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## Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-355



### Joint Air-to-Ground Missile (JAGM)

As of FY 2020 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Sensitivity Originator

**Organization:** JAMS Project Office - Intelligence and Security (SFAE-MSL-JAS) Redstone Arsenal, AL 35807  
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## Common Acronyms and Abbreviations for MDAP Programs

Acq O&M - Acquisition-Related Operations and Maintenance  
ACAT - Acquisition Category  
ADM - Acquisition Decision Memorandum  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
\$B - Billions of Dollars  
BA - Budget Authority/Budget Activity  
Blk - Block  
BY - Base Year  
CAPE - Cost Assessment and Program Evaluation  
CARD - Cost Analysis Requirements Description  
CDD - Capability Development Document  
CLIN - Contract Line Item Number  
CPD - Capability Production Document  
CY - Calendar Year  
DAB - Defense Acquisition Board  
DAE - Defense Acquisition Executive  
DAMIR - Defense Acquisition Management Information Retrieval  
DoD - Department of Defense  
DSN - Defense Switched Network  
EMD - Engineering and Manufacturing Development  
EVM - Earned Value Management  
FOC - Full Operational Capability  
FMS - Foreign Military Sales  
FRP - Full Rate Production  
FY - Fiscal Year  
FYDP - Future Years Defense Program  
ICE - Independent Cost Estimate  
IOC - Initial Operational Capability  
Inc - Increment  
JROC - Joint Requirements Oversight Council  
\$K - Thousands of Dollars  
KPP - Key Performance Parameter  
LRIP - Low Rate Initial Production  
\$M - Millions of Dollars  
MDA - Milestone Decision Authority  
MDAP - Major Defense Acquisition Program  
MILCON - Military Construction  
N/A - Not Applicable  
O&M - Operations and Maintenance  
ORD - Operational Requirements Document  
OSD - Office of the Secretary of Defense  
O&S - Operating and Support  
PAUC - Program Acquisition Unit Cost

PB - President's Budget  
PE - Program Element  
PEO - Program Executive Officer  
PM - Program Manager  
POE - Program Office Estimate  
RDT&E - Research, Development, Test, and Evaluation  
SAR - Selected Acquisition Report  
SCP - Service Cost Position  
TBD - To Be Determined  
TY - Then Year  
UCR - Unit Cost Reporting  
U.S. - United States  
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)  
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)

## Program Information

**Program Name**

Joint Air-to-Ground Missile (JAGM)

**DoD Component**

Army

**Joint Participants**

Navy

## Responsible Office

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**Date Assigned:** July 6, 2016

## References

**SAR Baseline (Development Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated September 29, 2015

**Approved APB**

Army Acquisition Executive (AAE) Approved Acquisition Program Baseline (APB) dated June 15, 2018

## Mission and Description

The Joint Air-to-Ground Missile (JAGM) program is an Army-led, ACAT IC MDAP with Joint interest with the U.S. Marine Corps and U.S. Navy. The JAGM is the next generation of aviation-launched, fire and forget missiles to replace the HELLFIRE Laser and Longbow Radar missiles. JAGM will be used by Joint service aircraft for destruction of high value stationary, moving, and relocatable land and maritime targets from standoff range in day, night, adverse weather, and obscured battlefield conditions.



## Executive Summary

### Program Highlights Since Last Report

The JAGM requirements are stable and funding is adequate to meet cost, schedule, and performance objectives established in the current approved APB. There is no increased risk to the JAGM program since the last SAR.

On May 29, 2018, the Army Acquisition Executive (AAE) chaired the Milestone C Army Systems Acquisition Review Council for the JAGM program. The PM Joint Attack Munition Systems and the PEO Missiles and Space requested authority to enter Production and Deployment (P&D). The AAE approved Milestone C for JAGM in an ADM dated June 15, 2018. The ADM authorized entry into P&D, execution of an LRIP quantity of 2,631 missiles, and established the exit criteria necessary to enter into FRP.

The JAGM program's P&D phase activities in support of the Milestone C decision will transition to LRIP and provide the Army with operational capability that achieves mission requirements. The program will establish the initial production base for the system and facilitate an orderly increase in the production rate sufficient to support an FRP Decision Review.

On April 27, 2018, the JAGM Product Office, Apache Product Office, and the Army's Training & Doctrine Command Capability Manager for Reconnaissance and Attack coordinated for the AH-64E version 6 (AH-64Ev6) Follow-on Operational Test and Evaluation 2, the JAGM Initial Operational Test Live-Fire, and littoral combat missions at Eglin Air Force Base, Florida. The purpose was to finalize the JAGM Live-Fire land and maritime vignettes as well as the maritime screen and attack vignettes to include casualty assessment and smoke pyrotechnics planning. The AH-64Ev6 required a reorganization and synchronization of the vignette mission sequence. The group will continue to execute detailed planning which includes all major stakeholders in order to ensure an efficient execution plan for Initial Operational Test and Evaluations in 3rd Quarter FY 2019.

The JAGM Product Office awarded LRIP 1 on August 16, 2018 for a quantity of 373 missiles (Army) and LRIP 2 on September 11, 2018 for a quantity of 600 missiles (502 Army and 98 Navy). 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.

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 Pilot-Vehicle Interface that provides optimized cockpit selections.

There are no significant software-related issues with this program at this time.

History of Significant Developments Since Program Initiation	
History of Significant Developments Since Program Initiation	
Date	Significant Development Description
October 2014	USD(AT&L) authorized the release of the final request for proposal for the JAGM EMD contract and LRIP options to include LRIP long lead items.
July 2015	Lockheed Martin was awarded the competitive JAGM EMD contract to develop the next generation of aviation-launched missiles to replace the HELLFIRE laser and Longbow radar missiles.
August 2015	The Joint Attack Munition Systems (JAMS) Project Office, with support from the U.S. Army Aviation and Missile Research, Development and Engineering Center and Lockheed Martin, successfully conducted the third JAGM flight test at Eglin Air Force Base, Florida. The missile had a nominal launch and impacted and destroyed the target. The missile executed a Doppler Beam Sharpening trajectory, increasing the probability of hit against a difficult stationary target using the Active Fire and Forget. Among many firsts, this was the first test of JAGM using the Active Fire and Forget engagement mode and the first engagement of an armored vehicle.
January 2016	The JAMS Project Office conducted a successful JAGM System Critical Design Review (CDR)/Initial Production Readiness Review. The JAGM CDR confirmed the system design is stable and is able to meet system performance requirements as evidenced by the detailed design documentation. The CDR also demonstrated the program to be on track to achieve affordability, should cost goals and establish the system's initial product baseline. The OSD post-CDR Assessment Report provided an overall assessment of the review and technical risk.
April 2016	The JAGM PM provided a program update to the Director, Operational Test & Evaluation on April 26, 2016. In accordance with the flexibility provided in the Milestone B Test and Evaluation Master Plan update, the program scheduled a Limited User Test (LUT) in place of the planned Initial Operational Test and Evaluation (IOT&E) to culminate EMD. The LUT placed the program in a position to be well suited for a successful demonstration of the missile's capability. The subsequent IOT&E included the platform software, currently in development, that enabled pilots to easily access full JAGM functionality without the workarounds that were necessary in LUT. The transition from IOT&E to LUT did not impact the missile design, LRIP, production timelines, IOC or any key program event.
August 2016	On August 23, 2016, JROC Memorandum 088-16 approved the Army's request to change the JAGM KPP for In-Flight Reliability to a Key System Attribute in accordance with the Joint Capabilities Integration and Development System manual.
September 2016	In accordance with the Weapon Systems Acquisition Reform Act (WSARA) of 2009, JAGM is to report the status of any waivers granted in conjunction with section 2366b certification until the certification requirements are satisfied. On July 29, 2015, the USD(AT&L) signed the Milestone B ADM for the JAGM program and authorized entry into EMD as an ACAT ID program. The associated 2366b certification waived the following provisions: Waived Provision (1) 2366b(1)(B): Appropriate trade-offs among cost, schedule, and performance objectives have been made to ensure that the program is affordable when considering the per unit cost and the total acquisition cost in the context of the total resources available during the period covered by the FYDP submitted during the fiscal year in which the certification is made; and Waived Provision (2) 2366b(1)(D): Funding is available to execute the product development and production plan under the program, through the period covered by the FYDP submitted during the fiscal year in which the certification is made, consistent with the estimates described in paragraph (a)(1)(C) of the 2366b certification for the program.  Waived Provision (3) 2366b(2): The program received a preliminary design review and conducted a

	<p>formal post-preliminary design review assessment and certifies on the basis of such assessment that the program demonstrates a high likelihood of accomplishing its intended mission.</p> <p>On September 2, 2016, the USD(AT&amp;L) signed an action memorandum approving the clearance of section 2366b waivers for the JAGM program and certifying that the program satisfied the provisions.</p> <ul style="list-style-type: none"> <li>• The JAGM program is fully funded with very minor and manageable deltas (&lt;1.2% of the total RDT&amp;E funding). This addresses provision (a)(1)(B) and (a)(1)(D).</li> <li>• The JAGM program successfully closed its Critical Design Review on March 28, 2016, and therefore satisfies the waiver JAGM received for a Program Deviation Report (PDR) at Milestone B. This addresses provision (a)(2).</li> </ul> <p>This clears all remaining 2366b waivers and will be the last time they are reported in the SAR.</p>
February 2017	<p>On February 2, 2017, PM JAMS submitted a PDR to provide notification of a deviation from the September 29, 2015 approved JAGM APB in accordance with section 2435 title 10 U.S. Code. The current baseline for Milestone C changed from July 2017 (Objective) - January 2018 (Threshold) to March 2018 (Objective) - September 2018 (Threshold). Production delays adversely affected test asset deliveries necessary for the execution of the EMD test program. The schedule delay was not likely to result in a cost deviation on this fixed price incentive (firm target) effort. The cumulative effect of multiple delays related to transitioning from the prototype phase to production processes required to meet EMD delivery requirements which was the key driver in the delay. Neither technology readiness nor program requirements were contributing factors and the program successfully overcame all issues. Resultant delays to IOC and FRP remained within the current baseline threshold as the program identified low-risk opportunities to mitigate schedule impact beyond EMD. The PDR was approved by the Army AAE on May 4, 2017.</p>
March 2017	<p>On March 17, 2017, the JAGM Product Office received the Army Program Delegation Decisions ADM in which the USD(AT&amp;L) delegated to the Secretary of the Army milestone decision authority for JAGM. Accordingly, the designation for JAGM acquisition program is now ACAT IC.</p>
June 2018	<p>The JAGM program was approved for Milestone C in June 2018 and authorized entry into Production and Deployment.</p>
August 2018	<p>On August 16, 2018, the JAGM Product Office awarded LRIP 1 for a quantity of 373 missiles (Army).</p>

### Threshold Breaches

#### APB Breaches

- Schedule
- Performance
- Cost 
  - RDT&E
  - Procurement
  - MILCON
  - Acq O&M
- O&S Cost
- Unit Cost 
  - PAUC
  - APUC

#### Nunn-McCurdy Breaches

- Current UCR Baseline
  - PAUC None
  - APUC None
- Original UCR Baseline
  - PAUC None
  - APUC None

## Schedule



Schedule Events					
Events	SAR Baseline Development Estimate	Current APB Production Objective/Threshold	Current Estimate		
Milestone B	Jul 2015	Jul 2015	Jul 2015	Jul 2015	
CDR	Jan 2016	Jan 2016	Jan 2016	Jan 2016	
Milestone C	Jul 2017	Mar 2018	Sep 2018	Jun 2018	(Ch-1)
Army IOC	Sep 2018	Sep 2018	Mar 2019	Mar 2019	
Navy IOC	Sep 2019	Sep 2019	Mar 2020	Mar 2020	
FRP Decision	Mar 2019	Mar 2020	Sep 2020	May 2020	(Ch-2)

### Change Explanations

(Ch-1) The Milestone C current estimate changed from May 2018 to June 2018 to reflect the actual date for Milestone C.  
 (Ch-2) The FRP Decision current estimate changed from September 2019 to May 2020 to support Cost and Software Data Reporting data collection and accurate pricing for new SCP to support FRP. The change does not adversely affect the production schedule.

### Acronyms and Abbreviations

CDR - Critical Design Review  
 CSDR - Cost and Software Data Reporting

## Performance

Performance Characteristics				
SAR Baseline Development Estimate	Current APB Production Objective/Threshold	Demonstrated Performance	Current Estimate	
<b>System Survivability</b>				
<b>Cyber Survivability</b>				
N/A	No higher than Low	No higher than Moderate	Adversarial Assessment conducted January 26, 2018	No higher than Moderate
<b>E3 and CBRN</b>				
N/A	Host A/C compatibility, MIL-STD-464 (HERO, EMC), MIL-STD-461, and MIL-STD 2169 (HEMP)	(T=O) Host A/C compatibility, MIL-STD-464 (HERO, EMC), MIL-STD-461, and MIL-STD 2169 (HEMP)	E3 completed March 23, 2018; CBRN completed March 2017	Host A/C compatibility, MIL-STD-464 (HERO, EMC), MIL-STD-461, and MIL-STD 2169 (HEMP)
<b>Training</b>				
<b>Support development of all training packages and training devices</b>				
N/A	Yes	(T=O) Yes	NET conducted January 9-12, 2018	Yes
<b>Range</b>				
<b>Minimum Engagement Range Rotary Wing (RW)</b>				
500 m	500 m	(T=O) 500 m	Demonstrated February 1, 2018	500 m
<b>Maximum Range (RW)</b>				
Greater Than 8 km	>=16 km	8 km	Demonstrated March 28, 2018	8 km (Ch-1)
<b>Minimum Engagement Range (FW)</b>				
N/A	2 km (1 nm)	None	TBD	None (Ch-1)
<b>Maximum Range (FW)</b>				
N/A	28 km (15 nm)	None	TBD	None (Ch-1)
<b>Interoperability</b>				
<b>Interoperable with joint rotary and fixed wing (manned and unmanned) aircraft</b>				
AH-64D, AH-1Z	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, Future UAS, A-10,	AH-64E, AH-1Z	AH-64E demonstrated January 24-29, 2019; AH-1Z TBD	AH-64E, AH-1Z

	F-16, MQ-9				
<b>Laser Designation</b>					
Compatible with standard Joint aviation platform laser designation systems, including PRF and PIM codes	Compatible with standard Joint aviation platform laser designation systems, including PRF and PIM codes.	(T=O) Compatible with standard Joint aviation platform laser designation systems, including PRF and PIM codes.	Completed compatibility testing March 13, 2018	Compatible with standard Joint aviation platform laser designation systems, including PRF and PIM codes.	
<b>Carrier/Shipboard Operability</b>					
<b>Compatible with carrier/shipboard operations without degrading other Naval operations</b>					
Yes	Yes	(T=O) Yes	Shipboard Weapons Integration Team Report completed January 10, 2018	Yes	
<b>Combat Effectiveness/Reliability</b>					
<b>In-Flight Reliability (Post P-BIT Check)</b>					
0.92 (Initial fielding) 0.94 (System Maturity)	N/A	N/A	DELETED	DELETED	(Ch-1)
<b>Sustainability (Materiel Availability)</b>					
<b>Percentage of missiles operationally capable of performing an assigned mission at a given time, based on materiel condition</b>					
0.90 (At initial fielding) 0.95 (At system maturity)	N/A	N/A	DELETED	DELETED	(Ch-1)

Classified Performance information is provided in the classified annex to this submission.

#### Requirements Reference

JAGM CPD for JAGM Increment 1 dated May 10, 2018.

#### Change Explanations

(Ch-1) Performance parameters from the prior SAR were changed or deleted by the CPD, dated May 10, 2018.

#### Notes

In the JAGM CPD, dated May 10, 2018, System Survivability and Training KPPs are introduced. Also in the 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.

**Acronyms and Abbreviations**

A/C - Aircraft

CBRN - Chemical, Biological, Radiation, Nuclear

DAP - Direct Air Penetrator

E3 - Electromagnetic Environmental Effects

EMC - Electromagnetic Compatibility

FW - Fixed Wing

HEMP - High-Altitude Electromagnetic Pulse

HERO - High Intensity Radio Frequency (HIRF) Transmission and Hazards of Electromagnetic Radiation to Ordnance

km - kilometer

m - meter

MIL-STD - Military Standard

NET - New Equipment Training

nm - nautical mile

O - Objective

P-BIT - Power-on Built In Test

PIM - Pulse Interval Modulation

PRF - Pulse Repetition Frequency

RW - Rotary Wing

T - Threshold

UAS - Unmanned Aircraft System



## Track to Budget

### RDT&E

Appn	BA	PE
Navy	1319 05	0605450M
	<b>Project</b>	<b>Name</b>
	2211	Joint Air-to-Ground Missile
Navy	1319 05	0605450N
	<b>Project</b>	<b>Name</b>
	2211	Joint Air-to-Ground Missile (JAGM)
Army	2040 05	0605450A
	<b>Project</b>	<b>Name</b>
	JA6	Joint Air-to-Ground Missile (JAGM)

### Procurement

Appn	BA	PE
Navy	1507 02	0206138M
	<b>Line Item</b>	<b>Name</b>
	2248	Joint Air-to-Ground Missile (JAGM)
Army	2032 02	0311100A
	<b>Line Item</b>	<b>Name</b>
	C70302	Joint Air-to-Ground Missile (JAGM)

### Acq O&M

Appn	BA	PE
Army	2020 04	0702806A
	<b>Subactivity Group</b>	<b>Name</b>
	435	Acquisition and Management Support: JAGM (Shared)

## Cost and Funding

### Cost Summary

Total Acquisition Cost							
Appropriation	BY 2018 \$M			BY 2018 \$M	TY \$M		
	SAR Baseline Development Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Development Estimate	Current APB Production Objective	Current Estimate
RDT&E	1023.2	1074.9	1182.4	1094.6	952.8	1008.7	1024.8
Procurement	4905.7	5951.5	6546.7	5857.7	6371.7	7640.4	7527.5
Flyaway	--	--	--	5697.6	--	--	7332.0
Recurring	--	--	--	5629.5	--	--	7256.7
Non Recurring	--	--	--	68.1	--	--	75.3
Support	--	--	--	160.1	--	--	195.5
Other Support	--	--	--	155.4	--	--	190.4
Initial Spares	--	--	--	4.7	--	--	5.1
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	44.0	48.4	43.9	0.0	52.8	52.8
Total	5928.9	7070.4	N/A	6996.2	7324.5	8701.9	8605.1

#### Current APB Cost Estimate Reference

Joint Cost Position for JAGM dated May 15, 2018

The Base Year for the program has been updated from FY 2015 to FY 2018 using the following deflators:

Appn Category	Deflation Factor
RDT&E	1.04567124
Procurement	1.04567128
Acq O&M	1.04567127

#### Cost Notes

Since Milestone C was approved by the Army Acquisition Executive on June 15, 2018, the SAR Baseline is being updated from a Development Estimate to a Production Estimate and the base year of the program revised from FY 2015 to FY 2018.

The Joint Cost Position (JCP) was developed by the Office of the Deputy Assistant Secretary of the Army for Cost and Economics and the Naval Center for Cost Analysis.

In the JCP, dated May 15, 2018, the following risks were identified: the cost risk associated with this program is moderate to high due to lack of JAGM/HELLFIRE data to develop learning and rate curves (LC and RC) and procurement schedule uncertainty. The potential impact on program cost is that the APUC is highly sensitive to fluctuations in the LC and RC. This variation in the curves will stabilize as the missile matures and production quantities increase. Approaches implemented to mitigate risks include: significant 1921, 1921-1, and 1921-2 data collection for both the JAGM and HELLFIRE programs and the development of an Affordability Integrated Product Team to work on implementing tasks that would drive affordability in a positive trend for JAGM.

Total Quantity			
Quantity	SAR Baseline Development Estimate	Current APB Production	Current Estimate
RDT&E	118	118	118
Procurement	26319	26319	26319
Total	26437	26437	26437

## Cost and Funding

### Funding Summary

Appropriation Summary									
FY 2020 President's Budget / December 2018 SAR (TY\$ M)									
Appropriation	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
RDT&E	948.6	18.6	27.9	21.6	2.4	2.5	3.2	0.0	1024.8
Procurement	330.8	280.5	324.4	263.1	271.3	289.8	286.7	5480.9	7527.5
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	3.3	3.4	3.4	3.5	3.6	3.7	31.9	52.8
PB 2020 Total	1279.4	302.4	355.7	288.1	277.2	295.9	293.6	5512.8	8605.1
PB 2019 Total	1283.5	324.1	327.3	360.9	363.1	498.1	292.1	3676.5	7125.6
Delta	-4.1	-21.7	28.4	-72.8	-85.9	-202.2	1.5	1836.3	1479.5

#### Funding Notes

Changes to Army 2032 Procurement funding and quantities reflect a \$20M Appropriations Committee mark in FY 2019.

Quantity Summary										
FY 2020 President's Budget / December 2018 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Development	118	0	0	0	0	0	0	0	0	118
Production	0	1376	796	991	783	655	893	852	19973	26319
PB 2020 Total	118	1376	796	991	783	655	893	852	19973	26437
PB 2019 Total	118	1293	1121	1183	1512	1568	2204	1330	16108	26437
Delta	0	83	-325	-192	-729	-913	-1311	-478	3865	0

## Cost and Funding

### Annual Funding By Appropriation

Annual Funding							
2040   RDT&E   Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	51.7
2009	--	--	--	--	--	--	114.8
2010	--	--	--	--	--	--	118.5
2011	--	--	--	--	--	--	66.4
2012	--	--	--	--	--	--	86.8
2013	--	--	--	--	--	--	11.6
2014	--	--	--	--	--	--	15.7
2015	--	--	--	--	--	--	80.6
2016	--	--	--	--	--	--	79.9
2017	--	--	--	--	--	--	47.4
2018	--	--	--	--	--	--	28.5
2019	--	--	--	--	--	--	11.8
2020	--	--	--	--	--	--	9.5
2021	--	--	--	--	--	--	8.9
2022	--	--	--	--	--	--	2.2
2023	--	--	--	--	--	--	2.3
2024	--	--	--	--	--	--	3.0
Subtotal	74	--	--	--	--	--	739.6

Annual Funding 2040   RDT&E   Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	BY 2018 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	59.4
2009	--	--	--	--	--	--	130.2
2010	--	--	--	--	--	--	132.4
2011	--	--	--	--	--	--	72.8
2012	--	--	--	--	--	--	93.6
2013	--	--	--	--	--	--	12.3
2014	--	--	--	--	--	--	16.3
2015	--	--	--	--	--	--	82.4
2016	--	--	--	--	--	--	80.9
2017	--	--	--	--	--	--	47.0
2018	--	--	--	--	--	--	27.8
2019	--	--	--	--	--	--	11.3
2020	--	--	--	--	--	--	8.9
2021	--	--	--	--	--	--	8.2
2022	--	--	--	--	--	--	2.0
2023	--	--	--	--	--	--	2.0
2024	--	--	--	--	--	--	2.6
Subtotal	74	--	--	--	--	--	790.1

Annual Funding 1319   RDT&E   Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	11.6
2009	--	--	--	--	--	--	52.8
2010	--	--	--	--	--	--	61.1
2011	--	--	--	--	--	--	48.6
2012	--	--	--	--	--	--	2.6
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	4.7
2015	--	--	--	--	--	--	6.1
2016	--	--	--	--	--	--	25.9
2017	--	--	--	--	--	--	17.8
2018	--	--	--	--	--	--	15.5
2019	--	--	--	--	--	--	6.8
2020	--	--	--	--	--	--	18.4
2021	--	--	--	--	--	--	12.7
2022	--	--	--	--	--	--	0.2
2023	--	--	--	--	--	--	0.2
2024	--	--	--	--	--	--	0.2
Subtotal	44	--	--	--	--	--	285.2

Annual Funding 1319   RDT&E   Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2018 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	13.4
2009	--	--	--	--	--	--	60.0
2010	--	--	--	--	--	--	68.4
2011	--	--	--	--	--	--	53.2
2012	--	--	--	--	--	--	2.8
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	4.9
2015	--	--	--	--	--	--	6.3
2016	--	--	--	--	--	--	26.4
2017	--	--	--	--	--	--	17.8
2018	--	--	--	--	--	--	15.2
2019	--	--	--	--	--	--	6.5
2020	--	--	--	--	--	--	17.3
2021	--	--	--	--	--	--	11.7
2022	--	--	--	--	--	--	0.2
2023	--	--	--	--	--	--	0.2
2024	--	--	--	--	--	--	0.2
Subtotal	44	--	--	--	--	--	304.5



Annual Funding 2032   Procurement   Missile Procurement, Army							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2016	--	27.7	--	--	27.7	--	27.7
2017	373	99.0	--	--	99.0	--	99.0
2018	899	177.9	--	--	177.9	0.5	178.4
2019	721	233.8	--	20.4	254.2	2.2	256.4
2020	609	208.9	--	20.0	228.9	4.5	233.4
2021	592	201.9	--	7.9	209.8	3.9	213.7
2022	460	174.2	--	22.0	196.2	24.7	220.9
2023	571	188.0	--	--	188.0	25.6	213.6
2024	540	182.5	--	--	182.5	26.4	208.9
2025	557	178.9	--	--	178.9	16.3	195.2
2026	930	249.1	--	1.5	250.6	4.0	254.6
2027	949	254.8	--	--	254.8	4.1	258.9
2028	951	259.5	--	--	259.5	4.1	263.6
2029	1004	263.2	--	--	263.2	4.3	267.5
2030	1022	267.8	--	--	267.8	4.3	272.1
2031	1048	270.2	--	1.7	271.9	4.5	276.4
2032	1064	276.6	--	--	276.6	4.6	281.2
2033	1079	281.5	--	--	281.5	4.7	286.2
2034	1092	286.2	--	--	286.2	4.8	291.0
2035	1103	289.4	--	1.8	291.2	4.9	296.1
2036	1118	296.4	--	--	296.4	5.0	301.4
2037	1135	301.6	--	--	301.6	5.1	306.7
2038	1155	304.0	--	--	304.0	5.2	309.2
2039	1331	349.5	--	--	349.5	5.0	354.5
2040	--	11.8	--	--	11.8	--	11.8
Subtotal	20303	5634.4	--	75.3	5709.7	168.7	5878.4

Annual Funding 2032   Procurement   Missile Procurement, Army							
Fiscal Year	Quantity	BY 2018 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2016	--	27.8	--	--	27.8	--	27.8
2017	373	97.3	--	--	97.3	--	97.3
2018	899	171.4	--	--	171.4	0.5	171.9
2019	721	220.8	--	19.2	240.0	2.1	242.1
2020	609	193.4	--	18.5	211.9	4.2	216.1
2021	592	183.3	--	7.1	190.4	3.6	194.0
2022	460	155.0	--	19.6	174.6	22.0	196.6
2023	571	164.0	--	--	164.0	22.4	186.4
2024	540	156.1	--	--	156.1	22.6	178.7
2025	557	150.0	--	--	150.0	13.7	163.7
2026	930	204.8	--	1.2	206.0	3.3	209.3
2027	949	205.4	--	--	205.4	3.3	208.7
2028	951	205.1	--	--	205.1	3.2	208.3
2029	1004	203.9	--	--	203.9	3.3	207.2
2030	1022	203.4	--	--	203.4	3.3	206.7
2031	1048	201.2	--	1.3	202.5	3.3	205.8
2032	1064	201.9	--	--	201.9	3.4	205.3
2033	1079	201.5	--	--	201.5	3.3	204.8
2034	1092	200.8	--	--	200.8	3.4	204.2
2035	1103	199.1	--	1.2	200.3	3.4	203.7
2036	1118	199.9	--	--	199.9	3.4	203.3
2037	1135	199.4	--	--	199.4	3.4	202.8
2038	1155	197.1	--	--	197.1	3.3	200.4
2039	1331	222.1	--	--	222.1	3.2	225.3
2040	--	7.4	--	--	7.4	--	7.4
Subtotal	20303	4372.1	--	68.1	4440.2	137.6	4577.8

Cost Quantity Information 2032   Procurement   Missile Procurement, Army		
Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned With Quantity) BY 2018 \$M
2016	--	--
2017	373	125.1
2018	899	171.4
2019	721	220.8
2020	609	193.4
2021	592	183.3
2022	460	155.0
2023	571	164.0
2024	540	156.1
2025	557	150.0
2026	930	204.8
2027	949	205.4
2028	951	205.1
2029	1004	203.9
2030	1022	203.4
2031	1048	201.2
2032	1064	201.9
2033	1079	201.5
2034	1092	200.8
2035	1103	199.1
2036	1118	199.9
2037	1135	199.4
2038	1155	197.1
2039	1331	229.5
2040	--	--
Subtotal	20303	4372.1

Annual Funding 1507   Procurement   Weapons Procurement, Navy								
Fiscal Year	Quantity	TY \$M						
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program	
2017	104	19.0	--	--	19.0	2.9	21.9	
2018	--	--	--	--	--	3.8	3.8	
2019	75	23.7	--	--	23.7	0.4	24.1	
2020	382	90.0	--	--	90.0	1.0	91.0	
2021	191	49.0	--	--	49.0	0.4	49.4	
2022	195	50.4	--	--	50.4	--	50.4	
2023	322	76.2	--	--	76.2	--	76.2	
2024	312	75.9	--	--	75.9	1.9	77.8	
2025	273	76.7	--	--	76.7	2.7	79.4	
2026	289	78.4	--	--	78.4	2.6	81.0	
2027	291	79.2	--	--	79.2	3.4	82.6	
2028	300	82.4	--	--	82.4	1.8	84.2	
2029	316	85.9	--	--	85.9	--	85.9	
2030	321	87.6	--	--	87.6	--	87.6	
2031	328	89.4	--	--	89.4	--	89.4	
2032	332	91.2	--	--	91.2	--	91.2	
2033	335	93.0	--	--	93.0	--	93.0	
2034	338	94.9	--	--	94.9	--	94.9	
2035	341	96.8	--	--	96.8	--	96.8	
2036	344	98.7	--	--	98.7	--	98.7	
2037	345	100.7	--	--	100.7	--	100.7	
2038	282	83.2	--	--	83.2	--	83.2	
2039	--	--	--	--	--	5.9	5.9	
Subtotal	6016	1622.3	--	--	1622.3	26.8	1649.1	

Annual Funding 1507   Procurement   Weapons Procurement, Navy								
Fiscal Year	Quantity	BY 2018 \$M						
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program	
2017	104	18.7	--	--	18.7	2.9	21.6	
2018	--	--	--	--	--	3.7	3.7	
2019	75	22.4	--	--	22.4	0.4	22.8	
2020	382	83.4	--	--	83.4	1.0	84.4	
2021	191	44.5	--	--	44.5	0.4	44.9	
2022	195	44.9	--	--	44.9	--	44.9	
2023	322	66.6	--	--	66.6	--	66.6	
2024	312	65.0	--	--	65.0	1.6	66.6	
2025	273	64.4	--	--	64.4	2.3	66.7	
2026	289	64.5	--	--	64.5	2.2	66.7	
2027	291	63.9	--	--	63.9	2.8	66.7	
2028	300	65.2	--	--	65.2	1.4	66.6	
2029	316	66.6	--	--	66.6	--	66.6	
2030	321	66.6	--	--	66.6	--	66.6	
2031	328	66.7	--	--	66.7	--	66.7	
2032	332	66.7	--	--	66.7	--	66.7	
2033	335	66.6	--	--	66.6	--	66.6	
2034	338	66.7	--	--	66.7	--	66.7	
2035	341	66.7	--	--	66.7	--	66.7	
2036	344	66.6	--	--	66.6	--	66.6	
2037	345	66.7	--	--	66.7	--	66.7	
2038	282	54.0	--	--	54.0	--	54.0	
2039	--	--	--	--	--	3.8	3.8	
Subtotal	6016	1257.4	--	--	1257.4	22.5	1279.9	

FY 2020 is OCO funding.

Annual Funding 2020   Acq O&M   Operation and Maintenance, Army		
Fiscal Year	TY \$M	
	Total Program	
2019		3.3
2020		3.4
2021		3.4
2022		3.5
2023		3.6
2024		3.7
2025		3.2
2026		3.1
2027		3.0
2028		2.9
2029		2.5
2030		2.4
2031		2.2
2032		2.1
2033		2.0
2034		1.9
2035		1.8
2036		1.7
2037		1.3
2038		1.0
2039		0.8
Subtotal		52.8

Annual Funding 2020   Acq O&M   Operation and Maintenance, Army		
Fiscal Year	BY 2018 \$M	
	Total Program	
2019		3.2
2020		3.2
2021		3.1
2022		3.2
2023		3.2
2024		3.2
2025		2.7
2026		2.6
2027		2.5
2028		2.3
2029		2.0
2030		1.9
2031		1.7
2032		1.6
2033		1.5
2034		1.4
2035		1.3
2036		1.2
2037		0.9
2038		0.7
2039		0.5
Subtotal		43.9



## Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	7/29/2015	6/15/2018
<b>Approved Quantity</b>	2631	2631
<b>Reference</b>	JAGM Milestone B ADM	JAGM Milestone C ADM
<b>Start Year</b>	2017	2017
<b>End Year</b>	2018	2019

The JAGM Milestone C ADM approved the execution of the LRIP quantity of 2,631 missiles established at Milestone B.

## **Foreign Military Sales**

None

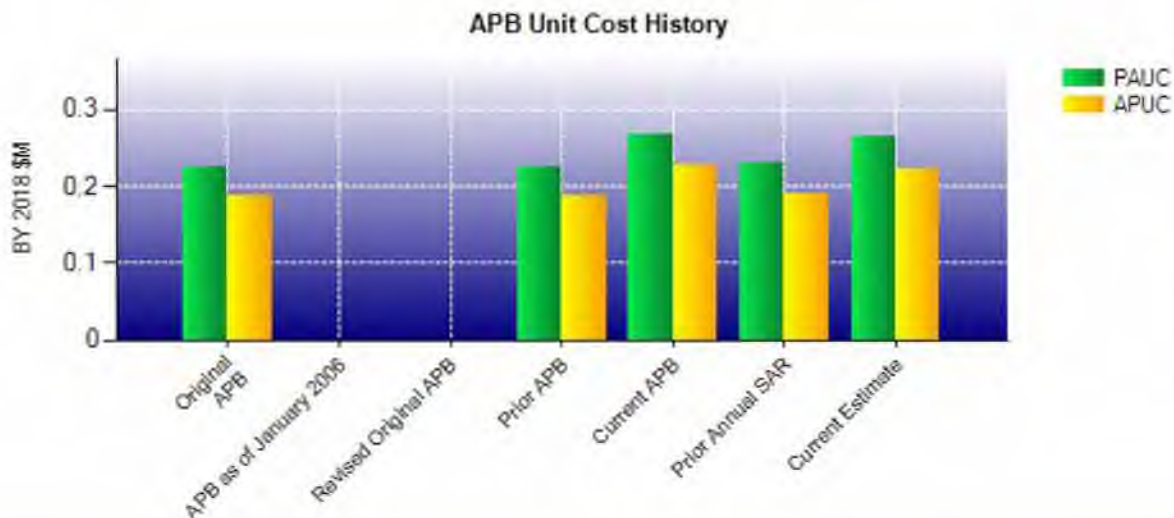
## **Nuclear Costs**

None

**Unit Cost**

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2018 \$M	BY 2018 \$M	% Change
	Current UCR Baseline (Jun 2018 APB)	Current Estimate (Dec 2018 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	7070.4	6996.2	
Quantity	26437	26437	
Unit Cost	0.267	0.265	-0.75
<b>Average Procurement Unit Cost</b>			
Cost	5951.5	5857.7	
Quantity	26319	26319	
Unit Cost	0.226	0.223	-1.33

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2018 \$M	BY 2018 \$M	% Change
	Original UCR Baseline (Sep 2015 APB)	Current Estimate (Dec 2018 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	5946.2	6996.2	
Quantity	26437	26437	
Unit Cost	0.225	0.265	+17.78
<b>Average Procurement Unit Cost</b>			
Cost	4920.0	5857.7	
Quantity	26319	26319	
Unit Cost	0.187	0.223	+19.25



APB Unit Cost History					
Item	Date	BY 2018 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Sep 2015	0.225	0.187	0.277	0.242
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	Aug 2017	0.225	0.187	0.277	0.242
Current APB	Jun 2018	0.267	0.226	0.329	0.290
Prior Annual SAR	Dec 2017	0.230	0.189	0.270	0.231
Current Estimate	Dec 2018	0.265	0.223	0.325	0.286

### SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY \$M)									
PAUC Development Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.277	-0.001	0.000	-0.001	0.015	0.030	0.000	0.005	0.048	0.325

Current SAR Baseline to Current Estimate (TY \$M)									
Initial APUC Development Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.242	-0.001	0.000	-0.001	0.015	0.026	0.000	0.005	0.044	0.286

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	Jul 2015	N/A	Jul 2015
Milestone C	N/A	Jul 2017	N/A	Jun 2018
IOC	N/A	Sep 2018	N/A	Mar 2019
Total Cost (TY \$M)	N/A	7324.5	N/A	8605.1
Total Quantity	N/A	26437	N/A	26437
PAUC	N/A	0.277	N/A	0.325

**Cost Variance**

Summary TY \$M					
Item	RDT&E	Procurement	MILCON	Acq O&M	Total
SAR Baseline (Development Estimate)	952.8	6371.7	--	--	7324.5
Previous Changes					
Economic	-0.5	-72.8	--	--	-73.3
Quantity	--	--	--	--	--
Schedule	--	-282.4	--	--	-282.4
Engineering	--	--	--	--	--
Estimating	+24.8	-248.3	--	+78.3	-145.2
Other	--	--	--	--	--
Support	--	+302.0	--	--	+302.0
Subtotal	+24.3	-301.5	--	+78.3	-198.9
Current Changes					
Economic	-1.1	+40.7	--	+0.5	+40.1
Quantity	--	--	--	--	--
Schedule	--	+258.8	--	--	+258.8
Engineering	--	+391.5	--	--	+391.5
Estimating	+48.8	+945.0	--	-26.0	+967.8
Other	--	--	--	--	--
Support	--	-178.7	--	--	-178.7
Subtotal	+47.7	+1457.3	--	-25.5	+1479.5
Adjustments	--	--	--	--	--
Total Changes	+72.0	+1155.8	--	+52.8	+1280.6
CE - Cost Variance	1024.8	7527.5	--	52.8	8605.1
CE - Cost & Funding	1024.8	7527.5	--	52.8	8605.1

Summary BY 2018 \$M					
Item	RDT&E	Procurement	MILCON	Acq O&M	Total
SAR Baseline (Development Estimate)	1026.2	4920.0	--	--	5946.2
Previous Changes					
Economic	--	--	--	--	--
Quantity	--	--	--	--	--
Schedule	--	-13.6	--	--	-13.6
Engineering	--	--	--	--	--
Estimating	+23.2	-167.7	--	+65.8	-78.7
Other	--	--	--	--	--
Support	--	+228.8	--	--	+228.8
Subtotal	+23.2	+47.5	--	+65.8	+136.5
Current Changes					
Economic	--	--	--	--	--
Quantity	--	--	--	--	--
Schedule	--	-13.4	--	--	-13.4
Engineering	--	+292.6	--	--	+292.6
Estimating	+45.1	+738.3	--	-22.1	+761.3
Other	--	--	--	--	--
Support	--	-127.4	--	--	-127.4
Subtotal	+45.1	+890.1	--	-22.1	+913.1
Adjustments	+0.1	+0.1	--	+0.2	+0.4
Total Changes	+68.4	+937.7	--	+43.9	+1050.0
CE - Cost Variance	1094.6	5857.7	--	43.9	6996.2
CE - Cost & Funding	1094.6	5857.7	--	43.9	6996.2

Previous Estimate: December 2017

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-1.1
Revised estimate to reflect the Milestone C Production and Deployment phase of the JAGM program (Army). (Estimating)	+13.1	+14.7
Revised estimate to reflect the Milestone C Production and Deployment phase of the JAGM program (Navy). (Estimating)	+30.8	+32.9
Adjustment for current and prior escalation. (Estimating)	+1.2	+1.2
<b>RDT&amp;E Subtotal</b>	<b>+45.1</b>	<b>+47.7</b>

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+40.7
Stretch-out of procurement buy profile from FY 2036 to FY 2039, which includes the Congressional rescission in FY 2019 (-\$20M) causing a shift of 108 missiles from FY 2019 across the Army profile (Army). (Schedule)	0.0	+295.3
Acceleration of procurement buy profile from FY 2039 to FY 2038 (Navy). (Schedule)	0.0	-15.4
Additional schedule variance in FY 2039 due to acceleration of procurement buy profile (Navy). (Schedule)	-13.4	-21.1
Additional funding due to production line cut-in of insensitive munition (IM) rocket motor (Army). (Engineering)	+208.7	+278.3
Additional funding due to production line cut-in of IM rocket motor (Navy). (Engineering)	+83.9	+113.2
Revised estimate to reflect production cost projections based on EMD contract actual costs (Army). (Estimating)	+519.6	+657.2
Revised estimate to reflect production cost projections based on EMD contract actual costs (Navy). (Estimating)	+10.7	+9.3
Adjustment for current and prior escalation. (Estimating)	-3.4	-3.3
Revised estimate due to internal program funding realignment from Support to Flyaway (Navy). (Estimating)	+211.4	+281.8
Adjustment for current and prior escalation. (Support)	+0.1	-0.1
Increase in Other Support due to procurement of Captive Air Training Missiles (Army). (Support)	+77.5	+98.1
Decrease in Other Support due to internal program funding realignment from Support to Flyaway (Navy). (Support)	-209.7	-281.8
Increase in Initial Spares due to updated estimate methodology (Army). (Support)	+4.7	+5.1
<b>Procurement Subtotal</b>	<b>+890.1</b>	<b>+1457.3</b>

Acq O&M	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+0.5
Revised estimate to reflect the Milestone C Production and Deployment phase of the JAGM program. (Estimating)	-22.1	-26.0
<b>Acq O&amp;M Subtotal</b>	<b>-22.1</b>	<b>-25.5</b>



## Contracts

### Contract Identification

**Appropriation:** RDT&E  
**Contract Name:** EMD and LRIP and Deployment  
**Contractor:** Lockheed Martin Corporation  
**Contractor Location:** 5600 W Sand Lake Rd MP-265  
 Orlando, FL 32819  
**Contract Number:** W31P4Q-15-C-0102  
**Contract Type:** Fixed Price Incentive(Firm Target) (FPIF)  
**Award Date:** July 31, 2015  
**Definitization Date:** July 31, 2015

### Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
195.2	201.3	1155	288.4	298.8	1541	298.8	298.8

### Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to incorporation of JAGM LRIP III Option into the contract.

### Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FPIF) contract.

### General Contract Variance Explanation

Cost Variance and Schedule Variance reporting are not required on this FPIF contract due to an EVM waiver granted by the DAE on October 17, 2014 in the JAGM Development Request for Proposals Release Decision ADM.

## Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	118	118	118	100.00%
Production	32	32	26319	0.12%
Total Program Quantity Delivered	150	150	26437	0.57%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	8605.1	Years Appropriated	12
Expended to Date	1219.4	Percent Years Appropriated	36.36%
Percent Expended	14.17%	Appropriated to Date	1581.8
Total Funding Years	33	Percent Appropriated	18.38%

The above data is current as of March 11, 2019.

## Operating and Support Cost

### Cost Estimate Details

Date of Estimate:	May 15, 2018
Source of Estimate:	SCP
Quantity to Sustain:	26319
Unit of Measure:	Missile
Service Life per Unit:	25.00 Years
Fiscal Years in Service:	FY 2019 - FY 2065

The 118 development missiles will not be sustained.

### Sustainment Strategy

#### Sustainment Approach

- Current: Three years initial Interim Contractor Support
- Future: Integrated Product Support based sustainment beginning 2nd Quarter FY 2022
- Obtain data rights to enable organic depot/partnering as required
- High Materiel Availability through design
- Leverage existing sustainment infrastructure

### Antecedent Information

No Antecedent

Cost Element	Annual O&S Costs BY2018 \$K	
	JAGM Average Annual Cost Per Missile	No Antecedent (Antecedent) N/A
Unit-Level Manpower	--	--
Unit Operations	--	--
Maintenance	0.192	--
Sustaining Support	0.344	--
Continuing System Improvements	0.047	--
Indirect Support	--	--
Other	--	--
<b>Total</b>	<b>0.583</b>	<b>--</b>

Item	Total O&S Cost \$M			
	JAGM		Current Estimate	No Antecedent (Antecedent)
	Current Production APB Objective/Threshold			
<b>Base Year</b>	400.9	441.0	383.2	N/A
<b>Then Year</b>	702.1	N/A	664.8	N/A

Disposal Cost is included in the Operating and Support Cost of the current APB objective and threshold for this program.

Since Milestone C was approved by the Army Acquisition Executive on June 15, 2018, the SAR Baseline is being updated from a Development Estimate to a Production Estimate and the base year of the program revised from FY 2015 to FY 2018.

#### Equation to Translate Annual Cost to Total Cost

Total Missile O&S = \$582.4 (Average Annual O&S Cost per Missile) x 25 (Years of Service Life) x 26,319 (Total Missile Quantity) = \$383.2M

O&S Cost Variance		
Category	BY 2018 \$M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2017 SAR	404.5	
Programmatic/Planning Factors	-6.3	Revised estimate to reflect the Milestone C Production and Deployment phase of the JAGM program.
Cost Estimating Methodology	0.0	
Cost Data Update	-15.0	Update to Engineering Services contract costs.
Labor Rate	0.0	
Energy Rate	0.0	
Technical Input	0.0	
Other	0.0	
<b>Total Changes</b>	<b>-21.3</b>	
Current Estimate	383.2	

Since Milestone C was approved by the Army Acquisition Executive on June 15, 2018, the SAR Baseline is being updated from a Development Estimate to a Production Estimate and the base year of the program revised from FY 2015 to FY 2018.

#### Disposal Estimate Details

**Date of Estimate:** May 15, 2018  
**Source of Estimate:** SCP  
**Disposal/Demilitarization Total Cost (BY 2018 \$M):** 3.2