.438 million procures 19 M142 HIMARS launchers and associated equipment. The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to support additional HIMARS launchers and Fleet Expansion.

The FY2021 and FY2022 flyaway cost for the HIMARS launchers have been revised to include costs for Prime Mission Equipment (Launcher), Contractor System Engineering/Program Management, and System Test & Evaluation. In the PB21 P-Form submission, the FY2021 flyaway cost for HIMARS launchers only included costs for the Prime Mission Equipment (Launcher), thus the PB21 P-Form FY2021 flyaway cost was understated, resulting in an understated unit cost. This FY2021 and FY2022 change has been made to more accurately reflect the flyaway cost of a HIMARS launcher.

In FY2021, the Army requested the transfer of \$10M from OMA line 121 to MIPA to procure one National Advanced Surface to Air Missile System (NASAMS) launcher. The \$10M of Missile Procurement, Army (MIPA) funding was included on the existing HIMARS line in the FY21 Appropriation. The Army Budget Office (ABO) established a new budget line (Cruise Missiles, SSN C21600), and the \$10M NASAMS funds will be reprogrammed for execution into the new line during the second quarter of FY21. Currently, the inclusion of \$10M NASAMS funding skews the Gross Weapon System Unit Cost for the HIMARS launcher. This unit cost will correct once the \$10M is reprogrammed from the HIMARS budget line.

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

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6200C02901 / High Mobility Artillery Rocket System (HIMARS)	<b>Item Number / Title [DODIC]:</b> C03000 / HIMARS LAUNCHER

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>				
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity (Units in Each)	416	0	6	19	-	19
Gross/Weapon System Cost (\$ in Millions)	2,031.716	-	46.276	128.438	-	128.438
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,031.716	-	46.276	128.438	-	128.438
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>2,031.716</b>	<b>-</b>	<b>46.276</b>	<b>128.438</b>	<b>-</b>	<b>128.438</b>
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>						
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	4,883.933	-	7,712.667	6,759.895	-	6,759.895

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<b>Flyaway Cost</b>																		
Recurring Cost																		
Launcher <sup>(†)</sup>	3,142.197	416	1,307.154	-	-	-	5,430.250	4	21.721	5,538.895	19	105.239	-	-	-	5,538.895	19	105.239
Carrier	8,494.792	24	203.875	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal: Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>1,511.029</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21.721</b>	<b>-</b>	<b>-</b>	<b>105.239</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>105.239</b>
Non Recurring Cost																		
European Deterrence Initiative Production Restart - Obsolescence Mitigation	-	-	74.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal: Non Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>74.400</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subtotal: Flyaway Cost</b>	<b>-</b>	<b>-</b>	<b>1,585.429</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21.721</b>	<b>-</b>	<b>-</b>	<b>105.239</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>105.239</b>
<b>Vehicles Cost</b>																		
Non Recurring Cost																		
National Advanced Surface to Air Missile System (NASAMS)	-	-	-	-	-	-	-	-	10.000	-	-	-	-	-	-	-	-	-
<b>Subtotal: Non Recurring Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10.000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subtotal: Vehicles Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10.000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Support - Fielding Cost</b>																		
Fielding	-	-	75.528	-	-	-	-	-	2.659	-	-	5.729	-	-	-	-	-	5.729

**UNCLASSIFIED**

Exhibit P-5, Cost Analysis: PB 2022 Army														Date: May 2021				
Appropriation / Budget Activity / Budget Sub Activity:						P-1 Line Item Number / Title:						Item Number / Title [DODIC]:						
2032A / 02 / 30						6200C02901 / High Mobility Artillery Rocket System (HIMARS)						C03000 / HIMARS LAUNCHER						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Fielding Cost</i>	-	-	75.528	-	-	-	-	-	2.659	-	-	5.729	-	-	-	-	-	5.729
Support - Operational/Site Activation Cost																		
System Assembly, Installation and Checkout on Site	-	-	28.410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Operational/Site Activation Cost</i>	-	-	28.410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - Peculiar Support Equipment Cost																		
Support and Handling Equipment	-	-	39.307	-	-	-	-	-	1.992	-	-	2.826	-	-	-	-	-	2.826
<i>Subtotal: Support - Peculiar Support Equipment Cost</i>	-	-	39.307	-	-	-	-	-	1.992	-	-	2.826	-	-	-	-	-	2.826
Support - Production Engineering Cost																		
Production Engineering	-	-	114.656	-	-	-	-	-	6.666	-	-	10.131	-	-	-	-	-	10.131
<i>Subtotal: Support - Production Engineering Cost</i>	-	-	114.656	-	-	-	-	-	6.666	-	-	10.131	-	-	-	-	-	10.131
Support - Program Management Cost																		
Government Management	-	-	23.611	-	-	-	-	-	3.238	-	-	3.303	-	-	-	-	-	3.303
<i>Subtotal: Support - Program Management Cost</i>	-	-	23.611	-	-	-	-	-	3.238	-	-	3.303	-	-	-	-	-	3.303
Support - System Engineering Cost																		
System Engineering	-	-	130.846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - System Engineering Cost</i>	-	-	130.846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - System Test and Evaluation Cost																		
Test and Evaluation Support	-	-	33.929	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - System Test and Evaluation Cost</i>	-	-	33.929	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - Training Cost																		
Services	-	-	-	-	-	-	-	-	-	-	-	1.210	-	-	-	-	-	1.210
<i>Subtotal: Support - Training Cost</i>	-	-	-	-	-	-	-	-	-	-	-	1.210	-	-	-	-	-	1.210
<b>Gross/Weapon System Cost</b>	<b>4,883.933</b>	<b>416</b>	<b>2,031.716</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>7,712.667</b>	<b>6</b>	<b>46.276</b>	<b>6,759.895</b>	<b>19</b>	<b>128.438</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,759.895</b>	<b>19</b>	<b>128.438</b>

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>	<b>Date:</b> May 2021
---	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6200C02901 / High Mobility Artillery Rocket System (HIMARS)	<b>Item Number / Title [DODIC]:</b> C03000 / HIMARS LAUNCHER
--	---	---

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

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	-	6	19	-	19
	Total Obligation Authority	-	46.276	128.438	-	128.438
<b>Total:</b>	<b>Quantity</b>	<b>0</b>	<b>6</b>	<b>19</b>	<b>-</b>	<b>19</b>
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>-</b>	<b>46.276</b>	<b>128.438</b>	<b>-</b>	<b>128.438</b>

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

**Exhibit P-5a, Procurement History and Planning: PB 2022 Army** **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6200C02901 / High Mobility Artillery Rocket System (HIMARS)	<b>Item Number / Title [DODIC]:</b> C03000 / HIMARS LAUNCHER
--	---	---

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Launcher <sup>(t)</sup>		2019	Lockheed Martin M. F. C. Sys / Dallas Texas	SS / FPIF	Aviation & Missile Command	Jul 2019	Oct 2021	17	7,609.353	N		Jan 2019
Launcher <sup>(t)</sup>		2021	Lockheed Martin M. F. C. Sys / Dallas Texas	SS / FPIF	Aviation & Missile Command	Jul 2021	Jul 2023	4	5,430.250	N		Jan 2019
Launcher <sup>(t)</sup>		2022	Lockheed Martin M. F. C. Sys / Dallas Texas	SS / FPIF	Aviation & Missile Command	Apr 2022	Jun 2024	19	5,538.895	N		Jan 2021

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

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6200C02901 / High Mobility Artillery Rocket System (HIMARS)	<b>Item Number / Title [DODIC]:</b> C03000 / HIMARS LAUNCHER
--	---	---

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2019													Fiscal Year 2020													BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019													Calendar Year 2020													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Launcher																																	
Prior Years Deliveries: 399																																	
	1	2019	ARMY	17	0	17																											
	1	2019	FMS (†)	38	0	38																											
	1	2019	MC (†)	10	0	10																											
	<b>1</b>	<b>2019</b>	<b>Total</b>	<b>65</b>	<b>0</b>	<b>65</b>																											
	1	2021	ARMY	4	0	4																											
	1	2021	FMS (†)	29	0	29																											
	1	2021	MC (†)	5	0	5																											
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>38</b>	<b>0</b>	<b>38</b>																											
	1	2022	ARMY	19	0	19																											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			



**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 6200C02901 / High Mobility Artillery Rocket System (HIMARS) **Item Number / Title [DODIC]:** C03000 / HIMARS LAUNCHER

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2021													Fiscal Year 2022													BALANCE			
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021													Calendar Year 2022														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
Launcher																																		
Prior Years Deliveries: 399																																		
	1	2019	ARMY	17	0	17	-	-	-	-	-	-	-	-	-	-	-	-	1	4	4	4	4	-	-	-	-	-	-	-	-	0		
	1	2019	FMS (†)	38	0	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	4	4	4	2	10			
	1	2019	MC (†)	10	0	10	-	-	-	-	-	-	-	-	-	1	5	4	-	-	-	-	-	-	-	-	-	-	-	-	0			
	<b>1</b>	<b>2019</b>	<b>Total</b>	<b>65</b>	<b>0</b>	<b>65</b>	-	-	-	-	-	-	-	-	-	<b>1</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>10</b>				
	1	2021	ARMY	4	0	4														A	-	-	-	-	-	-	-	-	-	-	4			
	1	2021	FMS (†)	29	0	29														A	-	-	-	-	-	-	-	-	-	-	-	-	-	29
	1	2021	MC (†)	5	0	5														A	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	<b>1</b>	<b>2021</b>	<b>Total</b>	<b>38</b>	<b>0</b>	<b>38</b>														-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>38</b>
	1	2022	ARMY	19	0	19														A			-	-	-	-	-	-	-	-	-	-	19	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 6200C02901 / High Mobility Artillery Rocket System (HIMARS) **Item Number / Title [DODIC]:** C03000 / HIMARS LAUNCHER

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2023													Fiscal Year 2024													BALANCE		
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023													Calendar Year 2024													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Launcher																																	
Prior Years Deliveries: 399																																	
1	2019	ARMY	17	17	0	-	-	-	-																				0				
1	2019	FMS (†)	38	28	10	2	2	4	2																				0				
1	2019	MC (†)	10	10	0	-	-	-	-																				0				
<b>1</b>	<b>2019</b>	<b>Total</b>	<b>65</b>	<b>55</b>	<b>10</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>				
1	2021	ARMY	4	0	4	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	2021	FMS (†)	29	0	29	-	-	-	-	-	-	-	-	-	-	2	4	4	1	3	4	4	4	3					0				
1	2021	MC (†)	5	0	5	-	-	-	-	-	-	-	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
<b>1</b>	<b>2021</b>	<b>Total</b>	<b>38</b>	<b>0</b>	<b>38</b>	-	-	-	-	-	-	-	-	<b>4</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	-	-	-	-	<b>0</b>				
1	2022	ARMY	19	0	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	3				
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A / 02 / 30 **P-1 Line Item Number / Title:** 6200C02901 / High Mobility Artillery Rocket System (HIMARS) **Item Number / Title [DODIC]:** C03000 / HIMARS LAUNCHER

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2025												Fiscal Year 2026												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 2 4	BAL D U E A S O F 1 O C T	Calendar Year 2025												Calendar Year 2026												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Launcher																															
Prior Years Deliveries: 399																															
1		2019	ARMY	17	17	0																							0		
1		2019	FMS (+)	38	38	0																							0		
1		2019	MC (+)	10	10	0																							0		
<b>1</b>		<b>2019</b>	<b>Total</b>	<b>65</b>	<b>65</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>		
1		2021	ARMY	4	4	0																							0		
1		2021	FMS (+)	29	29	0																							0		
1		2021	MC (+)	5	5	0																							0		
<b>1</b>		<b>2021</b>	<b>Total</b>	<b>38</b>	<b>38</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0</b>		
1		2022	ARMY	19	16	3	3																						0		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

**UNCLASSIFIED**

**Exhibit P-21, Production Schedule:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6200C02901 / High Mobility Artillery Rocket System (HIMARS)	<b>Item Number / Title [DODIC]:</b> C03000 / HIMARS LAUNCHER
--	---	---

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	Lockheed Martin M. F. C. Sys - Dallas Texas	2	4	6	0	6	18	24	0	6	18	24

**Remarks:**  
 US Army has no funding for Army HIMARS launcher procurement in FY20, however there are 10 USMC HIMARS launchers and 18 FMS HIMARS launchers being produced by the prime contractor. Due to a unique limitation with the Army's budget justification database, only rows that have a matching US ARMY manufacturer and FY will appear on the budget justification document.

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

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

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys	<b>P-1 Line Item Number / Title:</b> 6472C98510 / ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203802A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	1,279	282	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,266.402	300.783	-	-	-	-	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,266.402	300.783	-	-	-	-	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>1,266.402</b>	<b>300.783</b>	-	-	-	-	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	990.150	1,066.606	-	-	-	-	-	-	-	-	-	-

**Description:**

NOTE: All funds for this program were previously included in CA6700 ATACMS Mods in support of New Missiles.

There is no funding for FY 2022.

Army Tactical Missile System (ATACMS) is the United States (U.S.) Army's primary 24/7, all weather, and surface-to-surface artillery precision missile used by current and future Combatant Commanders to shape the battlefield with long-range fires against hard and soft stationary targets in open, complex, and urban environments. The missile provides the Combatant Commanders with a 24/7 all-weather 300 kilometers (km) long-range fires capability to attack high-payoff, time-sensitive targets without placing aircraft and crews at risk. It's precision accuracy, along with the absence of potential duds and reduced lethal radii, mitigate the warfighter's collateral damage concerns against hard and soft targets in complex and urban environments.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army									
Quantity	282	-	-	-	-	-	-	-	-
Total Obligation Authority	300.783	-	-	-	-	-	-	-	-
<b>Total:</b>									
<b>Secondary Distribution</b>									
Quantity	282	-	-	-	-	-	-	-	-
Total Obligation Authority	300.783	-	-	-	-	-	-	-	-

**Justification:**

There is no funding for FY 2022.

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

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys		<b>P-1 Line Item Number / Title:</b> 6472C98510 / ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203802A
<b>Line Item MDAP/MAIS Code:</b> N/A		
This program supports the Long Range Precision Fires Cross Functional Team (CFT), ATACMS BLK 1A (C98501).		

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys	<b>P-1 Line Item Number / Title:</b> 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203802A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	2,229	425	-	900	-	900	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	182.941	48.300	-	68.278	-	68.278	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	182.941	48.300	-	68.278	-	68.278	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>182.941</b>	<b>48.300</b>	<b>-</b>	<b>68.278</b>	<b>-</b>	<b>68.278</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	82.073	113.647	-	75.864	-	75.864	-	-	-	-	-	-

**Description:**

Lethal Miniature Aerial Missile System (LMAMS) is a single man-portable/operable, light-weight organic, beyond line-of-sight, precision guided, loitering aerial missile system capable of locating and engaging obscured and/or fleeting enemy targets who otherwise cannot be engaged by typical direct fire weapon systems. Front and Side Look High Resolution Electro-Optical (day) and Front Look Infrared (night) cameras allow the Warfighter to have eyes on the target for positive identification. LMAMS Wave-Off capability allows the operator to wave-off or re-direct the LMAMS flight path prior to impact, if necessary. The system is comprised of a fire control unit, launcher, missile, and a modular payload capable of high lethality against unprotected Combatant Personnel and producing casualties against Personnel in Soft Skinned Vehicles. LMAMS has the ability to be employed in less than two minutes.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	425	-	900	-	900	-	-	-
	Total Obligation Authority	48.300	-	68.278	-	68.278	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	<b>425</b>	<b>-</b>	<b>900</b>	<b>-</b>	<b>900</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>48.300</b>	<b>-</b>	<b>68.278</b>	<b>-</b>	<b>68.278</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 02: Other Missiles / BSA 30: Anti-Tank/ Assault Missile Sys **P-1 Line Item Number / Title:** 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0203802A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C88022 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)	P-5a, P-21			2,229 / 182.941	425 / 48.300	- / -	900 / 68.278	- / -	900 / 68.278
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>2,229 / 182.941</b>	<b>425 / 48.300</b>	<b>- / -</b>	<b>900 / 68.278</b>	<b>- / -</b>	<b>900 / 68.278</b>

\*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:**

Lethal Miniature Aerial Missile System (LMAMS) capability is required to fulfill Joint Operational Needs Statements (JUONs) and maintain training asset inventory in support of Joint Urgent Operational Need CC-0556, AC-0008, AF-0009, Operational Need Statement 17-22331, and other emerging urgent requirements.

FY2022 Direct War procurement dollars in the amount of \$68.278 million procures 900 All Up Rounds (AUR), 50 Fire Control Units, 7 Multi-Pack Launchers, 195 Inert Training Rounds, 50 Training Simulators, and supporting equipment. The 900 AURs support Operation Freedom's Sentinel and Operation Inherent Resolve.

The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to increase the Army procurement of LMAMS missiles.



**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)
		<b>Item Number / Title [DODIC]:</b> C88022 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	2,229	425	-	900	-	900
Gross/Weapon System Cost (\$ in Millions)	182.941	48.300	-	68.278	-	68.278
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	182.941	48.300	-	68.278	-	68.278
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>182.941</b>	<b>48.300</b>	<b>-</b>	<b>68.278</b>	<b>-</b>	<b>68.278</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	82.073	113.647	-	75.864	-	75.864

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
All Up Rounds <sup>(†)</sup>	52.050	2,114	110.034	70.259	425	29.860	-	-	-	58.063	900	52.257	-	-	-	58.063	900	52.257
Inert Training Missiles	47.427	520	24.662	44.458	190	8.447	-	-	-	40.636	195	7.924	-	-	-	40.636	195	7.924
Training Simulators	25.291	79	1.998	25.000	38	0.950	-	-	-	26.620	50	1.331	-	-	-	26.620	50	1.331
Multi-Pack Launcher	81.000	10	0.810	81.000	7	0.567	-	-	-	69.143	7	0.484	-	-	-	69.143	7	0.484
Training Support Equipment	-	-	2.795	-	-	1.514	-	-	-	-	-	1.894	-	-	-	-	-	1.894
Fielding	-	-	24.993	-	-	3.358	-	-	-	-	-	1.116	-	-	-	-	-	1.116
Fire Control Units	24.769	91	2.254	25.316	38	0.962	-	-	-	23.760	50	1.188	-	-	-	23.760	50	1.188
<i>Subtotal: Recurring Cost</i>	<i>-</i>	<i>-</i>	<i>167.546</i>	<i>-</i>	<i>-</i>	<i>45.658</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>66.194</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>66.194</i>
<i>Subtotal: Flyaway Cost</i>	<i>-</i>	<i>-</i>	<i>167.546</i>	<i>-</i>	<i>-</i>	<i>45.658</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>66.194</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>66.194</i>
Support - Acceptance Testing Cost																		
Acceptance Test	-	-	5.919	-	-	0.799	-	-	-	-	-	0.128	-	-	-	-	-	0.128
<i>Subtotal: Support - Acceptance Testing Cost</i>	<i>-</i>	<i>-</i>	<i>5.919</i>	<i>-</i>	<i>-</i>	<i>0.799</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0.128</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0.128</i>
Support - Program Management Cost																		
Government Management	-	-	9.476	-	-	1.843	-	-	-	-	-	1.956	-	-	-	-	-	1.956
<i>Subtotal: Support - Program Management Cost</i>	<i>-</i>	<i>-</i>	<i>9.476</i>	<i>-</i>	<i>-</i>	<i>1.843</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1.956</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1.956</i>

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30	<b>P-1 Line Item Number / Title:</b> 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)	<b>Item Number / Title [DODIC]:</b> C88022 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	82.073	2,229	182.941	113.647	425	48.300	-	-	-	75.864	900	68.278	-	-	-	75.864	900	68.278

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	425	-	900	-	900
	Total Obligation Authority	48.300	-	68.278	-	68.278
<b>Total:</b> Secondary Distribution	Quantity	425	-	900	-	900
	Total Obligation Authority	48.300	-	68.278	-	68.278

(t) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning:</b> PB 2022 Army								<b>Date:</b> May 2021				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30			<b>P-1 Line Item Number / Title:</b> 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)					<b>Item Number / Title [DODIC]:</b> C88022 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)				
<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$ K)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
All Up Rounds <sup>(†)</sup>	✓	2020	AeroVironment / Simi Valley, CA	SS / FFP	AMCOM, Redstone Arsenal, AL	Jan 2021	Jun 2021	425	70.259	Y		
All Up Rounds <sup>(†)</sup>		2022	TBD / TBD	SS / FFP	AMCOM, Redstone Arsenal, AL	Jul 2022	Feb 2023	900	58.063	Y		

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

**Remarks:**  
10 U.S. Code #2431 and DoD Financial Mgt Reg  
Vol 2B, Ch4 mandate Production Rates be  
defined in terms of ""budget year.""

**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army															<b>Date:</b> May 2021														
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30										<b>P-1 Line Item Number / Title:</b> 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)										<b>Item Number / Title [DODIC]:</b> C88022 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2021														Fiscal Year 2022														BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021														Calendar Year 2022														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
All Up Rounds																																			
Prior Years Deliveries: 2114																																			
✓	1	2020	ARMY	425	0	425			A	-	-	-	-	-	48	48	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	0		
	2	2022	ARMY	900	0	900																												900	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					



**UNCLASSIFIED**

<b>Exhibit P-21, Production Schedule:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 02 / 30		<b>P-1 Line Item Number / Title:</b> 6870C88001 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)
		<b>Item Number / Title [DODIC]:</b> C88022 / LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2022	1-8-5 For 2022	MAX For 2022	Initial				Reorder			
					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	AeroVironment - Simi Valley, CA	600	1,500	3,000	1	1	5	6	1	1	5	6
2	TBD - TBD	600	1,500	3,000	1	1	7	8	1	1	5	6

**Remarks:**  
 Since All Up Rounds are delivered in response to Joint Urgent Operational Needs Statement (JUONS), neither Minimum Sustaining Rate (MSR) nor MAX apply to Lethal Miniature Aerial Missile System (LMAMS).

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

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0607865A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	4,485.842	278.716	278.050	205.469	-	205.469	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	4,485.842	278.716	278.050	205.469	-	205.469	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>4,485.842</b>	<b>278.716</b>	<b>278.050</b>	<b>205.469</b>	<b>-</b>	<b>205.469</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	35,321.591	14,669.263	27,805.000	-	-	-	-	-	-	-	-	-

**Description:**

The PATRIOT Mods program implements critical capability, readiness and sustainability modifications to the weapon system, maintains Integrated Logistics Support, and supports materiel solutions to counter cybersecurity and electronic warfare shortcomings to all elements of the Lower Tier Battle Space. Required modifications are identified through various means to include: validated requirement documents such as the Capability Production Document (CPD), Capabilities Development Document (CDD), and the Operational Needs Statement (ONS); material changes supported by improved operational effectiveness as identified in the PATRIOT Product Improvement Program (PIP); material deficiencies identified in the field; obsolescence mitigation; emerging technologies; software improvements related to warfighter machine and crew interface requirements and communication upgrades.

Modifications outlined below are critical to maintain capabilities in the field for enduring PATRIOT components, or is critical in support of the transition to an Army Integrated Air and Missile Defense (AIAMD) in convergence efforts with the Integrated Battle Command System (IBCS) and the Lower Tier Air and Missile Defense Sensor (LTAMDS).

FY22 PATRIOT Mods funding supports International Engineering Services Program (IESP); Integrated Logistics Support (ILS); US Unique Engineering Services (ES); System Engineering and Technical Analysis activities supporting Reliability, Availability, and Maintainability (RAM) Mods; Recapitalization (RECAP); Battery Command Post/ Tactical Command System /Computer Software Module (BCP/TCS/CSM) Mod; Communications Obsolescence Upgrade, continued unit ONS fielding support while awaiting the Army standard solution, and Report Rocket Classification.

RAM modifications provide resolution to field failures which are identified through component analysis, field data collection, obsolescence issues and emerging technologies which are prioritized based on readiness and Operations and Support (O&S) impacts. This effort includes the engineering, acquisition, qualification testing, installation, technical support and training device upgrades associated with modification and design changes which are essential to stabilize the system at the highest readiness posture available and reduction of O&S. Kit quantity is based on expected Engineering Change Proposals (ECPs) to be applied to Major End Items (MEIs). Quantities will be procured at an optimized rate utilizing price advantage created through contract negotiation, other service procurement, and/or foreign military sales into a buy-to-budget procurement strategy.

Recapitalization (RECAP) Modifications include critical upgrades including but not limited to: Family of Medium Tactical Vehicles (FMTV), PATRIOT-unique prime mover obsolescence mitigation, Depot Maintenance Plant Equipment (DMPE), Harmonic Generator Kits, Post Deployment Build 8.1 (PDB-8.1) and Patriot Component Software Build (PCSB) S/W & H/W, Cryptographic Modernization Kits, Missile Segment Enhancement (MSE) Launching station upgrades; Radar Digital Sidelobe Canceller upgrade, Radar Weapons Control Interface Unit (RWCIU) obsolescence mitigation, Radar Search/Track Microwave Front Ends modernization, Radar Peripheral Electronics Assembly (PEA) box modernization, Electronic Power Plant (EPP) obsolescence mitigation, and Cooling Liquid Electron Tube (CLET) kits. These modifications are synchronized within the RECAP program. RECAP is a battalion set, resulting in a more supportable, reliable, and capable unit in the force. Quantity represents 1 battalion a year.

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0607865A
<b>Line Item MDAP/MAIS Code:</b> N/A		

Communications Obsolescence: Task is to replace obsolete PATRIOT communications equipment that is no longer supportable, with modern communications equipment for four PATRIOT Battalions. The fielded PATRIOT communications architecture utilizes obsolete serial technology that is no longer producible or repairable. This process requires modernization at battalion (BN) level to prevent breaking intra-BN communications, addresses the BN specific architecture to facilitate modern external and external communications. These measures provide an interim solution until transition to fleet-wide AIAMD system architecture is achieved, and is an essential step to keep the remainder of the fleet viable until it is fully replaced with AIAMD components.

The Battery Command Post/Tactical Command System/Computer Software Module (BCP/TCS/CSM) effort continues the development of the Capabilities Development Document (CDD) required Battle Management, Command, Control, Communications, Computers, and Intelligence (BMC4I) capability to maintain compatibility with tactical software enhancements, while enhancing and improving the defense design and planning capabilities for the PATRIOT warfighter. This includes systems engineering, software requirements, software design/code/test and independent validation and verification testing. This effort also provides Integrated Logistics Support, required due to the large amount of Commercial-Off-The-Shelf components, of the 62 Battery Command Posts and 17 Tactical Command Systems. Additionally, this effort supports the BCP/TCS/CSM fielding upgrades for each PATRIOT Post Deployment Build update. Note: Quantities procured and installed in prior years.

PATRIOT's IESP is a US chartered multi-national cost sharing program which allows the current 16 FMS partners to contribute toward common, non-RDTE engineering activities required to sustain PATRIOT capability. This cost share program structure is at a ratio of 2:1 FMS dollars to USD investment. Consolidated funds provide essential engineering services toward enhancing PATRIOT fleet readiness for both the United States Army and International partners. Significant cost avoidance is achieved by sharing expenses that would otherwise be fully funded by the United States to achieve the same result.

Logistics Recurring includes all aspects of Integrated Logistics Support (ILS) management, e.g., maintenance support, facilities, personnel, training, testing, and fielding.

Report Rocket Classification: The modern Air and Missile Defense environment contains a wide variety and large quantities of TBM and rocket threats. This task provides situational awareness for operators and allows for greater efficiency in management of interceptor inventories in the complex AMD environment.

Patriot Multi-Echelon Training (PMET), Reconfigurable Table Top Trainer (RT3): The PATRIOT Weapons System uses tactical equipment and training aids, devices, simulators, and simulations (TADSS) to conduct multi-level training for both operators and maintenance personnel. This includes both hardware devices and software programs utilized to include; the Patriot Maintenance Trainer (PMT), Reconfigurable Table Top Trainer (RT3) and the Patriot Multi-Echelon Training (PMET). The PMT was fielded to the Air Defense Artillery Schools at Fort Sill, OK. The PMT trains 14E, 140E, 14T, 94S and 948D 6D tasks. It reduces dependency on tactical equipment by merging physical simulators and virtual simulations replicating a realistic training environment. The PMT includes one instructor station, one radar set, one launching station, and an engagement control station. Some components are actual physical representations of the tactical hardware while other components are virtually simulated using state of the art gaming technology of PMET. The two environments work seamlessly together to simulate the tactical end items. PMET is a Microsoft Windows based software application utilizing state of the art gaming technology to train U.S. Army personnel in the proper trouble-shooting techniques to repair and maintain the PATRIOT Missile System. PMET is the Life Cycle Replacement for the PATRIOT Intermediate Maintenance Institutional Trainer (PIMIT) for Intermediate Maintenance training but is also used for Organizational, NET, and Depot maintenance training. PMET is used in an institutional, field and depot environment. PMET is designed and developed to operate on the RT3. The RT3 provides a flexible training platform that may be configured to support multiple training levels and systems, via removable hard drives. In PATRIOT the RT3 is used to run the PATRIOT tactical embedded training software (re-hosted tactical training software, PATRIOT Conduct of Fire Trainer (PCOFT)) for operations tasks, the PMET software for maintenance tasks, and the PATRIOT Skills Library (PSL) lessons for both maintenance and operator tasks. Other weapon systems may also use the RT3 platform for training (i.e., C-RAM, and THAAD). The RT3 is a Life Cycle Replacement for the PCOFT and the PIMIT hardware platforms.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	278.716	278.050	205.469	-	205.469	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>278.716</b>	<b>278.050</b>	<b>205.469</b>	-	<b>205.469</b>	-	-	-	-



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications **P-1 Line Item Number / Title:** 0962C50700 / Patriot Mods

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0607865A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	C50700 / Patriot Mods (Various)				- / 4,485.842	- / 278.716	- / 278.050	- / 205.469	- / -	- / 205.469
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 4,485.842</b>	<b>- / 278.716</b>	<b>- / 278.050</b>	<b>- / 205.469</b>	<b>- / -</b>	<b>- / 205.469</b>

\*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:**  
 FY2022 procurement dollars in the amount of \$205.469 million support the modifications for Reliability, Availability, and Maintainability Modifications (RAM Mods), Recapitalization (RECAP), Battery Command Post/ Tactical Command System/ Computer Software Module (BCP/TCS/CSM), Report Rocket Classification, Communications Obsolescence, the IESP, system engineering, program management, continued unit ONS fielding support while awaiting the Army standard solution, and logistics support.

PATRIOT Mods supports and facilitates enhanced capabilities and integration into the Integrated Air and Missile Defense (IAMD) architecture.

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	<b>Modification Number / Title:</b> C50700 / Patriot Mods

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

<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	4,485.842	278.716	278.050	205.469	-	205.469
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	4,485.842	278.716	278.050	205.469	-	205.469
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>4,485.842</b>	<b>278.716</b>	<b>278.050</b>	<b>205.469</b>	<b>-</b>	<b>205.469</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	35,321.591	14,669.263	27,805.000	-	-	-

**Description:**

The PATRIOT weapon system modernization program implements modifications to the weapon system and maintains Integrated Logistics Support. Required modifications are identified through various means, including the following: validated requirements documents such as Capability Production Documents and Operational Needs Statements; material changes identified in the PATRIOT Product Improvement Program (PIP); material deficiencies identified in the field; obsolescence issues; emerging technologies; software improvements; crew interface and communications upgrades.

<b>Secondary Distribution</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	278.716	278.050	205.469	-	205.469
<b>Total:</b> Secondary Distribution	Quantity	-	-	-	-	-
	Total Obligation Authority	278.716	278.050	205.469	-	205.469

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<b>Procurement</b>						
<b>Modification Item 1 of 23: RAM Mods</b>						
A Kits						
Recurring						
Kit Quantity	6,819 / 707.607	144 / 24.573	153 / 23.519	118 / 18.118	- / -	118 / 18.118
Training	- / 106.008	- / 16.650	- / 16.656	- / 15.852	- / -	- / 15.852
Training Equipment	- / 32.578	- / 3.331	- / 3.332	- / 3.092	- / -	- / 3.092
Support Equipment	- / 62.404	- / 8.657	- / 8.661	- / 8.911	- / -	- / 8.911
Fielding Support and NET	- / 109.980	- / 14.652	- / 14.658	- / 14.385	- / -	- / 14.385
Integrated Logistics Support	- / 13.288	- / 1.332	- / 1.332	- / 2.072	- / -	- / 2.072
<b>Subtotal: Recurring</b>	<b>6,819 / 1,031.865</b>	<b>144 / 69.195</b>	<b>153 / 68.158</b>	<b>118 / 62.430</b>	<b>- / -</b>	<b>118 / 62.430</b>
<b>Subtotal: RAM Mods</b>	<b>6,819 / 1,031.865</b>	<b>144 / 69.195</b>	<b>153 / 68.158</b>	<b>118 / 62.430</b>	<b>- / -</b>	<b>118 / 62.430</b>
<b>Modification Item 2 of 23: Recapitalization</b>						
A Kits						
Recurring						
Kit Quantity	16 / 259.500	1 / 14.101	1 / 14.104	1 / 14.300	- / -	1 / 14.300
Integrated Logistics Support	- / 20.058	- / 1.100	- / 1.100	- / 1.200	- / -	- / 1.200
<b>Subtotal: Recurring</b>	<b>16 / 279.558</b>	<b>1 / 15.201</b>	<b>1 / 15.204</b>	<b>1 / 15.500</b>	<b>- / -</b>	<b>1 / 15.500</b>
<b>Subtotal: Recapitalization</b>	<b>16 / 279.558</b>	<b>1 / 15.201</b>	<b>1 / 15.204</b>	<b>1 / 15.500</b>	<b>- / -</b>	<b>1 / 15.500</b>
<b>Modification Item 3 of 23: Communications Obsolescence</b>						
A Kits						
Recurring						
Kits	- / -	1 / 20.906	1 / 30.684	2 / 20.678	- / -	2 / 20.678
<b>Subtotal: Recurring</b>	<b>- / -</b>	<b>1 / 20.906</b>	<b>1 / 30.684</b>	<b>2 / 20.678</b>	<b>- / -</b>	<b>2 / 20.678</b>
<b>Subtotal: Communications Obsolescence</b>	<b>- / -</b>	<b>1 / 20.906</b>	<b>1 / 30.684</b>	<b>2 / 20.678</b>	<b>- / -</b>	<b>2 / 20.678</b>
<b>Modification Item 4 of 23: Dismounted Information Coordination Central</b>						
B Kits						
Non-Recurring						
Dismounted Information Coordination Cent	2 / 20.000	1 / 10.346	- / -	- / -	- / -	- / -
<b>Subtotal: Non-Recurring</b>	<b>2 / 20.000</b>	<b>1 / 10.346</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Subtotal: Dismounted Information Coordination Central</b>	<b>2 / 20.000</b>	<b>1 / 10.346</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
<b>Financial Plan</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<b>Modification Item 5 of 23: BCP/TCS/CSM</b>						
A Kits						
Recurring						
Engineering Change Orders	- / 4.385	- / 0.770	- / 0.770	- / 0.770	- / -	- / 0.770
Fielding Support	- / 6.919	- / 0.980	- / 0.980	- / 0.980	- / -	- / 0.980
Obsolescence/Tech Refresh	- / 1.573	- / 0.280	- / 0.280	- / 0.280	- / -	- / 0.280
Software/Systems Engineering	- / 31.640	- / 0.980	- / 0.980	- / 0.980	- / -	- / 0.980
Integrated Logistics Support	- / 54.180	- / 3.990	- / 3.990	- / 3.990	- / -	- / 3.990
<b>Subtotal: Recurring</b>	<b>- / 98.697</b>	<b>- / 7.000</b>	<b>- / 7.000</b>	<b>- / 7.000</b>	<b>- / -</b>	<b>- / 7.000</b>
Non-Recurring						
BCP Kit Quantity	62 / 29.435	- / -	- / -	- / -	- / -	- / -
<b>Subtotal: Non-Recurring</b>	<b>62 / 29.435</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Subtotal: BCP/TCS/CSM</b>	<b>62 / 128.132</b>	<b>- / 7.000</b>	<b>- / 7.000</b>	<b>- / 7.000</b>	<b>- / -</b>	<b>- / 7.000</b>
<b>Modification Item 6 of 23: International Engineering Services Program (IESP)</b>						
A Kits						
Recurring						
International Engineering Services Prog	- / -	- / -	- / 59.000	- / 59.000	- / -	- / 59.000
<b>Subtotal: Recurring</b>	<b>- / -</b>	<b>- / -</b>	<b>- / 59.000</b>	<b>- / 59.000</b>	<b>- / -</b>	<b>- / 59.000</b>
<b>Subtotal: International Engineering Services Program (IESP)</b>	<b>- / -</b>	<b>- / -</b>	<b>- / 59.000</b>	<b>- / 59.000</b>	<b>- / -</b>	<b>- / 59.000</b>
<b>Modification Item 7 of 23: Logistics Recurring</b>						
A Kits						
Recurring						
Logistics Support	- / -	- / -	- / 27.091	- / 27.561	- / -	- / 27.561
<b>Subtotal: Recurring</b>	<b>- / -</b>	<b>- / -</b>	<b>- / 27.091</b>	<b>- / 27.561</b>	<b>- / -</b>	<b>- / 27.561</b>
<b>Subtotal: Logistics Recurring</b>	<b>- / -</b>	<b>- / -</b>	<b>- / 27.091</b>	<b>- / 27.561</b>	<b>- / -</b>	<b>- / 27.561</b>
<b>Modification Item 8 of 23: Report Rocket Classification</b>						
A Kits						
Non-Recurring						
Kits	- / -	- / 4.011	- / 6.000	- / 6.000	- / -	- / 6.000
<b>Subtotal: Non-Recurring</b>	<b>- / -</b>	<b>- / 4.011</b>	<b>- / 6.000</b>	<b>- / 6.000</b>	<b>- / -</b>	<b>- / 6.000</b>
<b>Subtotal: Report Rocket Classification</b>	<b>- / -</b>	<b>- / 4.011</b>	<b>- / 6.000</b>	<b>- / 6.000</b>	<b>- / -</b>	<b>- / 6.000</b>

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
<b>Financial Plan</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<b>Modification Item 9 of 23: PATRIOT Maintenance Trainer (PMT)</b>						
A Kits						
Recurring						
Kit Quantity	6 / 87.941	1 / 19.500	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	6 / 87.941	1 / 19.500	- / -	- / -	- / -	- / -
Non-Recurring						
Training Support	- / 4.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Non-Recurring</i>	- / 4.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: PATRIOT Maintenance Trainer (PMT)</i>	6 / 91.941	1 / 19.500	- / -	- / -	- / -	- / -
<b>Modification Item 10 of 23: PATRIOT Multi-Echelon Training (PMET)</b>						
A Kits						
Recurring						
Kit Quantity	20 / 26.180	4 / 7.000	4 / 7.000	3 / 6.000	- / -	3 / 6.000
<i>Subtotal: Recurring</i>	20 / 26.180	4 / 7.000	4 / 7.000	3 / 6.000	- / -	3 / 6.000
<i>Subtotal: PATRIOT Multi-Echelon Training (PMET)</i>	20 / 26.180	4 / 7.000	4 / 7.000	3 / 6.000	- / -	3 / 6.000
<b>Modification Item 11 of 23: SNAP/TROPO</b>						
A Kits						
Recurring						
Kit Quantity SNAP	6 / 0.830	- / -	- / -	- / -	- / -	- / -
Support	- / 6.926	- / 1.115	- / -	- / -	- / -	- / -
Integrated Logistics Support	- / 3.360	- / 0.633	- / -	- / -	- / -	- / -
Training	- / 0.173	- / 0.002	- / -	- / -	- / -	- / -
Equipment	- / 0.859	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	6 / 12.148	- / 1.750	- / -	- / -	- / -	- / -
Non-Recurring						
Kit Quantity TROPO	26 / 12.884	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Non-Recurring</i>	26 / 12.884	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: SNAP/TROPO</i>	32 / 25.032	- / 1.750	- / -	- / -	- / -	- / -
<b>Modification Item 12 of 23: Enhanced Launcher Electronics System (ELES)</b>						
A Kits						

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Recurring						
Kit Quantity	346 / 499.205	19 / 73.191	10 / 40.717	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	346 / 499.205	19 / 73.191	10 / 40.717	- / -	- / -	- / -
<i>Subtotal: Enhanced Launcher Electronics System (ELES)</i>	346 / 499.205	19 / 73.191	10 / 40.717	- / -	- / -	- / -
<b>Modification Item 13 of 23:</b> Digital Sidelobe Canceller (DSLCL)						
A Kits						
Recurring						
Kit Quantity	71 / 152.954	10 / 27.428	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	71 / 152.954	10 / 27.428	- / -	- / -	- / -	- / -
<i>Subtotal: Digital Sidelobe Canceller (DSLCL)</i>	71 / 152.954	10 / 27.428	- / -	- / -	- / -	- / -
<b>Modification Item 14 of 23:</b> Command Obsolescence Alleviation						
A Kits						
Recurring						
Command Obsolescence Alleviation	- / 7.000	- / 1.989	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	- / 7.000	- / 1.989	- / -	- / -	- / -	- / -
<i>Subtotal: Command Obsolescence Alleviation</i>	- / 7.000	- / 1.989	- / -	- / -	- / -	- / -
<b>Modification Item 15 of 23:</b> MAP/RDP Encryption Compliance						
A Kits						
Non-Recurring						
Certification	- / -	- / 11.999	- / 11.996	- / -	- / -	- / -
<i>Subtotal: Non-Recurring</i>	- / -	- / 11.999	- / 11.996	- / -	- / -	- / -
<i>Subtotal: MAP/RDP Encryption Compliance</i>	- / -	- / 11.999	- / 11.996	- / -	- / -	- / -
<b>Modification Item 16 of 23:</b> IFF Antenna Redesign						
A Kits						
Non-Recurring						
Kits	- / -	18 / 8.000	9 / 4.000	- / -	- / -	- / -
<i>Subtotal: Non-Recurring</i>	- / -	18 / 8.000	9 / 4.000	- / -	- / -	- / -
<i>Subtotal: IFF Antenna Redesign</i>	- / -	18 / 8.000	9 / 4.000	- / -	- / -	- / -

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
<b>Financial Plan</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<b>Modification Item 17 of 23: Combined Crypto Modification Phase I (CCMPI)</b>						
A Kits						
Recurring						
Kit Quantity	150 / 48.970	- / -	- / -	- / -	- / -	- / -
Kit Quantity (GFE)	- / 1.072	- / -	- / -	- / -	- / -	- / -
<b>Subtotal: Recurring</b>	<b>150 / 50.042</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
Non-Recurring						
Training	- / 0.396	- / -	- / -	- / -	- / -	- / -
<b>Subtotal: Non-Recurring</b>	<b>- / 0.396</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Subtotal: Combined Crypto Modification Phase I (CCMPI)</b>	<b>150 / 50.438</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Modification Item 18 of 23: Radar Digital Processor - Configuration (RDP-C)</b>						
A Kits						
Recurring						
Kit Quantity	80 / 240.766	- / -	- / -	- / -	- / -	- / -
Fielding	- / 14.000	- / -	- / -	- / -	- / -	- / -
Support Equipment	- / 36.942	- / -	- / -	- / -	- / -	- / -
<b>Subtotal: Recurring</b>	<b>80 / 291.708</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Subtotal: Radar Digital Processor - Configuration (RDP-C)</b>	<b>80 / 291.708</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Modification Item 19 of 23: Air Defense Artillery School Upgrades/ TADSS</b>						
A Kits						
Recurring						
Radar Kit Quantity	4 / 96.000	- / -	- / -	- / -	- / -	- / -
<b>Subtotal: Recurring</b>	<b>4 / 96.000</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Subtotal: Air Defense Artillery School Upgrades/ TADSS</b>	<b>4 / 96.000</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
<b>Modification Item 20 of 23: Modern Manstation (MMS)</b>						
A Kits						
Recurring						
Fielding	- / 7.825	- / -	- / -	- / -	- / -	- / -
Support Equipment	- / 56.567	- / -	- / -	- / -	- / -	- / -

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
<b>Financial Plan</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<i>Subtotal: Recurring</i>	- / 64.392	- / -	- / -	- / -	- / -	- / -
Non-Recurring						
Kit Quantity	82 / 55.842	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Non-Recurring</i>	82 / 55.842	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Modern Manstation (MMS)</i>	82 / 120.234	- / -	- / -	- / -	- / -	- / -
<b>Modification Item 21 of 23:</b> Reconfigurable Table Top Trainers (RT3)						
A Kits						
Recurring						
Kit Quantity	489 / 31.338	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	489 / 31.338	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Reconfigurable Table Top Trainers (RT3)</i>	489 / 31.338	- / -	- / -	- / -	- / -	- / -
<b>Modification Item 22 of 23:</b> Assured PNT						
A Kits						
Recurring						
Hardware Integration	798 / 3.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	798 / 3.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Assured PNT</i>	798 / 3.000	- / -	- / -	- / -	- / -	- / -
<b>Modification Item 23 of 23:</b> Test Detachment						
A Kits						
Recurring						
Equipment	1 / 56.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Recurring</i>	1 / 56.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Test Detachment</i>	1 / 56.000	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Procurement, All Modification Items</i>	8,978 / 2,910.585	199 / 277.516	178 / 276.850	124 / 204.169	- / -	124 / 204.169
<b>Installation</b>						
<b>Modification Item 1 of 23:</b> RAM Mods	6,784 / 151.613	137 / -	149 / -	135 / -	- / -	135 / -
<b>Modification Item 2 of 23:</b> Recapitalization	16 / 229.030	1 / 1.200	1 / 1.200	1 / 1.300	- / -	1 / 1.300
<b>Modification Item 5 of 23:</b> BCP/TCS/CSM	79 / 1,192.582	- / -	- / -	- / -	- / -	- / -
<b>Modification Item 17 of 23:</b> Combined Crypto Modification Phase I (CCMPI)	150 / 2.032	- / -	- / -	- / -	- / -	- / -
<i>Subtotal: Installation</i>	7,029 / 1,575.257	138 / 1.200	150 / 1.200	136 / 1.300	- / -	136 / 1.300



**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army					<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> Various		<b>Modification Type:</b> Various			<b>Related RDT&amp;E PEs:</b>	
<b>Financial Plan</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<b>Total</b>						
<b>Total Cost (Procurement + Support + Installation)</b>	4,485.842	278.716	278.050	205.469	-	205.469

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	<b>Modification Number / Title:</b> C50700 / Patriot Mods

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

**Modification Item 1 of 23:** RAM Mods

**Manufacturer Information**

Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime (in Months): 2		Production Leadtime (in Months): 14	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Dec 2019	Dec 2020	Dec 2021
Delivery Dates	Feb 2021	Feb 2022	Feb 2023

**Installation Information**

**Method of Implementation:** Lead Logistics Fielding Team (Included in unit cost)

Installation Cost	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	6,784 / 151.613	65 / 0.000	- / -	- / -	- / -	- / -
FY 2020	- / -	72 / 0.000	72 / 0.000	- / -	- / -	- / -
FY 2021	- / -	- / -	77 / 0.000	76 / 0.000	- / -	76 / 0.000
FY 2022	- / -	- / -	- / -	59 / 0.000	- / -	59 / 0.000
Total	6,784 / 151.613	137 / 0.000	149 / 0.000	135 / 0.000	- / -	135 / 0.000

**Installation Schedule**

	PYS	FY 2020				FY 2021				FY 2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
In	6,923	32	32	32	31	31	41	41	40	40	37	36	36
Out	6,853	33	32	32	32	31	31	41	41	40	40	37	36

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	<b>Modification Number / Title:</b> C50700 / Patriot Mods

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

**Modification Item 2 of 23:** Recapitalization

**Manufacturer Information**

Manufacturer Name: Various		Manufacturer Location: Various	
Administrative Leadtime (in Months): 6		Production Leadtime (in Months): 12	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Apr 2020	Apr 2021	Apr 2022
Delivery Dates	Apr 2021	Apr 2022	Apr 2023

**Installation Information**

**Method of Implementation:** Depot, PM Office, contractor team (Included in unit cost)

Installation Cost	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	15 / 227.830	- / -	- / -	- / -	- / -	- / -
FY 2020	1 / 1.200	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	1 / 1.200	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	1 / 1.200	- / -	- / -	- / -
Total	16 / 229.030	1 / 1.200	1 / 1.200	1 / 1.300	- / -	1 / 1.300

**Installation Schedule**

	PYS	FY 2020				FY 2021				FY 2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
In	16	-	-	1	-	-	-	1	-	-	-	1	-
Out	15	-	1	-	-	-	1	-	-	-	1	-	-

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 3 of 23:</b> Communications Obsolescence			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime ( <i>in Months</i> ): 3		Production Leadtime ( <i>in Months</i> ): 5	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jan 2020	Jan 2021	Jan 2022
Delivery Dates	Jun 2020	Jun 2021	Jun 2022
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> TBD		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 4 of 23:</b> Dismounted Information Coordination Central			
<b>Manufacturer Information</b>			
Manufacturer Name: N/A		Manufacturer Location: N/A	
Administrative Leadtime (in Months):		Production Leadtime (in Months):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Engineering Services (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	<b>Modification Number / Title:</b> C50700 / Patriot Mods

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

**Modification Item 5 of 23:** BCP/TCS/CSM

**Manufacturer Information**

Manufacturer Name: Various		Manufacturer Location: Various	
Administrative Leadtime (in Months):		Production Leadtime (in Months):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			

**Installation Information**

**Method of Implementation:** Various (Included in unit cost)

<b>Installation Cost</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	79 / 1,192.582	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -
FY 2022	0 / 0.000	- / -	- / -	- / -	- / -	- / -
<b>Total</b>	79 / 1,192.582	- / -	- / -	- / -	- / -	- / -

**Installation Schedule**

	<b>PYS</b>	<b>FY 2020</b>				<b>FY 2021</b>				<b>FY 2022</b>			
		<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
In	79	-	-	-	-	-	-	-	-	-	-	-	-
Out	79	-	-	-	-	-	-	-	-	-	-	-	-

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 6 of 23:</b> International Engineering Services Program (IESP)			
<b>Manufacturer Information</b>			
Manufacturer Name: Multiple		Manufacturer Location: Various	
Administrative Leadtime (in Months):		Production Leadtime (in Months):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Various		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 7 of 23:</b> Logistics Recurring			
<b>Manufacturer Information</b>			
Manufacturer Name: Logistics		Manufacturer Location: Huntsville, AL	
Administrative Leadtime (in Months):		Production Leadtime (in Months):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Various		<b>Installation Quantity:</b> 0	



**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 8 of 23:</b> Report Rocket Classification			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime ( <i>in Months</i> ): 4		Production Leadtime ( <i>in Months</i> ): 5	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jan 2020	Jan 2021	Jan 2022
Delivery Dates	Jun 2020	Jun 2021	Jun 2022
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM Fielding Team (Included in Fielding cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 9 of 23:</b> PATRIOT Maintenance Trainer (PMT)			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Tewksbury, MA	
Administrative Leadtime (in Months): 4		Production Leadtime (in Months): 4	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Feb 2020		
Delivery Dates	Jun 2020		
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM Office, Contractor Team		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 10 of 23:</b> PATRIOT Multi-Echelon Training (PMET)			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Tewksbury, MA	
Administrative Leadtime (in Months): 4		Production Leadtime (in Months): 4	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Feb 2020	Feb 2021	Feb 2022
Delivery Dates	May 2020	May 2021	May 2022
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM Office, Contractor Team (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 11 of 23:</b> SNAP/TROPO			
<b>Manufacturer Information</b>			
Manufacturer Name: TeleCommunication Systems (TCS)		Manufacturer Location: Tampa, FL	
Administrative Leadtime ( <i>in Months</i> ): 1		Production Leadtime ( <i>in Months</i> ): 9	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Depot, PM, contractor team		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 12 of 23:</b> Enhanced Launcher Electronics System (ELES)			
<b>Manufacturer Information</b>			
Manufacturer Name: Various		Manufacturer Location: Various	
Administrative Leadtime ( <i>in Months</i> ): 3		Production Leadtime ( <i>in Months</i> ): 18	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Dec 2019	Dec 2020	
Delivery Dates	Jun 2021	Jun 2022	
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Fielding Team (Included in unit cost)		<b>Installation Quantity:</b> 10	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 13 of 23:</b> Digital Sidelobe Cancellor (DSLCL)			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Tewksbury, MA	
Administrative Leadtime (in Months): 3		Production Leadtime (in Months): 18	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jan 2020		
Delivery Dates	Jul 2021		
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Depot, PM Office, Contractor Team (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 14 of 23:</b> Command Obsolescence Alleviation			
<b>Manufacturer Information</b>			
Manufacturer Name: Various		Manufacturer Location: Various	
Administrative Leadtime (in Months): 8		Production Leadtime (in Months): 5	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM Office, Contractor Team (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 15 of 23:</b> MAP/RDP Encryption Compliance			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime ( <i>in Months</i> ): 4		Production Leadtime ( <i>in Months</i> ): 5	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jan 2020	Jan 2021	
Delivery Dates	Jun 2020	Jun 2021	
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Contractor Team (Included in unit cost), PM Fielding Team		<b>Installation Quantity:</b> 0	



**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 16 of 23:</b> IFF Antenna Redesign			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime ( <i>in Months</i> ): 4		Production Leadtime ( <i>in Months</i> ):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jan 2020	Jan 2021	
Delivery Dates	Feb 2021	Feb 2022	
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM Fielding Team (Included in Fielding cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army	<b>Date:</b> May 2021
--	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	<b>Modification Number / Title:</b> C50700 / Patriot Mods
--	---	--

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

**Modification Item 17 of 23:** Combined Crypto Modification Phase I (CCMPI)

**Manufacturer Information**

Manufacturer Name: OGA	Manufacturer Location: N/A
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 12

Dates	FY 2020	FY 2021	FY 2022
Contract Dates			
Delivery Dates			

**Installation Information**

**Method of Implementation:** LEAD Logistics Fielding Team (Included in unit cost)

Installation Cost	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	150 / 2.032	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -
FY 2022	0 / 0.000	- / -	- / -	- / -	- / -	- / -
<b>Total</b>	150 / 2.032	- / -	- / -	- / -	- / -	- / -

**Installation Schedule**

PYS	PYS	FY 2020				FY 2021				FY 2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
In	150	-	-	-	-	-	-	-	-	-	-	-	-
Out	150	-	-	-	-	-	-	-	-	-	-	-	-

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 18 of 23:</b> Radar Digital Processor - Configuration (RDP-C)			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime (in Months): 8		Production Leadtime (in Months): 20	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Depot, PM Office, contractor team (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 19 of 23:</b> Air Defense Artillery School Upgrades/ TADSS			
<b>Manufacturer Information</b>			
Manufacturer Name: PM Office, contractor team		Manufacturer Location: Various	
Administrative Leadtime (in Months): 6		Production Leadtime (in Months): 18	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM fielding team		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 20 of 23:</b> Modern Manstation (MMS)			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Andover, MA	
Administrative Leadtime (in Months): 6		Production Leadtime (in Months): 15	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Various (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 21 of 23:</b> Reconfigurable Table Top Trainers (RT3)			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Tewksbury, MA	
Administrative Leadtime (in Months): 3		Production Leadtime (in Months): 9	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> PM Office, Contractor Team (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
<b>Modification Number / Title:</b> C50700 / Patriot Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 22 of 23:</b> Assured PNT			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Tewksbury, MA	
Administrative Leadtime (in Months): 4		Production Leadtime (in Months): 14	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Logistics Fielding Team (Included in unit cost)		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 0962C50700 / Patriot Mods	
		<b>Modification Number / Title:</b> C50700 / Patriot Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 23 of 23:</b> Test Detachment			
<b>Manufacturer Information</b>			
Manufacturer Name: Various		Manufacturer Location: Various	
Administrative Leadtime (in Months): 4		Production Leadtime (in Months): 8	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> WSMR PM owned test bed personnel		<b>Installation Quantity:</b> 0	



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 1823CA6700 / ATACMS MODS
---	--

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203802A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	918.977	80.320	214.524	-	-	-	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	918.977	80.320	214.524	-	-	-	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>918.977</b>	<b>80.320</b>	<b>214.524</b>	-	-	-	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	1,271.061	1,004.000	1,094.510	-	-	-	-	-	-	-	-	-

**Description:**

ATACMS is the United States (U.S.) Army's primary 24/7, all weather, and surface-to-surface artillery precision missile used by current and future Combatant Commanders to shape the battlefield with long-range fires against hard and soft stationary targets in open, complex, and urban environments. The missile provides the Combatant Commanders with a 24/7 all-weather 300 kilometers (km) long-range fires capability to attack high-payoff, time-sensitive targets. ATACMS continues as the Commanders long range precision missile until fielding of the Army's objective system, Precision Strike Missile.

This procurement is related to the qualification program funded under Program Element (PE) 0203802A.

Block (BLK) I/IA missiles are aging beyond their service life and have warheads that are non-compliant with the Department of Defense (DoD) cluster munitions (CM) policy. This modification is performed as a Service Life Extension Program (SLEP) and will convert expired assets into Unitary HOB missiles with a reset 10 year service life. This modification replaces the existing M74 bomblets with a policy compliant unitary warhead, updates electronics and propellants, and adds a proximity sensor. This effort effectively brings the expired inventory back into service while meeting the DoD CM policy. Multi-mode seeker kits are also added for CD ATACMS missiles to engage moving maritime and land targets.

ATACMS modifications performed by Lockheed Martin Missiles and Fire Control, Grand Prairie, TX will stop production after FY 2021.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	80.320	214.524	-	-	-	-	-	-
<b>Total:</b> Secondary Distribution	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	<b>80.320</b>	<b>214.524</b>	-	-	-	-	-	-

**Justification:**

There is no funding in FY 2022.

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications		<b>P-1 Line Item Number / Title:</b> 1823CA6700 / ATACMS MODS
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203802A
<b>Line Item MDAP/MAIS Code:</b> N/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.

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 1824C57701 / GMLRS MOD
---	--

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	2	14	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	6.513	5.094	-	-	-	-	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	6.513	5.094	-	-	-	-	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>6.513</b>	<b>5.094</b>	-	-	-	-	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	3,256.500	363.857	-	-	-	-	-	-	-	-	-	-

**Description:**

FY 2021 funding totals include \$0.0M for Base and \$0.0M for Overseas Contingency Operations (OCO).

This effort shall be complete in FY 2020. No further funding is required.

GMLRS rockets are surface-to-surface artillery rockets fired from the Multiple Launch Rocket System (MLRS) and High Mobility Artillery Rocket System (HIMARS) launchers. GMLRS rockets provide 24/7, all-weather precision fires to engage both area and point targets at short, medium, and long ranges.

The GMLRS Program currently consists of multiple variants: GMLRS Dual Purpose Improved Conventional Munition (DPICM) is a cluster munition that replaced the shorter range MLRS rockets to engage area or imprecisely located targets. GMLRS DPICM Production was terminated in response to the June 2008 Department of Defense (DoD) Cluster Munitions Policy. GMLRS Unitary utilizes a 200 pound high explosive warhead to engage point targets with limited collateral damage. GMLRS Alternative Warhead (AW) was developed as a non-cluster munition to engage the same target sets as DPICM. GMLRS Unitary and AW are currently in full rate production.

The U.S. Army manages all three variants as part of the GMLRS Program. This modification program along with all GMLRS rockets are produced on a common production line by Lockheed Martin in Camden, Arkansas.

	Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	14	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.094	-	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>14</b>	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>5.094</b>	-	-	-	-	-	-	-	-

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications		<b>P-1 Line Item Number / Title:</b> 1824C57701 / GMLRS MOD
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> N/A
<b>Line Item MDAP/MAIS Code:</b> N/A		
<b>Justification:</b> No funds are requested for FY 2021.		

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 2684C20000 / Stinger Mods
---	---

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0203801A
---	--	--

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	389.000	87.262	-	-	-	-	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	389.000	87.262	-	-	-	-	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>389.000</b>	<b>87.262</b>	-	-	-	-	-	-	-	-	-	-

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	120.396	53.865	-	-	-	-	-	-	-	-	-	-

**Description:**

The Stinger Block I missile is an advanced, fire-and-forget, short-range, man-portable, shoulder-fired and platform mounted guided missile system that provides the maneuver force and point defense assets air defense protection. Stinger's mission is to provide the force with low-altitude air defense against Fixed Wing (FW) and Rotary Wing (RW) Aircraft, Unmanned Aircraft Systems (UAS) and Cruise Missiles (CM). The Stinger missile is deployable from a variety of platforms that includes vehicles, helicopters, UAS and Man Portable Air Defense System (MANPADS). The missile is delivered as a certified round and requires no field testing or maintenance.

The Service Life Extension Program (SLEP) is ongoing at McAlester Army Ammunition Plant to replace aging key components in existing Block I missiles to extend the current shelf life providing a more viable asset to the Army's inventory. The addition of a Proximity Fuze (PROX) capability in FY 2019 provided improved effectiveness against UAS threats by eliminating the need for hit to kill.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	40.754	-	-	-	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	46.508	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>87.262</b>	-	-	-	-	-	-	-

**Justification:**

The Stinger FY 2022 budget request is \$0.000 million.

In accordance with Section 1815 of the FY08 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications		<b>P-1 Line Item Number / Title:</b> 2684C20000 / Stinger Mods
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203801A
<b>Line Item MDAP/MAIS Code:</b> N/A		

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS
---	---

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0203801A
---	--	--

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	192.317	14.107	13.942	11.227	-	11.227	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	192.317	14.107	13.942	11.227	-	11.227	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>192.317</b>	<b>14.107</b>	<b>13.942</b>	<b>11.227</b>	<b>-</b>	<b>11.227</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	127.955	143.949	53.830	-	-	-	-	-	-	-	-	-

**Description:**

Avenger is a lightweight, ground-to-air missile and gun weapon system mounted on a High Mobility Multi-purpose Wheeled Vehicle. The system protects against unmanned aircraft systems, cruise missiles, and fixed and rotary wing threats. Avenger provides day/night adverse weather operations, shoot on the move capability, rapid target engagement, and remote firing capability. It can be air dropped, lifted by helicopter and is air transportable. The system employs up to eight Stinger missiles to counter aerial threats and a .50 Caliber Machine Gun (M3P) for close-in ground and air threats. An Identification Friend or Foe (IFF) system aids in the identification of friendly aircraft in order to minimize the potential for fratricide. The Avenger fleet of 453 systems includes 169 systems that are equipped with a digital Slew-to-Cue (STC) capability to speed target detection and engagement.

The Avenger Modification - Service Life Extension Program (MOD-SLEP) consists of Project 038: Avenger Production Improvement Program (PIP) and Program Element CE8710: Avenger MODS. The ongoing MOD-SLEP addresses obsolescence of Avenger components to ensure Avenger maintains operational capability through FY 2031. Five key MOD-SLEP components are: the Targeting Console (TC), the M3P, the Avenger Fire Control Computer (AFCC), the Mode 5 Identification Friend or Foe (IFF) and the Vehicle Internal Communications (VIC-5). Additional Obsolescence Mitigation Items include Avenger Organizational Maintenance Tool Kits, AN/PSM-95 Electronic Systems Test Set and the Avenger Remote Handheld Terminal Unit (RHTU) mounting kits.

The TC and AFCC are fielded to the 169 STC Avengers only. The M3P is fielded as spares through the supply system. The VIC-5 and Mode 5 IFF are fielded to all 453 of the Avenger systems.

The Product Office will use FY 2022 funding to provide Systems Engineering, Engineering Services, Program Management and Fielding support necessary to complete MOD-SLEP.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.894	4.791	3.823	-	3.823	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.213	9.151	7.404	-	7.404	-	-	-
<b>Total:</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0203801A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Secondary Distribution	Total Obligation Authority	14.107	13.942	11.227	-	11.227	-	-	-	-

--	--	--	--	--	--	--	--	--	--	--



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications **P-1 Line Item Number / Title:** 2690CE8710 / AVENGER MODS

**ID Code** (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0203801A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	CE8710 / AVENGER MODS (Operational)		A		- / 192.317	- / 14.107	- / 13.942	- / 11.227	- / -	- / 11.227
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 192.317</b>	<b>- / 14.107</b>	<b>- / 13.942</b>	<b>- / 11.227</b>	<b>- / -</b>	<b>- / 11.227</b>

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

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

**Justification:**

FY 2022 procurement dollars in the amount of \$11.227 million provides Systems Engineering, Engineering Services, Program Management and Fielding support necessary to complete MOD-SLEP.

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

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	<b>Modification Number / Title:</b> CE8710 / AVENGER MODS

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

<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	192.317	14.107	13.942	11.227	-	11.227
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	192.317	14.107	13.942	11.227	-	11.227
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>192.317</b>	<b>14.107</b>	<b>13.942</b>	<b>11.227</b>	-	<b>11.227</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	127.955	143.949	53.830	-	-	-

**Description:**

Avenger is a lightweight, ground-to-air missile and gun weapon system mounted on a High Mobility Multi-purpose Wheeled Vehicle. The system protects against unmanned aircraft systems, cruise missiles, and fixed and rotary wing threats. Avenger provides day/night adverse weather operations, shoot on the move capability, rapid target engagement, and remote firing capability. It can be air dropped, lifted by helicopter and is air transportable. The system employs up to eight Stinger missiles to counter aerial threats and a .50 Caliber Machine Gun (M3P) for close-in ground and air threats. An Identification Friend or Foe (IFF) system aids in the identification of friendly aircraft in order to minimize the potential for fratricide. The Avenger fleet of 453 systems includes 169 systems that are equipped with a digital Slew-to-Cue (STC) capability to speed target detection and engagement.

The Avenger Modification - Service Life Extension Program (MOD-SLEP) addresses obsolescence of five key Avenger components to ensure Avenger maintains operational capability through FY 2031.

The Vehicle Internal Communications System is a required subsystem that allows communication between the gunner and driver. It also interfaces with the IFF and missile electronics resulting in improved IFF capabilities. The digital VIC-5 replaces the analog VIC-1 that is currently fielded with the Avenger.

The Avenger Fire Control Computer (AFCC) is a required subsystem of the Avenger Slew-to-Cue system that processes and displays air tracks data to the gunner. The current AFCC is not supportable through FY 2031. The AFCC will undergo software and hardware upgrades that will enable the system to handle increased targeting capability realized with the latest version of the FAAD early warning system, ensure the system meets the latest Information Assurance (IA) requirements, and allow for future growth in areas such as improved fire control/longer range engagements.

The Mode 5 IFF is required to replace the Mode 4 IFF, in order to comply with Department of Defense standards. Incorporation of Mode 5 IFF into Avenger is critical to retaining the cooperative target identification capability, allowing Avenger to remain relevant and effective in Air Defense and Homeland Defense missions. Mode 5 IFF quantities above 453 also support the Stinger Man Portable Air Defense System Initiative.

Additional Obsolescence Mitigation Items, in various quantities, support 453 Avenger systems and include Avenger Organizational Maintenance Tool Kits, AN/PSM-95 Electronic Systems Test Sets and Avenger Remote Handheld Terminal Unit (RHTU) mounting kits.

The TC and AFCC are fielded to the 169 STC Avengers only. The M3P is fielded as spares through the supply system. The VIC-5 and Mode 5 IFF are fielded to all 453 of the Avenger systems.

In prior years, the Avenger MODS program also addressed the Slew-to-Cue upgrade, Targeting Consoles (TC) and M3P .50 CAL machine guns.

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army	<b>Date:</b> May 2021
--	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	<b>Modification Number / Title:</b> CE8710 / AVENGER MODS
--	---	--

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

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	4.894	4.791	3.823	-	3.823
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	9.213	9.151	7.404	-	7.404
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>14.107</b>	<b>13.942</b>	<b>11.227</b>	-	<b>11.227</b>

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>						<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS			<b>Modification Number / Title:</b> CE8710 / AVENGER MODS	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A				<b>MDAP/MAIS Code:</b>			
<b>Models of Systems Affected:</b> Avenger Basic and Slew-to-Cue Systems		<b>Modification Type:</b> Operational			<b>Related RDT&amp;E PEs:</b>		
Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
<b>Procurement</b>							
<b>Modification Item 1 of 5: Prior Modifications</b>							
A Kits							
Recurring							
Prior Year Modifications	466 / 67.153	- / -	- / -	- / -	- / -	- / -	
<b>Subtotal: Recurring</b>	<b>466 / 67.153</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	
<b>Subtotal: Prior Modifications</b>	<b>466 / 67.153</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	
<b>Modification Item 2 of 5: Vehicle Internal Communication (VIC-5)</b>							
A Kits							
Recurring							
Hardware	454 / 4.327	- / -	- / -	- / -	- / -	- / -	
Spares	- / 0.457	- / -	- / -	- / -	- / -	- / -	
Engineering Services	- / 0.172	- / -	- / 0.163	- / 0.110	- / -	- / 0.110	
Systems Engineering / Program Management	- / 2.711	- / -	- / 0.241	- / 0.230	- / -	- / 0.230	
Fielding	- / -	- / -	- / 0.208	- / 0.212	- / -	- / 0.212	
<b>Subtotal: Recurring</b>	<b>454 / 7.667</b>	<b>- / -</b>	<b>- / 0.612</b>	<b>- / 0.552</b>	<b>- / -</b>	<b>- / 0.552</b>	
B Kits							
Recurring							
Avenger to VIC 5 Cables	264 / 11.880	- / -	- / -	- / -	- / -	- / -	
Spares	- / 1.188	- / -	- / -	- / -	- / -	- / -	
Engineering Services	- / 0.739	- / -	- / 0.446	- / 0.302	- / -	- / 0.302	
Systems Engineering / Program Management	- / 1.753	- / -	- / 0.662	- / 0.631	- / -	- / 0.631	
Fielding	- / 0.100	- / -	- / 0.572	- / 0.583	- / -	- / 0.583	
<b>Subtotal: Recurring</b>	<b>264 / 15.660</b>	<b>- / -</b>	<b>- / 1.680</b>	<b>- / 1.516</b>	<b>- / -</b>	<b>- / 1.516</b>	
<b>Subtotal: Vehicle Internal Communication (VIC-5)</b>	<b>718 / 23.327</b>	<b>- / -</b>	<b>- / 2.292</b>	<b>- / 2.068</b>	<b>- / -</b>	<b>- / 2.068</b>	
<b>Modification Item 3 of 5: Mode 5/Identification Friend or Foe</b>							
A Kits							
Recurring							
Equipment	301 / 44.603	183 / 7.486	- / -	- / -	- / -	- / -	
Spares	- / 4.459	- / 0.749	- / -	- / -	- / -	- / -	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>						<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS			<b>Modification Number / Title:</b> CE8710 / AVENGER MODS	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A				<b>MDAP/MAIS Code:</b>			
<b>Models of Systems Affected:</b> Avenger Basic and Slew-to-Cue Systems		<b>Modification Type:</b> Operational			<b>Related RDT&amp;E PEs:</b>		
Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Engineering Services	- / 2.376	- / 0.542	- / 1.957	- / 1.278	- / -	- / 1.278	
System Engineering / Program Management	- / 11.282	- / 1.479	- / 2.903	- / 2.669	- / -	- / 2.669	
Fielding	- / 0.020	- / 0.015	- / 2.508	- / 2.463	- / -	- / 2.463	
<b>Subtotal: Recurring</b>	<b>301 / 62.740</b>	<b>183 / 10.271</b>	<b>- / 7.368</b>	<b>- / 6.410</b>	<b>- / -</b>	<b>- / 6.410</b>	
Non-Recurring							
Non-Recurring Production	- / 10.197	- / -	- / -	- / -	- / -	- / -	
<b>Subtotal: Non-Recurring</b>	<b>- / 10.197</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	
<b>Subtotal: Mode 5/Identification Friend or Foe</b>	<b>301 / 72.937</b>	<b>183 / 10.271</b>	<b>- / 7.368</b>	<b>- / 6.410</b>	<b>- / -</b>	<b>- / 6.410</b>	
<b>Modification Item 4 of 5: Avenger Fire Control Computer</b>							
A Kits							
Recurring							
Hardware	170 / 21.545	- / -	- / -	- / -	- / -	- / -	
Spares	- / 2.155	- / -	- / -	- / -	- / -	- / -	
Engineering Services	- / 1.639	- / -	- / 0.809	- / 0.548	- / -	- / 0.548	
Systems Engineering / Program Management	- / 3.546	- / -	- / 1.201	- / 1.145	- / -	- / 1.145	
Fielding	- / 0.015	- / -	- / 1.037	- / 1.056	- / -	- / 1.056	
<b>Subtotal: Recurring</b>	<b>170 / 28.900</b>	<b>- / -</b>	<b>- / 3.047</b>	<b>- / 2.749</b>	<b>- / -</b>	<b>- / 2.749</b>	
<b>Subtotal: Avenger Fire Control Computer</b>	<b>170 / 28.900</b>	<b>- / -</b>	<b>- / 3.047</b>	<b>- / 2.749</b>	<b>- / -</b>	<b>- / 2.749</b>	
<b>Modification Item 5 of 5: Obsolescence Mitigation Items</b>							
A Kits							
Recurring							
Hardware	- / -	37 / 3.836	169 / 0.606	- / -	- / -	- / -	
Engineering Services	- / -	- / -	- / 0.167	- / -	- / -	- / -	
Systems Engineering / Program Management	- / -	- / -	- / 0.248	- / -	- / -	- / -	
Fielding	- / -	- / -	- / 0.214	- / -	- / -	- / -	
<b>Subtotal: Recurring</b>	<b>- / -</b>	<b>37 / 3.836</b>	<b>169 / 1.235</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	
<b>Subtotal: Obsolescence Mitigation Items</b>	<b>- / -</b>	<b>37 / 3.836</b>	<b>169 / 1.235</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	
<b>Subtotal: Procurement, All Modification Items</b>	<b>1,655 / 192.317</b>	<b>220 / 14.107</b>	<b>169 / 13.942</b>	<b>- / 11.227</b>	<b>- / -</b>	<b>- / 11.227</b>	
<b>Installation</b>							
<b>Subtotal: Installation</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army						<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS			<b>Modification Number / Title:</b> CE8710 / AVENGER MODS	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A				<b>MDAP/MAIS Code:</b>			
<b>Models of Systems Affected:</b> Avenger Basic and Slew-to-Cue Systems			<b>Modification Type:</b> Operational			<b>Related RDT&amp;E PEs:</b>	
<b>Financial Plan</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
<b>Total</b>							
<b>Total Cost (Procurement + Support + Installation)</b>	192.317	14.107	13.942	11.227	-	11.227	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 1 of 5:</b> Prior Modifications			
<b>Manufacturer Information</b>			
Manufacturer Name: Not Applicable		Manufacturer Location: Not Applicable	
Administrative Leadtime (in Months):		Production Leadtime (in Months):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Completed at Depot		<b>Installation Quantity:</b> 466	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	
<b>Modification Number / Title:</b> CE8710 / AVENGER MODS			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 2 of 5:</b> Vehicle Internal Communication (VIC-5)			
<b>Manufacturer Information</b>			
Manufacturer Name: Northrop Grumman		Manufacturer Location: Tobyhanna, PA	
Administrative Leadtime (in Months): 1		Production Leadtime (in Months): 9	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Fielded by Depot with Phase II kit		<b>Installation Quantity:</b> 453	



**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	
<b>Modification Number / Title:</b> CE8710 / AVENGER MODS			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 3 of 5:</b> Mode 5/Identification Friend or Foe			
<b>Manufacturer Information</b>			
Manufacturer Name: Raytheon		Manufacturer Location: Largo, FL	
Administrative Leadtime (in Months): 4		Production Leadtime (in Months): 12	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Apr 2020		
Delivery Dates	Jan 2023		
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Fielded by Depot with Phase II kit		<b>Installation Quantity:</b> 453	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	
<b>Modification Number / Title:</b> CE8710 / AVENGER MODS			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 4 of 5:</b> Avenger Fire Control Computer			
<b>Manufacturer Information</b>			
Manufacturer Name: Boeing		Manufacturer Location: Huntsville, AL	
Administrative Leadtime (in Months): 1		Production Leadtime (in Months): 9	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Fielded by Depot with Phase II kit		<b>Installation Quantity:</b> 169	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 2690CE8710 / AVENGER MODS	
<b>Modification Number / Title:</b> CE8710 / AVENGER MODS			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 5 of 5:</b> Obsolescence Mitigation Items			
<b>Manufacturer Information</b>			
Manufacturer Name: Varies		Manufacturer Location: Varies	
Administrative Leadtime ( <i>in Months</i> ): 6		Production Leadtime ( <i>in Months</i> ): 6	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jul 2020	Jul 2021	
Delivery Dates	Jul 2021	Jul 2022	
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Fielded by Depot		<b>Installation Quantity:</b> 169	

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 3972C61700 / ITAS/TOW Mods
---	--

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,795.993	3.469	5.666	4.561	-	4.561	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,795.993	3.469	5.666	4.561	-	4.561	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>1,795.993</b>	<b>3.469</b>	<b>5.666</b>	<b>4.561</b>	<b>-</b>	<b>4.561</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	44,899.825	173.450	153.135	-	-	-	-	-	-	-	-	-

**Description:**

The Improved Target Acquisition System (ITAS) with Far Target Location (FTL) is a combat proven system that provides long-range, lethal anti-armor and precision assault fires capability for Active Component and Army National Guard Infantry Brigade Combat Teams (IBCT) and Stryker Brigade Combat Teams (SBCT) equipped with Modified ITAS (MITAS) across the spectrum of contemporary operational environments. ITAS with the TOW Missile provides the capability to defeat armored vehicles, bunkers, and buildings at extended ranges in all battlefield conditions. ITAS's superior surveillance capability also enables the Soldier to shape the battlefield by detecting targets at long range and either engaging with TOW missiles or other weapon systems to destroy those targets with its ability to generate a 10 digit grid coordinate of a target location. The ITAS completed fielding to the total Army in December 2012. ITAS continues to be the weapon of choice in precision combat engagements.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	3.469	3.166	4.561	-	4.561	-	-	-	-
ANG									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	2.500	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	<b>3.469</b>	<b>5.666</b>	<b>4.561</b>	<b>-</b>	<b>4.561</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Justification:**

FY2022 funding totals include \$4.561 Million in Base to procure 10 Precision Far Target Location (PFTL) Kits and non-recurring engineering and procurement of 28 Lithium-ion Battery Boxes (LBB) for ITAS. This procurement will field a M-Code compatible Global Positioning System (GPS) receiver with Category 1 Target Location Error (TLE) capable far target location capability necessary for the employment of Precision Guided Munitions (PGM). The PFTL is currently being fielded to the Stryker Brigade Combat Teams (SBCT) as a part of the Stryker Anti-Tank Guided Missile (ATGM) vehicle lethality Engineering

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications		<b>P-1 Line Item Number / Title:</b> 3972C61700 / ITAS/TOW Mods
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> N/A
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Change Proposal (ECP). This procurement will enable the Army to demonstrate and experiment with the PFTL capability in the IBCTs. The LBB incorporates increased safety features and a newly designed battery cell, with modern cell chemistry and structure, to increase the overall safety of the LBB. The funding also includes the installation and program management cost for this procurement.</p> <p>In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.</p>		

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods
---	--

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0603778A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,062.635	372.550	330.419	273.856	-	273.856	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,062.635	372.550	330.419	273.856	-	273.856	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>1,062.635</b>	<b>372.550</b>	<b>330.419</b>	<b>273.856</b>	<b>-</b>	<b>273.856</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	20,049.717	9,086.585	8,260.475	9,128.533	-	9,128.533	-	-	-	-	-	-

**Description:**

The M270A1 Multiple Launch Rocket System (MLRS) launcher is a full-spectrum, combat-proven, all-weather, 24/7 lethal and responsive, precision strike weapon system. MLRS provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. MLRS is a tracked, indirect fire, rocket/missile launcher capable of firing two pods of precision rockets/missiles from the current and emerging Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Extended Range Guided Multiple Launch Rocket System (ER GMLRS), the Army Tactical Missile System (ATACMS), and the Precision Strike Missile (PrSM).

In FY2017, the Army directed the program office to modernize 160 obsolete, unserviceable MLRS M270A0s to M270A2s in an effort called MLRS Fleet Expansion. In addition to MLRS Fleet Expansion, the Army decided to extend the operational life of the existing M270A1 fleet to FY2050 or beyond, which drives the requirement to upgrade the current fleet of 225 M270A1 launchers to the M270A2 configuration. The end state is 367 MLRS launchers with Improved Armored Cabs (IAC), Bradley commonality improvements, and Common Fire Control System (CFCS). Upon integration of the IAC Modification Kit on a M270A1, the launcher permanently becomes an M270A2.

Mod 1 (MLRS Fleet Expansion). The Fleet Expansion effort will modernize 160 MLRS M270A0s to M270A2s through a Public Private Partnership. The prime contractor and Red River Army Depot (RRAD) will rebuild, address obsolescence and provide selective upgrades to include IAC, Bradley commonality improvements, and CFCS.

Mod 2 (MLRS Fleet Upgrade). The MLRS Fleet upgrade effort will follow the same rebuild process and selective upgrades as the Fleet Expansion effort, by upgrading the current fleet of M270A1 launchers to M270A2 with IAC, Bradley Commonality, and CFCS. Upon integration of the IAC Modification Kit on a M270A1, the launcher permanently becomes a M270A2. This upgrade effort will extend the operational life of these launchers to FY2050 and beyond.

Mod 3 (Improved Armored Cab). The Improved Armored Cab (IAC) Modification Kit provides crew survivability against Improvised Explosive Devices (IEDs) and small arms fire greater than or equal to the High Mobility Artillery Rocket System (HIMARS) Increased Crew Protection Cab (ICP). Additionally, IAC standardizes crew drill requirements between HIMARS and MLRS operators. Upon integration of the IAC Modification Kit on a M270A1, the launcher permanently becomes a M270A2. Integration of the IAC is performed by RRAD under a Public Private Partnership as part of the MLRS Fleet Expansion effort.

The current Army Acquisition Objective is 225 MLRS launchers. The end state Army Acquisition Objective after Fleet Expansion will be 367 M270A2 MLRS launchers.

**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army							<b>Date:</b> May 2021			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications					<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0603778A				
<b>Line Item MDAP/MAIS Code:</b> N/A										

<b>Secondary Distribution</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	372.550	118.027	273.856	-	273.856	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	212.392	-	-	-	-	-	-	-
<b>Total:</b> Secondary Distribution	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>372.550</b>	<b>330.419</b>	<b>273.856</b>	-	<b>273.856</b>	-	-	-	-

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications **P-1 Line Item Number / Title:** 6552C67500 / MLRS Mods

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603778A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	C67500 / MLRS Mods (.)				- / 1,062.635	- / 372.550	- / 330.419	- / 273.856	- / -	- / 273.856
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 1,062.635</b>	<b>- / 372.550</b>	<b>- / 330.419</b>	<b>- / 273.856</b>	<b>- / -</b>	<b>- / 273.856</b>

\*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:**  
 FY2022 procurement dollars support \$273.856M Base, \$0.000M Direct War, and \$0.000M Enduring costs.

FY 2022 procurement dollars in the amount of \$273.856 million procures 30 M270A2 MLRS launchers and 35 Improved Armored Cabs. Supports MLRS Fleet Expansion (Mod 1) of 26 MLRS launchers from M270A0 configuration to M270A2 configuration and completes the nonrecurring engineering obsolescence effort of the launcher chassis design. Supports MLRS Fleet Upgrade (Mod 2) of 4 MLRS launchers from M270A1 configuration to M270A2 configuration. Procures 35 Improved Armored Cabs (Mod 3).

The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or foreign military sales to continue the MLRS Fleet Upgrade (Mod 2) of MLRS launchers from M270A1 configuration to M270A2 configuration, and/or address obsolescence, modernization, cost reduction, and production initiatives. The Army will continue to incorporate modifications with the MLRS launcher to keep pace with the current and evolving threat.

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



**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods	<b>Modification Number / Title:</b> C67500 / MLRS Mods

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

<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,062.635	372.550	330.419	273.856	-	273.856
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,062.635	372.550	330.419	273.856	-	273.856
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>1,062.635</b>	<b>372.550</b>	<b>330.419</b>	<b>273.856</b>	<b>-</b>	<b>273.856</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	20,049.717	9,086.585	8,260.475	9,128.533	-	9,128.533

**Description:**

The M270A1 Multiple Launch Rocket System (MLRS) launcher is a full-spectrum, combat-proven, all-weather, 24/7 lethal and responsive, precision strike weapon system. MLRS provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. MLRS is a tracked, indirect fire, rocket/missile launcher capable of firing two pods of precision rockets/missiles from the current and emerging Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Extended Range Guided Multiple Launch Rocket System (ER GMLRS), the Army Tactical Missile System (ATACMS), and the Precision Strike Missile (PrSM).

In FY2017, the Army directed the program office to modernize 160 obsolete, unserviceable MLRS M270A0s to M270A2s in an effort called MLRS Fleet Expansion. In addition to MLRS Fleet Expansion, the Army decided to extend the operational life of the existing M270A1 fleet to FY2050 or beyond, which drives the requirement to upgrade the current fleet of 225 M270A1 launchers to the M270A2 configuration. The end state is 367 MLRS launchers with Improved Armored Cabs (IAC), Bradley commonality improvements, and Common Fire Control System (CFCS). Upon integration of the IAC Modification Kit on a M270A1, the launcher permanently becomes an M270A2.

Mod 1 (MLRS Fleet Expansion). The Fleet Expansion effort will modernize 160 MLRS M270A0s to M270A2s through a Public Private Partnership. The prime contractor and Red River Army Depot (RRAD) will rebuild, address obsolescence and provide selective upgrades to include IAC, Bradley commonality improvements, and CFCS.

Mod 2 (MLRS Fleet Upgrade). The MLRS Fleet upgrade effort will follow the same rebuild process and selective upgrades as the Fleet Expansion effort, by upgrading the current fleet of M270A1 launchers to M270A2 with IAC, Bradley Commonality, and CFCS. Upon integration of the IAC Modification Kit on a M270A1, the launcher permanently becomes a M270A2. This upgrade effort will extend the operational life of these launchers to FY2050 and beyond.

Mod 3 (Improved Armored Cab). The Improved Armored Cab (IAC) Modification Kit provides crew survivability against Improvised Explosive Devices (IEDs) and small arms fire greater than or equal to the High Mobility Artillery Rocket System (HIMARS) Increased Crew Protection Cab (ICP). Additionally, IAC standardizes crew drill requirements between HIMARS and MLRS operators. Upon integration of the IAC Modification Kit on a M270A1, the launcher permanently becomes a M270A2. Integration of the IAC is performed by RRAD under a Public Private Partnership as part of the MLRS Fleet Expansion effort.

The current Army Acquisition Objective is 225 MLRS launchers. The end state Army Acquisition Objective after Fleet Expansion will be 367 M270A2 MLRS launchers.

<b>Secondary Distribution</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	372.550	118.027	273.856	-	273.856
ANG	Quantity	-	-	-	-	-

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army	<b>Date:</b> May 2021
--	-----------------------

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods	<b>Modification Number / Title:</b> C67500 / MLRS Mods
--	--	---

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

		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<b>Secondary Distribution</b>						
	Total Obligation Authority	-	212.392	-	-	-
<b>Total:</b>	<b>Quantity</b>	-	-	-	-	-
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>372.550</b>	<b>330.419</b>	<b>273.856</b>	-	<b>273.856</b>

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>					<b>Date: May 2021</b>	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10			<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods		<b>Modification Number / Title:</b> C67500 / MLRS Mods	
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :				<b>MDAP/MAIS Code:</b>		
<b>Models of Systems Affected:</b> M270A1		<b>Modification Type:</b> .		<b>Related RDT&amp;E PEs:</b>		
Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<b>Procurement</b>						
<b>Modification Item 1 of 3: MLRS Fleet Expansion</b>						
A Kits						
Recurring						
Obsolescence Mitigation (inactive)	- / 468.710	- / -	- / -	- / -	- / -	- / -
System Engineering Program Management	- / 31.265	- / 16.244	- / 16.525	- / 10.481	- / -	- / 10.481
Transmissions and Engines	- / 18.413	- / 25.526	- / 16.383	- / 17.988	- / -	- / 17.988
M270A2 Launcher Fleet Expansion	53 / 351.606	41 / 271.493	40 / 249.978	26 / 162.329	- / -	26 / 162.329
Fielding	- / -	- / -	- / -	- / 8.822	- / -	- / 8.822
Training	- / -	- / -	- / -	- / 4.057	- / -	- / 4.057
<b>Subtotal: Recurring</b>	<b>53 / 869.994</b>	<b>41 / 313.263</b>	<b>40 / 282.886</b>	<b>26 / 193.677</b>	<b>- / -</b>	<b>26 / 193.677</b>
Non-Recurring						
Obsolescence Mitigation Bradley Chassis	- / 38.822	- / -	- / 17.871	- / 6.645	- / -	- / 6.645
Obsolescence Mitigation Fire Control Sys	- / 27.091	- / -	- / -	- / 1.296	- / -	- / 1.296
Launcher Risk Reduction	- / 17.417	- / -	- / -	- / -	- / -	- / -
Government Testing	- / 0.923	- / 10.460	- / 12.627	- / 0.865	- / -	- / 10.865
Initial Spares	- / 17.059	- / 14.470	- / 18.172	- / -	- / -	- / -
Training	- / 1.909	- / -	- / 6.693	- / -	- / -	- / -
<b>Subtotal: Non-Recurring</b>	<b>- / 93.221</b>	<b>- / 14.930</b>	<b>- / 25.363</b>	<b>- / 8.806</b>	<b>- / -</b>	<b>- / 8.806</b>
<b>Subtotal: MLRS Fleet Expansion</b>	<b>53 / 963.215</b>	<b>41 / 328.193</b>	<b>40 / 308.249</b>	<b>26 / 202.483</b>	<b>- / -</b>	<b>26 / 202.483</b>
<b>Modification Item 2 of 3: MLRS Fleet Upgrade</b>						
A Kits						
Recurring						
System Engineering Program Management	- / -	- / -	- / -	- / 5.448	- / -	- / 5.448
Transmissions and Engines	- / -	- / -	- / -	- / 4.025	- / -	- / 4.025
M270A2 Launcher Upgrade	- / -	- / -	- / -	4 / 25.221	- / -	4 / 25.221
Fielding	- / -	- / -	- / -	- / 3.202	- / -	- / 3.202
Training	- / -	- / -	- / -	- / 1.299	- / -	- / 1.299
<b>Subtotal: Recurring</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>4 / 39.195</b>	<b>- / -</b>	<b>4 / 39.195</b>
Non-Recurring						
Obsolescence Mitigation Bradley Chassis	- / -	- / -	- / -	- / 0.928	- / -	- / 0.928
Obsolescence Mitigation Fire Control Sys	- / -	- / -	- / -	- / 0.199	- / -	- / 0.199
Government Testing	- / -	- / -	- / -	- / 0.133	- / -	- / 0.133

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date: May 2021</b>
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods	<b>Modification Number / Title:</b> C67500 / MLRS Mods

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

<b>Models of Systems Affected:</b> M270A1	<b>Modification Type:</b> .	<b>Related RDT&amp;E PEs:</b>
---	-----------------------------	-------------------------------

Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
<i>Subtotal: Non-Recurring</i>	- / -	- / -	- / -	- / 1.260	- / -	- / 1.260
<i>Subtotal: MLRS Fleet Upgrade</i>	- / -	- / -	- / -	4 / 40.455	- / -	4 / 40.455
<b>Modification Item 3 of 3: Improved Armored Cab (IAC)</b>						
A Kits						
Recurring						
Production	102 / 99.420	51 / 44.357	26 / 22.170	30 / 26.567	- / -	30 / 26.567
IAC Spares	- / -	- / -	- / -	5 / 4.351	- / -	5 / 4.351
<i>Subtotal: Recurring</i>	102 / 99.420	51 / 44.357	26 / 22.170	35 / 30.918	- / -	35 / 30.918
<i>Subtotal: Improved Armored Cab (IAC)</i>	102 / 99.420	51 / 44.357	26 / 22.170	35 / 30.918	- / -	35 / 30.918
<i>Subtotal: Procurement, All Modification Items</i>	155 / 1,062.635	92 / 372.550	66 / 330.419	65 / 273.856	- / -	65 / 273.856
<b>Installation</b>						
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -
<b>Total</b>						
<b>Total Cost (Procurement + Support + Installation)</b>	<b>1,062.635</b>	<b>372.550</b>	<b>330.419</b>	<b>273.856</b>	<b>-</b>	<b>273.856</b>

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods	
<b>Modification Number / Title:</b> C67500 / MLRS Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 1 of 3:</b> MLRS Fleet Expansion			
<b>Manufacturer Information</b>			
Manufacturer Name: Lockheed Martin Missiles & Fire Control		Manufacturer Location: Camden, AR	
Administrative Leadtime ( <i>in Months</i> ): 3		Production Leadtime ( <i>in Months</i> ): 28	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jun 2020	Apr 2021	Apr 2022
Delivery Dates	Sep 2022	Sep 2023	Aug 2024
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Field Artillery Launchers Product Office		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods	
<b>Modification Number / Title:</b> C67500 / MLRS Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 2 of 3:</b> MLRS Fleet Upgrade			
<b>Manufacturer Information</b>			
Manufacturer Name: Lockheed Martin Missiles & Fire Control		Manufacturer Location: Camden, AR	
Administrative Leadtime ( <i>in Months</i> ): 3		Production Leadtime ( <i>in Months</i> ): 28	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			Apr 2022
Delivery Dates			Dec 2024
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Field Artillery Launchers Product Office		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10		<b>P-1 Line Item Number / Title:</b> 6552C67500 / MLRS Mods	
<b>Modification Number / Title:</b> C67500 / MLRS Mods			
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 3 of 3:</b> Improved Armored Cab (IAC)			
<b>Manufacturer Information</b>			
Manufacturer Name: Loc Performance Products, LLC		Manufacturer Location: Plymouth, MI	
Administrative Leadtime (in Months): 3		Production Leadtime (in Months): 21	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates	Jun 2020	May 2021	May 2022
Delivery Dates	May 2022	May 2023	May 2024
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Depot		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications	<b>P-1 Line Item Number / Title:</b> 6580C67501 / HIMARS Modifications
---	---

<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0210600A, 0603778A, 0210608A
--	---	---

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	245.250	12.483	6.081	7.192	-	7.192	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	245.250	12.483	6.081	7.192	-	7.192	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>245.250</b>	<b>12.483</b>	<b>6.081</b>	<b>7.192</b>	<b>-</b>	<b>7.192</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	3,554.348	312.075	276.409	326.909	-	326.909	-	-	-	-	-	-

**Description:**

The M142 High Mobility Artillery Rocket System (HIMARS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. HIMARS provides critical missile precision strike, operational shaping fires, counter-fire, and close support destructive and suppressive fires. HIMARS is a C-130 or C-17 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing one pod of precision rockets/missiles from the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System-Unitary (GMLRS-U), GMLRS Alternative Warhead, the Army Tactical Missile System (ATACMS) and future MFOM to include the Extended Range (ER) GMLRS, and the Precision Strike Missile (PrSM).

Mod 1 (M142 Mods). Modifications to address safety, operational-related, chassis, and Command, Control, Communications, Computer, and Intelligence (C4I) obsolescence issues within the HIMARS fleet. Additionally, procures system-specific training devices required to support the HIMARS Vehicle and Maintainer training courses.

Mod 2 (CFCS). Modifications to field the Common Fire Control System (CFCS) to the HIMARS Launcher fleet. CFCS replaces the obsolete Universal Fire Control System that cannot be procured as designed. CFCS will provide the capability to launch all current and future MFOM and provide an updated and more intuitive user interface that will be common to both HIMARS and MLRS launchers. CFCS will reduce training costs and operations and maintenance costs. The fielding of CFCS on the HIMARS Launcher fleet mitigates obsolescence issues. Mod Kit 2 (CFCS) funding begins in FY2024.

The Army currently has 363 HIMARS launchers on hand and is increasing the Army Acquisition Objective to 547 to support the Army Structure Memorandum 2022-2026 decision.

	Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	12.483	1.789	2.091	-	2.091	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	4.292	5.101	-	5.101	-	-	-	-
<b>Total:</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>



**UNCLASSIFIED**

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications		<b>P-1 Line Item Number / Title:</b> 6580C67501 / HIMARS Modifications
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0210600A, 0603778A, 0210608A

Line Item MDAP/MAIS Code: N/A

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Secondary Distribution	Total Obligation Authority	12.483	6.081	7.192	-	7.192	-	-	-	-

--	--	--	--	--	--	--	--	--	--	--

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 03: Modification of Missiles / BSA 10: Modifications **P-1 Line Item Number / Title:** 6580C67501 / HIMARS Modifications

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0210600A, 0603778A, 0210608A

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	C67501 / HIMARS Modifications (Operational, Reliability, Safety, Crew Survivability)				- / 245.250	- / 12.483	- / 6.081	- / 7.192	- / -	- / 7.192
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 245.250</b>	<b>- / 12.483</b>	<b>- / 6.081</b>	<b>- / 7.192</b>	<b>- / -</b>	<b>- / 7.192</b>

\*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:**  
 FY2022 procurement dollars support \$7.192M Base, \$0.000M Direct War, and \$0.000M Enduring costs.

FY2022 Base procurement dollars in the amount of \$7.192 million support obsolescence mitigation and other design modifications of the M142 High Mobility Artillery Rocket System (HIMARS) fleet. HIMARS Modifications funding will include, but are not limited to, the following: updating the Family of Medium Tactical Vehicle carrier and the Launcher-Loader Module drawing packages and Technical Data Packages through the prime contractor and the government product office; updating the Interactive Electronic Technical Manuals for Soldiers to perform operator maintenance; upgrading the Diagnostic Trainers and HIMARS Mock-up Trainer due to obsolescence. Systems engineering efforts will address obsolescence issues and apply necessary modifications to the major HIMARS components of the Carrier, Launcher-Loader Module, and Fire Control System. Base procurement dollars will also incorporate modifications to the HIMARS launcher to meet the current and evolving threat.

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

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 6580C67501 / HIMARS Modifications	<b>Modification Number / Title:</b> C67501 / HIMARS Modifications

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

<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	245.250	12.483	6.081	7.192	-	7.192
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	245.250	12.483	6.081	7.192	-	7.192
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>245.250</b>	<b>12.483</b>	<b>6.081</b>	<b>7.192</b>	<b>-</b>	<b>7.192</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	3,554.348	312.075	276.409	326.909	-	326.909

**Description:**

The M142 High Mobility Artillery Rocket System (HIMARS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. HIMARS provides critical missile precision strike, operational shaping fires, counter-fire, and close support destructive and suppressive fires. HIMARS is a C-130 or C-17 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing one pod of precision rockets/missiles from the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System-Unitary (GMLRS-U), GMLRS Alternative Warhead, the Army Tactical Missile System (ATACMS) and future MFOM to include the Extended Range (ER) GMLRS, and the Precision Strike Missile (PrSM).

Mod 1 (M142 Mods). Modifications to address safety, operational-related, chassis, and Command, Control, Communications, Computer, and Intelligence (C4I) obsolescence issues within the HIMARS fleet. Additionally, procures system-specific training devices required to support the HIMARS Vehicle and Maintainer training courses.

Mod 2 (CFCS). Modifications to field the Common Fire Control System (CFCS) to the HIMARS Launcher fleet. CFCS replaces the obsolete Universal Fire Control System that cannot be procured as designed. CFCS will provide the capability to launch all current and future MFOM and provide an updated and more intuitive user interface that will be common to both HIMARS and MLRS launchers. CFCS will reduce training costs and operations and maintenance costs. The fielding of CFCS on the HIMARS Launcher fleet mitigates obsolescence issues. Mod Kit 2 (CFCS) funding begins in FY2024.

The Army currently has 363 HIMARS launchers on hand and is increasing the Army Acquisition Objective to 547 to support the Army Structure Memorandum 2022-2026 decision.

<b>Secondary Distribution</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	12.483	1.789	2.091	-	2.091
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	-	4.292	5.101	-	5.101
<b>Total:</b>	<b>Quantity</b>	-	-	-	-	-
<b>Secondary Distribution</b>	<b>Total Obligation Authority</b>	<b>12.483</b>	<b>6.081</b>	<b>7.192</b>	<b>-</b>	<b>7.192</b>

**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification: PB 2022 Army** **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 6580C67501 / HIMARS Modifications	<b>Modification Number / Title:</b> C67501 / HIMARS Modifications
--	---	--

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

<b>Models of Systems Affected:</b> M142 High Mobility Artillery Rocket System	<b>Modification Type:</b> Operational, Reliability, Safety, Crew Survivability	<b>Related RDT&amp;E PEs:</b>
---	--	-------------------------------

Financial Plan	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)

**Procurement**

<b>Modification Item 1 of 1:</b> M142 Mods						
A Kits						
Recurring						
Program Management	- / 2.618	- / 1.353	- / 1.262	- / 1.493	- / -	- / 1.493
Obsolescence Mitigation	- / 232.205	- / 5.930	- / 2.552	- / 3.440	- / -	- / 3.440
Industrial Facilities	- / 1.414	- / 0.729	- / 0.356	- / -	- / -	- / -
Peculiar Support Equipment	- / 0.354	- / 0.183	- / 0.089	- / 0.105	- / -	- / 0.105
Training	- / 1.336	- / 0.689	- / 0.336	- / 0.397	- / -	- / 0.397
Test & Evaluation (Acceptance Testing)	- / 2.424	- / 1.249	- / 0.609	- / 0.720	- / -	- / 0.720
Systems Engineering	- / 4.899	- / 2.350	- / 0.877	- / 1.037	- / -	- / 1.037
<b>Subtotal: Recurring</b>	<b>- / 245.250</b>	<b>- / 12.483</b>	<b>- / 6.081</b>	<b>- / 7.192</b>	<b>- / -</b>	<b>- / 7.192</b>
<b>Subtotal: M142 Mods</b>	<b>- / 245.250</b>	<b>- / 12.483</b>	<b>- / 6.081</b>	<b>- / 7.192</b>	<b>- / -</b>	<b>- / 7.192</b>
<b>Subtotal: Procurement, All Modification Items</b>	<b>- / 245.250</b>	<b>- / 12.483</b>	<b>- / 6.081</b>	<b>- / 7.192</b>	<b>- / -</b>	<b>- / 7.192</b>

**Installation**

<b>Subtotal: Installation</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>	<b>- / -</b>
-------------------------------	--------------	--------------	--------------	--------------	--------------	--------------

**Total**

<b>Total Cost (Procurement + Support + Installation)</b>	<b>245.250</b>	<b>12.483</b>	<b>6.081</b>	<b>7.192</b>	<b>-</b>	<b>7.192</b>
--	----------------	---------------	--------------	--------------	----------	--------------

**UNCLASSIFIED**

<b>Exhibit P-3a, Individual Modification:</b> PB 2022 Army		<b>Date:</b> May 2021	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 03 / 10	<b>P-1 Line Item Number / Title:</b> 6580C67501 / HIMARS Modifications		<b>Modification Number / Title:</b> C67501 / HIMARS Modifications
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>	
<b>Modification Item 1 of 1:</b> M142 Mods			
<b>Manufacturer Information</b>			
Manufacturer Name: Strategic and Operational Rocket & Missiles Project Office		Manufacturer Location: Redstone Arsenal, AL	
Administrative Leadtime (in Months):		Production Leadtime (in Months):	
<b>Dates</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Contract Dates			
Delivery Dates			
<b>Installation Information</b>			
<b>Method of Implementation (Organic):</b> Field Artillery Launchers Product Office		<b>Installation Quantity:</b> 0	

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A: Missile Procurement, Army / BA 04: Spares and Repair Parts / BSA 10: Spares And Repair Parts	<b>P-1 Line Item Number / Title:</b> 1242CA0250 / Spares And Repair Parts
---	--

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	357.519	26.444	5.090	5.019	-	5.019	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	357.519	26.444	5.090	5.019	-	5.019	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>357.519</b>	<b>26.444</b>	<b>5.090</b>	<b>5.019</b>	<b>-</b>	<b>5.019</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

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

**Description:**

FY 2022 funds provide for the procurement of spares to support initial fielding of new or modified end items.  
The FY 2022 funding request was reduced by \$1.07 million to account for the availability of prior year execution balances.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.444	5.090	5.019	-	5.019	-	-	-
<b>Total:</b> Secondary Distribution	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	<b>26.444</b>	<b>5.090</b>	<b>5.019</b>	<b>-</b>	<b>5.019</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 04: Spares and Repair Parts / BSA 10: Spares And Repair Parts **P-1 Line Item Number / Title:** 1242CA0250 / Spares And Repair Parts

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

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	CA0267 / PATRIOT MODIFICATION INITIAL SPARES				- / 357.519	- / 26.444	- / 5.090	- / 5.019	- / -	- / 5.019
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 357.519</b>	<b>- / 26.444</b>	<b>- / 5.090</b>	<b>- / 5.019</b>	<b>- / -</b>	<b>- / 5.019</b>

\*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:**  
 FY2022 procurement dollars in the amount of \$5.019 million support continuing acquisition of Patriot Modification Initial Spares. The funds in this account procure depot level repairable (DLR) secondary items from Supply Management, Army activities of the Army Working Capital Fund and commercial life cycle support vendors. To provide initial issue spares support, funds are required in the same year that end items are fielded.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 04 / 10	<b>P-1 Line Item Number / Title:</b> 1242CA0250 / Spares And Repair Parts	<b>Item Number / Title [DODIC]:</b> CA0267 / PATRIOT MODIFICATION INITIAL SPARES

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	357.519	26.444	5.090	5.019	-	5.019
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	357.519	26.444	5.090	5.019	-	5.019
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
<b>Total Obligation Authority <i>(\$ in Millions)</i></b>	<b>357.519</b>	<b>26.444</b>	<b>5.090</b>	<b>5.019</b>	<b>-</b>	<b>5.019</b>

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

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

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Non Recurring Cost																		
CA0267 / PATRIOT MODIFICATION INITIAL SPARES	-	-	357.519	-	-	26.444	-	-	5.090	-	-	5.019	-	-	-	-	-	5.019
<i>Subtotal: Non Recurring Cost</i>	-	-	357.519	-	-	26.444	-	-	5.090	-	-	5.019	-	-	-	-	-	5.019
<i>Subtotal: Hardware Cost</i>	-	-	<b>357.519</b>	-	-	<b>26.444</b>	-	-	<b>5.090</b>	-	-	<b>5.019</b>	-	-	-	-	-	<b>5.019</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>357.519</b>	-	-	<b>26.444</b>	-	-	<b>5.090</b>	-	-	<b>5.019</b>	-	-	-	-	-	<b>5.019</b>

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	26.444	5.090	5.019	-	5.019
<b>Total: Secondary Distribution</b>	Quantity	-	-	-	-	-
	Total Obligation Authority	<b>26.444</b>	<b>5.090</b>	<b>5.019</b>	<b>-</b>	<b>5.019</b>



**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 05: Support Equipment and Facilities / BSA 10: Support Equipment & Facilities **P-1 Line Item Number / Title:** 1242C93000 / Air Defense Targets

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

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	788	500	538	666	-	666	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	447.499	10.593	8.978	10.618	-	10.618	-	-	-	-	-	-
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	447.499	10.593	8.978	10.618	-	10.618	-	-	-	-	-	-
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>447.499</b>	<b>10.593</b>	<b>8.978</b>	<b>10.618</b>	<b>-</b>	<b>10.618</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Initial Spares ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	567.892	21.186	16.688	15.943	-	15.943	-	-	-	-	-	-

**Description:**

Air Defense Artillery (ADA) Targets program procures target hardware and associated training services to include scoring, payload, and ground support equipment to enable Air Defense Artillery Soldiers and units to conduct required training. This training consists of Department of the Army Pamphlet (DA PAM) 350-38 (Standards in Training Commission) required gunnery tables and aerial target tracking, training, and scoring. Target systems are also available to support collective training exercises and Force Development Testing and Experimentation (FDT&E) investigations of engagement techniques for small unmanned aircraft systems.

Secondary Distribution	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026
Army									
Quantity	500	538	666	-	666	-	-	-	-
Total Obligation Authority	10.593	8.978	10.618	-	10.618	-	-	-	-
<b>Total:</b>									
<b>Secondary Distribution</b>									
Quantity	<b>500</b>	<b>538</b>	<b>666</b>	<b>-</b>	<b>666</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Total Obligation Authority	<b>10.593</b>	<b>8.978</b>	<b>10.618</b>	<b>-</b>	<b>10.618</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2022 Army **Date:** May 2021

**Appropriation / Budget Activity / Budget Sub Activity:** 2032A: Missile Procurement, Army / BA 05: Support Equipment and Facilities / BSA 10: Support Equipment & Facilities **P-1 Line Item Number / Title:** 1242C93000 / Air Defense Targets

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

**Line Item MDAP/MAIS Code:** N/A

Exhibits Schedule					Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	C93000 / Air Defense Targets	P-5a			788 / 447.499	500 / 10.593	538 / 8.978	666 / 10.618	- / -	666 / 10.618
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>788 / 447.499</b>	<b>500 / 10.593</b>	<b>538 / 8.978</b>	<b>666 / 10.618</b>	<b>- / -</b>	<b>666 / 10.618</b>

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

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

**Justification:**  
 FY 2022 Base procurement dollars in the amount of \$10.618 million supports Air Defense Artillery Targets and scoring, payload, and ground support equipment for training required in DA PAM 350-38, Standards in Weapons Training. These items support gunnery tables, aerial target tracking (Captive Flight Trainer (CFT) and Tracking Head Trainer (THT) 5.56) training, Missile Live Fire training when missiles are allocated in accordance with the Missile Distribution Plan, and U.S. Army Avenger and IM-SHORAD systems worldwide. Training requirements are generated by Department of the Army Major Field Commands, Training Centers, Division Level Commands, and real world mission rehearsals. These field requirements have been reviewed and validated against ongoing force restructuring and are consistent with the approved training doctrine. These targets are necessary to meet Army Regulation 220-1 (Army Unit Status Reporting and Force Registration) training requirements, training strategies and gunnery standards, and Soldier qualification in support of unit readiness. In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>		<b>Date:</b> May 2021
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 05 / 10	<b>P-1 Line Item Number / Title:</b> 1242C93000 / Air Defense Targets	<b>Item Number / Title [DODIC]:</b> C93000 / Air Defense Targets

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

Resource Summary	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Procurement Quantity (Units in Each)	788	500	538	666	-	666
Gross/Weapon System Cost (\$ in Millions)	447.499	10.593	8.978	10.618	-	10.618
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	447.499	10.593	8.978	10.618	-	10.618
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>447.499</b>	<b>10.593</b>	<b>8.978</b>	<b>10.618</b>	<b>-</b>	<b>10.618</b>

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

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	567.892	21.186	16.688	15.943	-	15.943

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Remotely Piloted Vehicle Target (RPVT) <sup>(†)</sup>	369.992	1,183	437.701	6.962	394	2.743	7.185	538	3.866	6.683	666	4.451	-	-	-	6.683	666	4.451
Infrared Kit Payload <sup>(†)</sup>	0.292	1,182	0.345	0.332	394	0.131	0.341	538	0.183	0.335	666	0.223	-	-	-	0.335	666	0.223
Launcher <sup>(†)</sup>	28.273	11	0.311	31.000	5	0.155	32.000	1	0.032	33.200	5	0.166	-	-	-	33.200	5	0.166
Manual Navigation GCS <sup>(†)</sup>	11.143	28	0.312	12.214	14	0.171	12.600	5	0.063	12.000	5	0.060	-	-	-	12.000	5	0.060
BVR Navigation GCS <sup>(†)</sup>	28.875	8	0.231	31.750	4	0.127	32.700	10	0.327	33.500	10	0.335	-	-	-	33.500	10	0.335
BVR Payload <sup>(†)</sup>	12.544	68	0.853	14.100	20	0.282	14.519	27	0.392	15.800	65	1.027	-	-	-	15.800	65	1.027
Acoustic Scoring Payload <sup>(†)</sup>	13.513	78	1.054	13.786	28	0.386	14.200	50	0.710	15.000	55	0.825	-	-	-	15.000	55	0.825
Acoustic Scoring GCS <sup>(†)</sup>	45.529	17	0.774	49.222	9	0.443	51.000	2	0.102	50.000	2	0.100	-	-	-	50.000	2	0.100
Radar Scoring Payload <sup>(†)</sup>	17.825	40	0.713	19.300	20	0.386	20.000	40	0.800	22.400	55	1.232	-	-	-	22.400	55	1.232
Radar Scoring GCS <sup>(†)</sup>	17.000	1	0.017	18.000	1	0.018	18.500	2	0.037	18.000	2	0.036	-	-	-	18.000	2	0.036
RPVT Lighting Kit Payload <sup>(†)</sup>	0.299	87	0.026	0.323	31	0.010	0.333	45	0.015	0.260	100	0.026	-	-	-	0.260	100	0.026
Program Management Support	1,607.333	3	4.822	1,815.000	1	1.815	2,132.000	1	2.132	1,792.000	1	1.792	-	-	-	1,792.000	1	1.792

**UNCLASSIFIED**

<b>Exhibit P-5, Cost Analysis: PB 2022 Army</b>												<b>Date:</b> May 2021					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 05 / 10						<b>P-1 Line Item Number / Title:</b> 1242C93000 / Air Defense Targets						<b>Item Number / Title [DODIC]:</b> C93000 / Air Defense Targets					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :												<b>MDAP/MAIS Code:</b>					

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

Cost Elements	Prior Years			FY 2020			FY 2021			FY 2022 Base			FY 2022 OCO			FY 2022 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Smoke Generator Payload <sup>(†)</sup>	0.339	53	0.018	-	-	-	0.500	30	0.015	0.500	30	0.015	-	-	-	0.500	30	0.015
Over the Horizon BVR Payload <sup>(†)</sup>	23.000	14	0.322	-	-	-	20.000	15	0.300	22.000	15	0.330	-	-	-	22.000	15	0.330
<i>Subtotal: Recurring Cost</i>	-	-	447.499	-	-	6.667	-	-	8.974	-	-	10.618	-	-	-	-	-	10.618
<i>Subtotal: Flyaway Cost</i>	-	-	447.499	-	-	6.667	-	-	8.974	-	-	10.618	-	-	-	-	-	10.618
<b>Software Cost</b>																		
<b>Recurring Cost</b>																		
Technical Refresh - Windows OS Update	-	-	-	3,926.000	1	3.926	4.000	1	0.004	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	3.926	-	-	0.004	-	-	-	-	-	-	-	-	-
<i>Subtotal: Software Cost</i>	-	-	-	-	-	3.926	-	-	0.004	-	-	-	-	-	-	-	-	-
<b>Gross/Weapon System Cost</b>	<b>567.892</b>	<b>788</b>	<b>447.499</b>	<b>21.186</b>	<b>500</b>	<b>10.593</b>	<b>16.688</b>	<b>538</b>	<b>8.978</b>	<b>15.943</b>	<b>666</b>	<b>10.618</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15.943</b>	<b>666</b>	<b>10.618</b>

**Remarks:**

FY 2020 increase in unit cost for Windows Operating System upgrade, which is necessary to maintain the system's authority to operate.

Secondary Distribution		FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Army	Quantity		500	538	666	666
	Total Obligation Authority		10.593	8.978	10.618	10.618
<b>Total: Secondary Distribution</b>	<b>Quantity</b>		<b>500</b>	<b>538</b>	<b>666</b>	<b>666</b>
	<b>Total Obligation Authority</b>		<b>10.593</b>	<b>8.978</b>	<b>10.618</b>	<b>10.618</b>

(†) indicates the presence of a P-5a

**UNCLASSIFIED**

Exhibit P-5a, Procurement History and Planning: PB 2022 Army								Date: May 2021				
Appropriation / Budget Activity / Budget Sub Activity: 2032A / 05 / 10			P-1 Line Item Number / Title: 1242C93000 / Air Defense Targets					Item Number / Title [DODIC]: C93000 / Air Defense Targets				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
Remotely Piloted Vehicle Target (RPVT)		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	394	6.962	Y		
Remotely Piloted Vehicle Target (RPVT)		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO-STRI	Dec 2020	Apr 2021	538	7.185	Y		
Remotely Piloted Vehicle Target (RPVT)		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Jan 2022	666	6.683	Y		
Infrared Kit Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	394	0.332	Y		
Infrared Kit Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO-STRI	Dec 2020	Apr 2021	538	0.341	Y		
Infrared Kit Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Jan 2022	666	0.335	Y		
Launcher		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	5	31.000	Y		
Launcher		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO-STRI	Dec 2020	Jun 2021	1	32.000	Y		
Launcher		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Jan 2022	5	33.200	Y		
Manual Navigation GCS		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	14	12.214	Y		
Manual Navigation GCS		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	Jun 2021	5	12.600	Y		
Manual Navigation GCS		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Jan 2022	5	12.000	Y		
BVR Navigation GCS		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	4	31.750	Y		
BVR Navigation GCS		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	Jul 2021	10	32.700	Y		
BVR Navigation GCS		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Feb 2022	10	33.500	Y		
BVR Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	20	14.100	Y		
BVR Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	Jul 2021	27	14.519	Y		
BVR Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	May 2022	65	15.800	Y		
Acoustic Scoring Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	28	13.786	Y		
Acoustic Scoring Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PE STRI	Dec 2020	Jul 2021	50	14.200	Y		
Acoustic Scoring Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	May 2022	55	15.000	Y		
Acoustic Scoring GCS		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	9	49.222	Y		
Acoustic Scoring GCS		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	Jul 2021	2	51.000	Y		
Acoustic Scoring GCS		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	May 2022	2	50.000	Y		
Radar Scoring Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Dec 2021	20	19.300	Y		
Radar Scoring Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2021	Dec 2021	40	20.000	Y		
Radar Scoring Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Nov 2022	55	22.400	Y		
Radar Scoring GCS		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	1	18.000	Y		
Radar Scoring GCS		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	Dec 2021	2	18.500	Y		
Radar Scoring GCS		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Nov 2022	2	18.000	Y		
RPVT Lighting Kit Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	31	0.323	Y		
RPVT Lighting Kit Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	May 2021	45	0.333	Y		

**UNCLASSIFIED**

**Exhibit P-5a, Procurement History and Planning: PB 2022 Army** **Date:** May 2021

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 2032A / 05 / 10	<b>P-1 Line Item Number / Title:</b> 1242C93000 / Air Defense Targets	<b>Item Number / Title [DODIC]:</b> C93000 / Air Defense Targets
--	--	---

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
RPVT Lighting Kit Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Jan 2022	100	0.260	Y		
Smoke Generator Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	0	0.000	Y		
Smoke Generator Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	May 2021	30	0.500	Y		
Smoke Generator Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Jan 2022	30	0.500	Y		
Over the Horizon BVR Payload		2020	Griffon Aerospace Inc. / Madison, AL	C / FFP	AMCOM	Mar 2020	Jun 2020	0	0.000	Y		
Over the Horizon BVR Payload		2021	Griffon Aerospace Inc. / Madison, AL	C / FFP	PEO STRI	Dec 2020	Jul 2021	15	20.000	Y		
Over the Horizon BVR Payload		2022	Griffon Aerospace Inc. / Madison, AL	C / FFP	ACC-ORL	Nov 2021	Feb 2022	15	22.000	Y		