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## **CLEARED**For Open Publication

Sep 27, 2024

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

# Modernized Selected Acquisition Report (MSAR) Joint Air-to-Ground Missile (JAGM)

FY 2025 President's Budget

Effective: December 31, 2023

Defense Acquisition Visibility Environment

## **Table of Contents**

Common DoD Abbreviations	3
Program Description	5
Responsible Office	6
Executive Summary	7
Schedule	9
Performance	10
Acquisition Budget Estimate	13
Unit Costs	15
Life-Cycle Costs	16
Technologies and Systems Engineering	18
Performing Activities and Contracts	19
Production	22
Deliveries and Expenditures	23
International Program Aspects	24

#### (U) Common DoD Abbreviations

\$B Billions of Dollars \$K Thousands of Dollars \$M Millions of Dollars ACAT Acquisition Category

Acq O&M Acquisition-Related Operations and Maintenance

ADM Acquisition Decision Memorandum APA Additional Performance Attribute APB Acquisition Program Baseline

APPN Appropriation

APUC Average Procurement Unit Cost
BA Budget Authority or Budget Activity

Blk Block BY Base Year

CAE Component Acquisition Executive

CAPE Cost Assessment and Program Evaluation
CARD Cost Analysis Requirements Description

CCE Component Cost Estimate
CCP Component Cost Position

CDD Capability Development Document

CLIN Contract Line Item Number
CPD Capability Production Document
CY Calendar Year or Constant Year
DAB Defense Acquisition Board
DAE Defense Acquisition Executive

DAES Defense Acquisition Executive Summary
DAVE Defense Acquisition Visibility Environment

DoD Department of Defense
DSN Defense Switched Network

EMD Engineering and Manufacturing Development

EVM Earned Value Management

FD Full Deployment

FDD Full-Deployment Decision
FMS Foreign Military Sales
FOC Full Operational Capability
FRP Full-Rate Production

FY Fiscal Year

FYDP Future Years Defense Program
ICD Initial Capabilities Document
ICE Independent Cost Estimate

Inc Increment

IOC Initial Operational Capability
IT Information Technology

JROC Joint Requirements Oversight Council

KPP Key Performance Parameter

KSA Key System Attribute

LRIP Low-Rate Initial Production MDA Milestone Decision Authority

MDAP Major Defense Acquisition Program

MILCON Military Construction
N/A Not Applicable
O Objective

O&M Operations and Maintenance

O&S Operating and Support

ORD Operational Requirements Document
OSD Office of the Secretary of Defense
PAUC Program Acquisition Unit Cost

PB President's Budget
PE Program Element

PEO Program Executive Officer

PM Program Manager

POE Program Office Estimate

R&MF Revolving and Management Funds

RDT&E Research, Development, Test, and Evaluation

SAR Selected Acquisition Report

SCP Service Cost Position

T Threshold

TBD To Be Determined

TY Then Year U.S. United States

U.S.C United States Code UCR Unit Cost Reporting

USD(A&S) Under Secretary of Defense (Acquisition and Sustainment)

#### (U) Program Description

Full Name

Joint Air-to-Ground Missile

**PNO** 

355

**Lead Component** 

Department of the Army

Joint Program

Yes

Adaptive Acquisition Pathway

Major Capability Acquisition

**Acquisition Category** 

IC

**Acquisition Status** 

**Active Acquisition** 

Short Name

JAGM

Milestone Decision Authority

Component Acquisition Executive

**Program Executive Office** 

PEO Missiles & Space (M&S)

**Supporting Components** 

Department of the Navy

International Partners

**United Kingdom** 

**Acquisition Type** 

Major Defense Acquisition Program

**Acquired Systems** 

**JAGM** 

#### Mission

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.

#### (U) Responsible Office

#### **Program Executive Officer**

PEO Missiles & Space (M&S) BG Francisco J. Lozano francisco.j.lozano8.mil@army.mil (primary) (256) 876-0714 (commercial)

#### **Program Executive Officer**

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#### **Program Manager**

Tactical Aviation and Ground Munitions Mr Craig C. Riedel craig.c.riedel.civ@army.mil (primary) (256) 876-1141 (commercial)

#### (U) Executive Summary

#### **Program Highlights Since Last Report**

The JAGM requirements are stable and funding is adequate to meet cost and performance objectives established in the current approved Acquisition Program Baseline (APB). FY22-25 Full Rate Production (FRP) contract awarded March 2023. FY23 Production contract awarded July 2023. The contractor is currently delivering against Low Rate Initial Production (LRIP) 4.

The JAGM missile currently has no significant software-related issues.

#### (U) History of Significant Developments Since Program Inception

Date	Description
July 2023	FY23 FY22-25 AGMS Production contract awarded 31 July 2023.
March 2023	Production Acquisition Program Baseline approved March 17, 2023.
March 2023	On March 30, 2023, the AGMS product office awarded the FY22-25 contract.
September 2022	Full Rate Production (FRP) milestone ADM signed September 2022.
April 2021	LRIP 4 and 5 were awarded on March 11, 2021 and April 30, 2021, respectively.
August 2020	Due to a schedule delay on the Navy AH-1Z platform integration and testing, the milestones for Navy Initial Operational Capability (IOC) and FRP were revised. On August 17, 2020, the Army Acquisition Executive (AAE) authorized an additional 3,000 LRIP missiles until the Navy completes Initial Operational Test & Evaluation (IOT&E) requirements currently scheduled for September 2021. There are no performance issues with the missile itself; however, without all IOT&E objectives completed, the program does not meet statutory requirements for FRP. The AAE also approved the updated APB for the Navy IOC and FRP milestones. The APB re-baselined the Navy IOC objective date to September 2021, and threshold date to March 2022, and the FRP objective date to March 2022, and threshold date to September 2022.
June 2020	During September through October 2019, the AGMS PdO administered an MRL 9 assessment to support the FRP DR to assess the industrial base and prime contractor capabilities. The assessment resulted in 60 of 66 sub-thread criteria rated at MRL 9. The JAGM established and worked a maturation plan which resulted in the remaining 6 sub-threads achieving an MRL 9 by June 2020
December 2019	The JAGM Product Office completed seven missile launches in stressing, realistic, tactical conditions from Apache AH-64E version 6 at Yuma Proving Ground, AZ on December 3-12, 2019. The collected data supports system evaluation, Safety Confirmation, Airworthiness Release, and validation and accreditation of the system simulation. All shots were successful and will be assessed for lethality. These results will support the Operational Evaluation Report and the Beyond LRIP Report from office of the Director, Operational Test and Evaluation(DOT&E).
December 2019	On December 13, 2019, the JAGM Product Office awarded a Rate Ramp to increase the facilitization and production capacity from 600 missiles per year to 1,200 missiles per year.
November 2019	On November 27, 2019, the JAGM Product Office awarded LRIP 3 for a quantity of 825 missiles (750 Army and 75 Navy).
July 2019	Live Fire Test and Evaluation (LFT&E) lethality and the Live Fire strategy commitment were successfully completed on July 7, 2019. The Army Test & Evaluation Command (ATEC)

Date	Description
	and the office of the Director, Operational Test and Evaluation (DOT&E) will evaluate all shots for lethality. Test results will support the Operational Evaluation Report (OER) from ATEC and the Beyond LRIP Report from DOT&E.
May 2019	JAGM and Apache PMs conducted JAGM IOT&E & Apache AH-64E Version 6 (V6) Follow- on Operational Test & Evaluation II (FOT&E II) on April 24 through May 7, 2019. Eight total JAGM flight tests, two maritime and six land, were successfully completed. JAGM has demonstrated full capability on an AH-64E and successfully completed IOT&E.
March 2019	JAGM achieved IOC in March 2019.
January 2019	On January 24-29, 2019, the JAGM Product Office, with support from Yuma Proving Ground, Redstone Test Center, U.S. Army Combat Capabilities Development Command Aviation & Missile Center, the Apache Project Office, Boeing, and Lockheed Martin, conducted six JAGM launches from the fully integrated Apache. These tests utilized the AH-64Ev6 with the JAGM PilotVehicle Interface that provides optimized cockpit selections. On January 26, 2018, JAGM successfully completed Cooperative Vulnerability and Penetration Assessment (CVPA) and Cybersecurity Adversarial Assessment (AA).
December 2018	On December 17, 2018, the JAGM Product Office awarded LRIP 2B for a quantity of 450 missiles (397 Army, six Navy, and 47 Other Customers). On December 19, 2018, JAGM received its first LRIP production missiles.
September 2018	On September 11, 2018, LRIP 2 awarded a quantity of 600 missiles (502 Army and 98 Navy).

## (U) Schedule

#### (U) Schedule Events

Events				Current Estimate 12/31/2023	Actual
Milestone B	MS B	Jul 2015	Jul 2015	-	15 Jul 2015
CDR	CDR	Jan 2016	Jan 2016	-	28 Jan 2016
Milestone C	MS C	Jun 2018	Jun 2018	-	15 Jun 2018
Army IOC	IOC	Mar 2019	Mar 2019	-	27 Mar 2019
Navy IOC	Other	Mar 2022	Mar 2022	-	1 Mar 2022
FRP Decision	FRP Decision	Sept 2022	Sept 2022	-	21 Sept 2022

**Notes** 

None

**Schedule Baseline Deviation Explanation** 

None

(U) Current Significant Schedule Risks and Risks Identified at Milestones/Decisions

None

## (U) Performance

Additional information for this section is provided in the classified annex to this submission.

(U) Performance Attributes

(U) Performance Attributes System Survivability					
Cyber Survivability			KPP		
Current Estimate 12/31/2023		No higher than Moderate			
Demonstrated Performance 1/26/2018		Adversarial Assessment conducted	January 26, 2018		
Production APB (Current)	Objective	No higher than Low			
3/17/2023	Threshold	No higher than Moderate			
E3 and CBRN			KPP		
Current Estimate 12/31/2023		Host A/C compatibility, MIL-STD-464 MIL-STD-461, and MIL-STD 2169 (HE			
Demonstrated Performance 3/23/2018		E3 completed March 23, 2018; CBRN March 2017	l completed		
Production APB (Current)	Objective	Host A/C compatibility, MIL-STD-464 MIL-STD-461, and MIL-STD 2169 (HE			
3/17/2023	Threshold	(T=0) Host A/C compatibility, MIL-STD-464 (HERO, EMC), MIL-STD-461, and MIL-STD 2169 (HEMP)			
Training					
Support development of all training	packages and trair	ning devices	KPP		
Current Estimate 12/31/2023		Yes			
Demonstrated Performance 3/18/2018		NET conducted Feb 11, 2019 - March	า 20, 2019		
Production APB (Current)	Objective	Yes			
3/17/2023	Threshold	(T=0) Yes			
Range					
Minimum Engagement Range Rotary	y Wing (RW)		KPP		
Current Estimate 12/31/2023		500 m			
Demonstrated Performance 2/1/2018		Demonstrated February 1, 2018			
Production APB (Current)	Objective	500 m			
3/17/2023	Threshold	(T=0) 500 m			
Maximum Range (RW)			KPP		
Current Estimate 12/31/2023		8 km			
Demonstrated Performance 3/28/2018		Demonstrated March 28, 2018	Demonstrated March 28, 2018		

Production APB (Current)	Objective	>=16 km	
3/17/2023	Threshold	8 km	
Maximum Range (FW)			KPP
Current Estimate 12/31/2023		None	
Demonstrated Performance		TBD	
Production APB (Current)	Objective	28 km (15 nm)	
3/17/2023	Threshold	None	
Minimum Engagement Range (FW)			KPP
Current Estimate 12/31/2023		None	
Demonstrated Performance -		TBD	
Production APB (Current)	Objective	2 km (1 nm)	
3/17/2023	Threshold	None	
Carrier/Shipboard Operability			
Compatible with carrier/shipboard ope	rations without deg	rading other Naval operations	KPP
Current Estimate 12/31/2023		Yes	,
Demonstrated Performance 1/10/2018		Shipboard Weapons Integration Team Rep completed January 10, 2018	ort
Production APB (Current)	Objective	Yes	
3/17/2023	Threshold	(T=O) Yes	
Interoperability			
Interoperable with joint rotary and fixed	d wing (manned and	l unmanned) aircraft	KPP
Current Estimate 12/31/2023		Meets threshold. AH-64E, AH-1Z	,
Demonstrated Performance 6/8/2022		Federated SW demo: MQ-1C - 25 May 201 07 Dec 2016 AH-64E - 24 Jan 2017 AH-1Z 2018 Integrated SW demo: AH-64E V6 23	- 13 Feb
Production APB (Current)	Objective	MQ-1C Gray Eagle, MH-60M DAP, AH-6M, MH-60S, MH-60R, AH-64D, F/A-18 E/F, F-35, F/A-18 A-D, KC-130J Harvest Hawk, AC-130J, AV-8B, V-22, Futu UAS, A-10, F-16, MQ-9	
3/17/2023	Threshold	AH-64E, AH-1Z	
Laser Designation			KPP
Current Estimate 12/31/2023		Meets Objective. Compatible with standa aviation platform laser designation system PRF and PIM codes.	
Demonstrated Performance -		Completed compatibility testing March 13	, 2018

Production APB (Current)	Objective	Compatible with standard Joint aviation platform laser designation systems, including PRF and PIM codes.
3/17/2023	Threshold	(T=0) Compatible with standard Joint aviation platform laser designation systems, including PRF and PIM codes.

#### (U) Requirement Source:

Sponsor(s): United States Army; United States Navy

1. Capability Production Document, *JAGM CPD*Validated By: Joint Requirements Oversight Council, May 10, 2018

#### **Notes**

In the JAGM CPD, section 5.2.3 (KPP #5 - Range), it is stated, "There are no fixed wing requirements for JAGM Increment 1 since fixed wing platforms are objective", therefore there are no estimates at this time.

#### **Performance Deviation Explanation**

None

#### (U) Acquisition Budget Estimate

#### (U) Total Acquisition Estimates and Quantities

Category (\$M) Base Year: 2022	Production APB (Current) 3/17/2023 CY\$ obs Objective / Threshold		2025	
RDT&E	1,177.7	1,295.5	1,219.5	1,005.6
Procurement	6,785.9	7,464.5	6,297.4	8,339.7
MILCON	0.0	0.0	ı	-
O&M	63.6	70.0	62.7	84.6
R&MF	0.0	0.0	-	-
Total Acquisition	8,027.2	-	7,579.6	9,429.9
Program Acquisition Unit Cost	0.304	0.334	0.290	0.361
Average Procurement Unit Cost	0.258	0.284	0.242	0.320
Program End-Item Quantity				
Development	118		118	
Procurement	26319		26021	
O&M-Acquired	-		-	

#### **Budget Notes**

PB25 LOCK funding profile

CAPE Cost Risks: No new programmatic risks were identified in the latest POE.

#### **Quantity Notes**

None

#### **Cost Baseline Deviation Explanation**

None

#### (U) Risk and Sensitivity Analysis

#### Current Procurement Estimate Risks (12/31/2023)

The JAGM AUR unit cost is highly sensitive to procurement quantities. The current fiscally constrained environment is driving JAGM to lower production quantities in line with the minimum sustainment rate, which in turn is raising the missile unit cost. The JAGM Program is working with other services, including the Navy and Air Force, as well as FMS channels to gauge the potential for future year procurements that would raise production quantities and lower the missile unit cost.

Current Baseline Risks (3/17/2023)

The JAGM AUR unit cost is highly sensitive to procurement quantities. The current fiscally constrained environment is driving JAGM to lower production quantities in line with the minimum sustainment rate, which in turn is raising the missile unit cost. The JAGM Program is working with other services, including the Navy and Air Force, as well as FMS channels to gauge the potential for future year procurements that would raise production quantities and lower the missile unit cost.

#### Original Baseline Risks (9/29/2015)

The July 29, 2015 JAGM Milestone B ADM directs the Army and Navy to fund the program to the level of the OSD CAPE ICE. This estimate, like all previous OSD CAPE estimates, was built upon a product-oriented work breakdown structure, is based on historical cost information to the maximum extent possible, and most importantly based on conservative assumptions that are consistent with actual demonstrated contractor and Government performance for a series of acquisition programs in which the Department was successful.

#### (U) Unit Costs

#### (U) Current Estimate Compared with Current Baseline

Category (CY\$M) Base Year: 2022	Current Baseline 03/17/2023	Current Estimate PB 2025	% Change	
Program Acquisition Unit Cost				
Acquisition Cost	8,027.2	7,579.6		
Program Quantity	26,437	26,139		
PAUC	0.304	0.290	-4.50%	
Average Procurement Unit Cost				
Procurement Cost	6,785.9	6,297.4		
Procurement Quantity	26,319	26,021		
APUC	0.258	0.242	-6.14%	

#### (U) Current Estimate Compared with Original Baseline

Category (CY\$M) Base Year: 2015	Original Baseline 09/29/2015	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	5,669.9	6,334.3	
Program Quantity	26,437	26,139	
PAUC	0.214	0.242	13.08%
Average Procurement Unit Cost			
Procurement Cost	4,691.4	5,262.7	
Procurement Quantity	26,319	26,021	
APUC	0.178	0.202	13.48%

The Current Estimate's constant-year dollars have been converted from Base Year 2022 to Base Year 2015 using the National Defense Budget Estimates for FY 2022 (Green Book).

#### (U) Cost Growth Details

Actions taken or Proposed to Control Future Cost Growth

Status of Each Major Contract and Significant Factors Contributing to Cost and Schedule Variance; Projected Effects on Future Program Costs

See Contracts section.

**Notes** 

None

#### (U) Life-Cycle Costs

#### (U) Operating and Support and Disposal Cost Estimates Compared with Baseline

Category (\$M) Base Year: 2022	Production APB (Current) 3/17/2023 CY\$ obs Objective / Threshold		Current Estimate CY\$ obs / TY\$ obs	
Total O&S	762.5	838.7	762.5	1,388.0
Total Disposal	3.8	-	3.8	9.7

#### (U) Current Cost Estimate Sources

#### **Operating and Support Cost**

Type: Joint Cost Position

Approved by: D, CAPE, August 24, 2022

Note: Disposal cost is not included in the Operating and Support Cost of the current APB for this

program.

### Disposal/Demilitarization Cost

Type: Joint Cost Position

Approved by: D, CAPE, August 24, 2022

#### **Operating and Support Baseline Deviation Explanation**

None

#### **Cost Notes**

#### (U) Operating and Support Variance with Prior Estimate

(CY\$M) Base Year: 2022	Estimate	
Prior Estimate (8/17/2020)	409.6	
Current Estimate	762.5	
Category	Variance	Explanation
Unit-Level Manpower	0.0	
Unit Operations	0.0	
Maintenance	-12.1	
Sustaining Support	111.2	
Continuing System Improvements	253.8	
Other	0.0	

(CY\$M) Base Year: 2022	Estimate	
Not Categorized	0.0	

#### (U) Operating and Support Cost Element Structure Estimates by Acquired System

(CY\$M) Base Year: 2022							
System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
JAGM	-	ı	116.1	360.8	285.5	-	762.5
Program	-	-	116.1	360.8	285.5	-	762.5

## (U) Annual Operating and Support Costs per Unit Compared with Antecedent System No Data

## (U) Operating and Support Cost Estimate Assumptions No Data

**Additional O&S Estimate Assumptions** 

None

**Antecedent Estimate Assumptions** 

None

**0&S Annual Cost Calculation Memo** 

None

#### (U) Technologies and Systems Engineering

Additional information for this section is provided in the classified annex to this submission.

(U) Current Significant Technical Risks and Risks Identified at Milestones/Decisions

None

#### (U) Performing Activities and Contracts

#### (U) External Government Activities

None

#### (U) Contracts and Efforts

Contract Title	Contract Number / Effort	Contractor	Phase
AGMS Engineering Services	W31P4Q-23-C-0035	Lockheed Martin Corporation	Production
AGMS FY22-25 Full Rate Production Contract	W31P4Q-23-C-0005	Lockheed Martin Corporation	Production
HELLFIRE Buy 17 FY18- FY21 Production Contract	W31P4Q-18-C-0130	Lockheed Martin Corporation	Production

#### (U) Contract and Effort Identification, Price, Quantity and Performance

Contract Number: W31P4Q-23-C-0035 Order Number:

Contract Title: AGMS Engineering Services Strategy: FAR 15: Negotiated Contracts

CAGE: 04939 - Lockheed Martin Contracting Office: ACC Redstone

Corporation

City, State/Province: Orlando, FL

Effort Number: - Supported Phase: Production

Type: Multiple Types Award Date: August 1, 2023

Latest Modification Date: - Definitization Date: August 1, 2023

Latest Modification No.: - Work Start Date: August 1, 2023

**Technical Data Rights:** Government Purpose License

Rights

Notes: Contract Type(s): CPFF/FFP

Technical Data Rights are a mix and consist of the following: Government Purpose License Rights to Technical Data--Noncommercial Items & Software, Limited Rights to Technical Data--Non-Commercial Items Only, Restricted Rights to Technical Data--Noncommercial Software Only, Unlimited Rights to Technical Data--Noncommercial

Items & Software

EVM is waived, per DASM memo dated October 13 2021

	ice (TY\$M) / Ceiling		rice (TY\$M) / Ceiling	Estimate at Com Contract	•	Initial Quantity	Current Quantity	Delivered Quantity
0.6	373.1	5.3	373.1	-	-	-	-	-

#### (U) Contract and Effort Identification, Price, Quantity and Performance

Contract Number: W31P4Q-23-C-0005 Order Number:

Contract Title: AGMS FY22-25 Full Rate Strategy: FAR 15: Negotiated Contracts

**Production Contract** 

CAGE: 04939 - Lockheed Martin

Corporation

Orlando, FL

**Contracting Office:** ACC Redstone

City, State/Province:

**Effort Number:** Supported Phase: Production

Type: Multiple Types Award Date: March 30, 2023 **Latest Modification Date: Definitization Date:** March 30, 2023 Latest Modification No.: Work Start Date: March 30, 2023

**Technical Data Rights: Government Purpose License** 

Rights

Contract Type(s): FFP/FPIF/CPFF. Contract is a combined JAGM and HELLFIRE missile Notes:

contract. Quantity is JAGM only, but funding is combined JAGM HELLFIRE. Contract type is broken out as follows: FPIF Missile CLINs, FFP Container CLINS, Obsolescence/

Last Time Buy (LTB) CLINs (if applicable) CPFF Tired Tooling CLINS

JAGM EVM Waiver was approved on 19 Aug 2019.

Technical Data Rights are a mix and consist of the following: Government purpose License Rights to Technical Data--Noncommercial Items & Software, Limited Rights to Technical Data--Noncommercial Items Only, Restricted Rights to Technical Data--Noncommercial Software Only, Unlimited Rights to Technical Data--Noncommercial

Items & Software

	ce (TY\$M) / Ceiling	Current Pri Target /	ce (TY\$M) Ceiling	Estimate at Com Contract		Initial Quantity	Current Quantity	Delivered Quantity
1,086.6	1,127.9	1,528.9	1,646.5	-	-	623	1,599	-

(U) Contract and Effort Identification, Price, Quantity and Performa
--

Contract Number: W31P4Q-18-C-0130 Order Number:

HELLFIRE Buy 17 FY18-FY21 **Contract Title:** Strategy:

**Production Contract** 

CAGE: 04939 - Lockheed Martin **Contracting Office:** ACC Redstone

Corporation

City, State/Province: Orlando, FL

**Effort Number:** Supported Phase: Production

Type: Multiple Types **Award Date:** September 29, 2018 **Latest Modification Date:** October 17, 2023 **Definitization Date:** September 29, 2018 P00143 Latest Modification No.: Work Start Date: October 1, 2018

**Technical Data Rights: Government Purpose License** 

Rights

Notes: Contract Type(s):FFP/FPIF/CPFF. Contract is a combined JAGM and HELLFIRE missile

contract. Quantity is JAGM only, but funding is combined JAGM HELLFIRE. Contract type is broken out as follows: FPIF Missile CLINs FFP Container CLINs, Obsolescence/

Last Time Buy (LTB) CLINs (if applicable) CPFF Tired Tooling CLINs

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Items & Software

FAR 15: Negotiated Contracts

	ce (TY\$M) Ceiling	Current Pri Target /	` ' /	Estimate at Com Contract	•	Initial Quantity	Current Quantity	Delivered Quantity
537.1	665.2	3,165.3	4,157.3	=	-	1,896	1,896	565

#### (U) Production

#### (U) Low-Rate Initial Production

	Original LRIP Determination	Current LRIP Determination
Total LRIP Quantity	2,631	5,631
Date	7/29/2015	8/17/2020
Reference	JAGM Milestone B ADM	JAGM Additional LRIP Authorization ADM
LRIP Period	FY 2017 - 2018	FY 2017 - 2021
Total Procurement Quantity	26,319	26,319
LRIP Percentage of Total	10.0%	21.4%

#### Rationale if LRIP Quantity Exceeds 10% of Total Procurement Quantity (Current Determination)

The Current Total LRIP Quantity is more than 10% of the total production quantity as a result of the August 17, 2020 ADM, which authorized the program to procure up to 3,000 additional LRIP missiles, above the 2,631 authorized in the post Milestone C JAGM Additional LRIP Authorization ADM, in order to support Service and the FMS requirements until a FRP decision in FY 2022. FRP decision was received September 2022.

#### **LRIP Notes**

On June 15, 2018, the JAGM Milestone C ADM approved the execution of the LRIP quantity of 2,631 missiles established at Milestone B.

## (U) Deliveries and Expenditures

## (U) Acquisition Funding

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	46	17	37.0%
Appropriations (TY, \$M)	9,429.9	9,541.1	101.2%
Expenditures (TY, \$M)	9,429.9	2,582.0	27.4%

## (U) End Items Delivered

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Development	118			
JAGM		118	118	
Procurement	26,021			
JAGM		3,046	2,818	
Total	26,139	3,164	2,936	11.2%

**Notes** 

None

#### (U) International Program Aspects

#### **General Memo**

The JAGM Defense Exportability Features (DEF) Pilot Program completed July 31, 2018. The program received approval to export JAGM to the United Kingdom (UK) on February 7, 2019. France, Israel, Singapore, and UAE submitted Letters of Request (LOR) for Price and Availability (P&A). P&A data provided to France, Netherlands, Poland, UAE, and UK. The UK has submitted LOR for Letter of Offer and Acceptance (LOA) for a quantity of 460 JAGM missiles. Poland has submitted LOR for LOA requesting 460 JAGM missiles and the Netherlands has submitted LOR for LOA requesting 296 JAGM missiles. Korea submitted LOR for LOA (KS-B-ZJR) including up to 656 JAGM missiles as part of a new Apache buy.

#### **Exportability and Business Issues**

Currently no issues with current anticipated customers.

Is design for international exportability Yes Industry/Partner Exportability Cost-Sharing? No planned?

#### Program Protection: Technology Security and Foreign Disclosure Issues

Currently no issues with current anticipated customers.

#### (U) Agreements

<b>Activity Date</b>	Туре	Agreement Number	International Partner(s)	Quantity	Funding (TY\$M)
8/19/2019	FMS LOA	UK-B-WTX	United Kingdom (UK)	1	0.2

#### (U) Agreement Information

Partner(s):United Kingdom (UK)Activity Date:8/19/2019Type:Foreign Military Sales: Letter of Offer and AcceptanceAgreement Number:UK-B-WTX

Notes: None

United Kinadom (UK)

Fiscal Year	Funding (TY\$M)	Quantity
2019	0.2	1
Total	0.2	1

#### **UNCLASSIFIED**



## **Modernized Selected Acquisition Report Supplement**

Joint Air-to-Ground Missile (JAGM)

FY 2025 President's Budget Effective: December 31, 2023

#### **MSAR Supplement Sections**

**Program Description** 

Program Use of the Adaptive Acquisition Framework

Technologies and Systems Engineering

Funding Sources (Acquisition)

Funding Sources (Operating and Support)

Acquisition Estimate and Quantity Summary

Annual Acquisition Estimates by Appropriation Account

Acquired System Annual End-Item Quantities by Appropriation Account

**Nuclear Costs** 

Operational Fielding Plan

**O&S Independent Cost Estimate** 

Annual Operating and Support Estimates by Cost Element

## **Program Description**

Full Name Short Name

Joint Air-to-Ground Missile JAGM

PNO Lead Component

355 Army

AAF Pathway Acquisition Type

MCA MDAP

**Acquired Systems** 

JAGM

**Related Programs** 

				ACAT/	Acquisition	Costs i	n SAR?
Full Name	PNO	Pathway	Type	BCAT	Status	Acq	O&S
AGM 114 Hellfire Air-to-Ground Missle	108	MCA	MDAP		FOC/FD	No	No

#### **Program Use of the Adaptive Acquisition Framework**

This acquisition is accomplished by a single program in the Major Capability Acquisition Pathway. JAGM is the follow-on missile due to Laser HELLFIRE limitations.

## **Technologies and Systems Engineering**

#### Joint Air-to-Ground Missile

#### **Major Software Efforts**

Title	Status	Fielding Date	Description
None			

#### **Major Engineering Changes**

Title	Original Need Date	Description, Rationale and Program Impacts
None		

## **Funding Sources (Acquisition)**

## **Acquisition Funding Notes**

Category	Account	ВА	Line Item	Program Element	RDT&E Project	Shared	Sunk
Procurement	2032A	02	2605C70302 - Joint Air-to-Ground MSLS (JAGM)	0311100A	-		
RDT&E	2040A	05	0605450A - Joint Air-to-Ground Missile (JAGM)	0605450A	JA6 - Joint Air-To-Ground Missile (JAGM)		
O&M	2020A	04	435 - Other Service Support	0702806A	-	Х	
Note:	This is PE	O MS	Acq. O&M for core/TDA SEPM				

## **Funding Sources (Operating and Support)**

Note: Budget lines fund activites executed by the Program Office or Sustainment Office.

#### **Operating and Support Funding Notes**

Category	Account	ВА	Line Item	Program Element	RDT&E Project	Shared	Sunk
O&M	2020A	04	422 - Central Supply Activities	0701123A	-		

## **Acquisition Estimate and Quantity Summary**

#### Joint Air-to-Ground Missile

Acquisition Estimates	S	<b>Current Base Year</b>	Original Base Year	Report Fiscal Year
Category PB 2025	TY (\$M)	CY2022 (\$M)	CY2015 (\$M)	CY2024 (\$M)
RDT&E	1,005.6	1,219.5	1,019.2	1,308.8
Procurement	8,339.7	6,297.4	5,262.7	6,758.3
MILCON	-	-	-	-
O&M	84.6	62.7	52.4	67.3
Total Acquisition	9,429.8	7,579.7	6,334.3	8,134.4
PAUC	0.361	0.290	0.242	0.311
APUC	0.320	0.242	0.202	0.260

**Acquisition End-Item Quantities** 

System	PB 2025	Development	Procurement
JAGM		118	26,021
Total		118	26,021

#### **Unit Description**

A unit is one Joint Air-to-Ground Missile.

**Current and Future Years Defense Program Summary, TY(\$M)** 

								То	
Appropriation	Prior	2024	2025	2026	2027	2028	2029	Complete	Total
RDT&E	997.1	3.4	3.4	0.4	0.4	0.4	0.4	-	1,005.6
Procurement	1,622.1	381.8	126.9	268.8	256.5	270.0	277.4	5,136.2	8,339.7
MILCON	-	-	-	-	-	-	-	-	-
O&M	13.2	2.5	2.4	2.5	2.5	2.4	2.4	56.6	84.6
PB 2025 Total	2,632.4	387.7	132.7	271.7	259.4	272.7	280.3	5,192.8	9,429.8

(Aligned to Budget Position: PB 2025)

#### Joint Air-to-Ground Missile

	2040A - Research, Development, Te	est & Eval, A	rmy		
fiscal year		Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2022 (\$M)
Total		739.3	739.3	-	897.5
2008		51.673	51.7	0.765097	67.5
2009		114.817	114.8	0.774874	148.2
2010		118.900	118.9	0.786597	151.2
2011		66.400	66.4	0.802061	82.8
2012		86.796	86.8	0.814697	106.5
2013		11.623	11.6	0.828550	14.0
2014		15.684	15.7	0.844512	18.6
2015		80.585	80.6	0.858691	93.8
2016		79.897	79.9	0.867814	92.1
2017		47.446	47.4	0.886286	53.5
2018		28.520	28.5	0.902324	31.6
2019		12.440	12.4	0.917153	13.6
2020		6.314	6.3	0.946807	6.7
2021		7.292	7.3	0.986642	7.4
2022		2.467	2.5	1.032146	2.4
2023		2.366	2.4	1.072972	2.2
2024		3.014	3.0	1.098387	2.7
2025		3.030	3.0	1.121874	2.7

(Aligned to Budget Position: PB 2025)

#### Joint Air-to-Ground Missile

1319N - Research, Development, Test & Eval, Navy										
fiscal year	Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2022 (\$M)						
Total	266.3	266.3	-	322.0						
2008	11.602	11.6	0.763211	15.2						
2009	51.068	51.1	0.773011	66.1						
2010	57.797	57.8	0.784606	73.7						
2011	42.036	42.0	0.803340	52.3						
2012	1.284	1.3	0.816663	1.6						
2013		-	0.825238	-						
2014	4.659	4.7	0.836899	5.6						
2015	5.905	5.9	0.847429	7.0						
2016	23.596	23.6	0.863157	27.3						
2017	17.711	17.7	0.879307	20.1						
2018	14.045	14.0	0.900845	15.6						
2019	6.379	6.4	0.918196	6.9						
2020	14.743	14.7	0.951961	15.5						
2021	12.664	12.7	0.994746	12.7						
2022		-	1.046714	-						
2023	0.364	0.4	1.077876	0.3						
2024	0.384	0.4	1.102481	0.3						
2025	0.393	0.4	1.125868	0.3						
2026	0.403	0.4	1.149511	0.4						
2027	0.410	0.4	1.173651	0.3						
2028	0.418	0.4	1.198297	0.3						
2029	0.427	0.4	1.223462	0.3						

(Aligned to Budget Position: PB 2025)

#### Joint Air-to-Ground Missile

2032A - Missile Procurement, Army									
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non- Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2022 (\$M)
Total	6,696.7	-			-	-	6,696.7	-	4,972.0
2008							-	0.772130	-
2009							-	0.781852	-
2010							-	0.795403	-
2011							-	0.809461	-
2012							-	0.821335	-
2013							-	0.839028	-
2014							-	0.847131	-
2015							-	0.859496	-
2016	27.600						27.6	0.876339	31.5
2017	98.600						98.6	0.894248	110.3
2018	186.900						186.9	0.914046	204.5
2019	255.500						255.5	0.941981	271.2
2020	199.300						199.3	0.982266	202.9
2021	196.500						196.5	1.035716	189.7
2022	147.200						147.2	1.071554	137.4
2023	216.030						216.0	1.098275	196.7
2024	303.409						303.4	1.122133	270.4
2025	47.582						47.6	1.145768	41.5
2026	192.134						192.1	1.169829	164.2
2027	176.011						176.0	1.194396	147.4
2028	181.864						181.9	1.219478	149.1
2029	183.683						183.7	1.245087	147.5
2030	172.700						172.7	1.271234	135.9
2031	166.000						166.0	1.297930	127.9
2032	165.900						165.9	1.325186	125.2
2033	162.500						162.5	1.353015	120.1
2034	161.600						161.6	1.381429	117.0
2035	169.700						169.7	1.410439	120.3
2036	170.300						170.3	1.440058	118.3
2037	167.500						167.5	1.470299	113.9
2038	175.100						175.1	1.501175	116.6
2039	201.000						201.0	1.532700	131.1
2040	217.600						217.6	1.564887	139.1
2041	225.700						225.7	1.597749	141.3
2042	226.300						226.3	1.631302	138.7
2043	227.200						227.2	1.665559	136.4
2044	236.600						236.6	1.700536	139.1

#### Joint Air-to-Ground Missile

			2032	2A - Missile F	Procureme	nt, Army			
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non- Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2022 (\$M)
2045	238.300						238.3	1.736247	137.3
2046	239.900						239.9	1.772708	135.3
2047	249.800						249.8	1.809935	138.0
2048	251.700						251.7	1.847944	136.2
2049	228.400						228.4	1.886751	121.1
2050	175.500						175.5	1.926373	91.1
2051	41.950						42.0	1.966826	21.3
2052	9.700						9.7	2.008130	4.8
2053	3.400						3.4	2.050300	1.7

(Aligned to Budget Position: PB 2025)

#### Joint Air-to-Ground Missile

1507N - Weapons Procurement, Navy									
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non- Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2022 (\$M)
Total	1,643.0	-			-	-	1,643.0	-	1,325.4
2008							-	0.771133	-
2009							-	0.782212	-
2010							-	0.795569	-
2011							-	0.810797	-
2012							-	0.823002	-
2013							-	0.834697	-
2014							-	0.846316	-
2015							-	0.860122	-
2016							-	0.876280	-
2017	21.200						21.2	0.895254	23.7
2018	3.600						3.6	0.919840	3.9
2019	23.900						23.9	0.946847	25.2
2020	73.300						73.3	0.984408	74.5
2021	39.500						39.5	1.029328	38.4
2022	46.700						46.7	1.069529	43.7
2023	86.300						86.3	1.097188	78.7
2024	78.395						78.4	1.121276	69.9
2025	79.292						79.3	1.144940	69.3
2026	76.677						76.7	1.168984	65.6
2027	80.463						80.5	1.193533	67.4
2028	88.095						88.1	1.218597	72.3
2029	93.759						93.8	1.244187	75.4
2030	91.363						91.4	1.270315	71.9
2031	91.700						91.7	1.296992	70.7
2032	93.600						93.6	1.324229	70.7
2033	95.600						95.6	1.352037	70.7
2034	97.500						97.5	1.380430	70.6
2035	99.400						99.4	1.409419	70.5
2036	93.390						93.4	1.439017	64.9
2037	97.390						97.4	1.469236	66.3
2038	91.890						91.9	1.500090	61.3

(Aligned to Budget Position: PB 2025)

#### Joint Air-to-Ground Missile

2020A - Operation & Maintenance, Army					
fiscal year	Other/ Total Weighted Unallocated TY(\$M) Rate	Total CY2022 (\$M)			
Total	84.6 84.6 -	62.7			
2008	- 0.764919	-			
2009	- 0.772696	-			
2010	- 0.783951	-			
2011	- 0.800979	-			
2012	- 0.812428	-			
2013	- 0.823648	-			
2014	- 0.836644	-			
2015	- 0.845001	-			
2016	- 0.860123	-			
2017	- 0.874607	-			
2018	- 0.892139	-			
2019	2.021 2.0 0.912436	2.2			
2020	2.849 2.8 0.937424	3.0			
2021	3.150 3.2 0.983279	3.2			
2022	2.543 2.5 1.031990	2.5			
2023	2.650 2.7 1.069149	2.5			
2024	2.542 2.5 1.094381	2.3			
2025	2.411 2.4 1.117750	2.2			
2026	2.462 2.5 1.141222	2.2			
2027	2.515 2.5 1.165188	2.2			
2028	2.371 2.4 1.189657	2.0			
2029	2.422 2.4 1.214640	2.0			
2030	2.473 2.5 1.240147	2.0			
2031	2.526 2.5 1.266190	2.0			
2032	2.580 2.6 1.292780	2.0			
2033	2.415 2.4 1.319929	1.8			
2034	2.467 2.5 1.347647	1.8			
2035	2.520 2.5 1.375948	1.8			
2036	2.573 2.6 1.404843	1.8			
2037	2.628 2.6 1.434344	1.8			
2038	2.440 2.4 1.464466	1.7			
2039	2.243 2.2 1.495219	1.5			
2040	2.291 2.3 1.526619	1.5			
2041	2.080 2.1 1.558678				
2042	2.124 2.1 1.591410	1.3			
2043	2.169 2.2 1.624830				
2044	2.216 2.2 1.658951	1.3			

#### Joint Air-to-Ground Missile

	2020A - Operation & Maintenance, Army							
fiscal year		Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2022 (\$M)			
2045		2.263	2.3	1.693789	1.3			
2046		2.311	2.3	1.729359	1.3			
2047		2.361	2.4	1.765675	1.3			
2048		2.411	2.4	1.802754	1.3			
2049		2.462	2.5	1.840612	1.3			
2050		2.515	2.5	1.879265	1.3			
2051		2.247	2.2	1.918730	1.2			
2052		2.295	2.3	1.959023	1.2			
2053		2.009	2.0	2.000162	1.0			

## **Acquired System Annual End-Item Quantities by Appropriation Account**

(Aligned to Budget Position: PB 2025)

20	2040A - Research, Development, Test & Eval, Army						
fiscal year	JAGM			Total			
Total	118			118			
Undistributed				-			
2016	118			118			

## **Acquired System Annual End-Item Quantities by Appropriation Account**

(Aligned to Budget Position: PB 2025)

	2032A - Missile Procureme	nt, Army
fiscal year	JAGM	Total
Total	20,005	20,005
Undistributed		-
2016		-
2017	373	373
2018	899	899
2019	750	750
2020	701	701
2021	662	662
2022	490	490
2023	629	629
2024	910	910
2025	23	23
2026	661	661
2027	562	562
2028	578	578
2029	593	593
2030	600	600
2031	600	600
2032	600	600
2033	600	600
2034	600	600
2035	600	600
2036	600	600
2037	600	600
2038	600	600
2039	600	600
2040	600	600
2041	600	600
2042	600	600
2043	600	600
2044	600	600
2045	600	600
2046	600	600
2047	600	600
2048	600	600
2049	516	516

2032A - Missile Procurement, Army							
fiscal year	JAGM			Total			
2050	258			258			

## **Acquired System Annual End-Item Quantities by Appropriation Account**

(Aligned to Budget Position: PB 2025)

	1507N - W	1507N - Weapons Procurement, Navy					
fiscal year	JAGM	Total					
Total	6,016	6,016					
Undistributed	·	-					
2016		-					
2017		-					
2018	104	104					
2019	75	75					
2020	322	322					
2021	144	144					
2022	153	153					
2023	300	300					
2024	252	252					
2025	273	273					
2026	362	362					
2027	377	377					
2028	389	389					
2029	373	373					
2030	345	345					
2031	346	346					
2032	336	336					
2033	351	351					
2034	354	354					
2035	343	343					
2036	262	262					
2037	282	282					
2038	273	273					

#### **Nuclear Costs**

#### Joint Air-to-Ground Missile

**Program's Use of Department of Energy Resources** 

No data for 2023 MSAR

## **Operational Fielding Plan**

#### Joint Air-to-Ground Missile

System: JAGM

#### **Fielding and Inventory Notes**

No data for 2023 MSAR

**JAGM Fielding Plan and Inventory** 

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					
2024					-
2025					-
2026					-
2027					-
2028					-
2029					-

#### **O&S Independent Cost Estimate**

#### Joint Air-to-Ground Missile

#### **Independent and Current Cost Estimate Comparison**

Category	CY2022 (\$M)	Independent Cost Estimate 8/24/2022	Current Estimate 8/24/2022	Variance with ICE (%)
Unit-Level M	lanpower			-
Unit Operati	ons			-
Maintenance		116.1	116.1	0%
Sustaining Support		360.8	360.8	0%
Continued System Improvements		285.5	285.5	0%
Other				-
Total O&S		762.4	762.4	0%

#### **Independent Cost Estimate Source**

Event: FRP JCP

Type: Component Cost Position

Approved by: OSD Cost Assessment & Program Evaluation, August 24, 2022

Note: Disposal Cost is not included in the Operating and Support Cost of the current

APB for this program.

#### **Current Cost Estimate Source**

Type: Joint Cost Position

Approved by: OSD Cost Assessment & Program Evaluation, August 24, 2022

#### **Cost Estimate Variance Explanation**

## **Annual Operating and Support Estimates by Cost Element**

#### Joint Air-to-Ground Missile

System: JAGM

Source for TY-CY Conversion:

	Operating and Support Cost Elements							
fiscal year	1.0 Unit- Level Manpower	2.0 Unit Operations	3.0 Maintenance	4.0 Sustaining Support	5.0 Continuing System Improvements	Other	Total CY2022 (\$M)	
Total	_	-	-	_	_	-	_	