Selected Acquisition Report (SAR)

Joint Air-to-Surface Standoff Missile (JASSM)

FY 2024 President's Budget

Defense Acquisition Visibility Environment (DAVE)

Table of Contents

Common Acronyms and 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
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
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
FMS - Foreign Military Sales
FOC - Full Operational Capability
FRP - Full Rate Production
FY - Fiscal Year
FYDP - Future Years Defense Program
ICE - Independent Cost Estimate
Inc - Increment
IOC - Initial Operational Capability
JROC - Joint Requirements Oversight Council
KPP - Key Performance Parameter
LRIP - Low Rate Initial Production
MDA - Milestone Decision Authority
MDAP - Major Defense Acquisition Program
MILCON - Military Construction
N/A - Not Applicable
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
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
SCP - Service Cost Position
TBD - To Be Determined
TY - Then Year
U.S. - United States
UCR - Unit Cost Reporting
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Information

Program Name

Joint Air-to-Surface Standoff Missile (JASSM-ER)

Subprogram Name

Joint Air-to-Surface Standoff Missile - Extended Range (JASSM-ER)

DoD Component

Air Force

Responsible Office

Program Manager

Name: Colonel Timothy Fuhrman
Date Assigned: July 17, 2022
Address: 205 West D Ave
Bldg 350
Eglin AFB, FL 32542
Phone: (850) 883- 5340

Mission and Description

Introduction:

The Joint Air-to-Surface Standoff Missile (JASSM) enables the U.S. Air Force to destroy the enemy's war-sustaining capabilities from outside its area air defenses. There are multiple variants that make up the JASSM family of missiles: AGM-158A baseline (BL) and the Extended Range (ER) family (AGM-158B, AGM-158B-2, AGM-158B-3 and AGM-158D). JASSM is precise, lethal, survivable, flexible, and adverse-weather capable.

Mission:
JASSM-ER provides both fighter and bomber aircraft the capability to strike critical, high value, heavily defended targets early in a campaign.

Vision:
To provide the warfighter with an autonomous, precision, standoff strike weapon product line at an affordable cost and schedule.

Description:
The AGM-158A (JASSM BL) has a >200NM range and the production was completed in Lot 16 (2021)

JASSM-ER is a low observable, highly survivable, subsonic cruise missile which carries a 1000-pound class, hardened, penetrating warhead with a robust blast fragmentation capability. A launch can occur over a wide range of altitudes and at ranges greater than 500 nautical miles.

AGM-158B: Extended range, >500NM range

AGM-158B-2: Upgrade to AGM-158B addressing obsolescence issues while increasing processing power to rapidly respond to emerging threats.

AGM-158B-3: Adds M-Code GPS receiver

AGM-158D: Adds Radio Frequency Equipment (RFE), Line of Site (LOS) and Beyond Line of Site (BLOS) Weapons Data Link (WDL) and associated antennas to support in-flight target updates.

CONOPS:
JASSM-ER employment will occur primarily in the early stages of conflict before air superiority is established, and in the later stages of conflict against high value targets remaining heavily defended. JASSM-ER can also be employed in those cases where, due to rules of engagement/political constraints, high value, point targets must be attacked from international airspace. JASSM-ER may be employed independently, or the missile may be used as part of a composite package.

Executive Summary

JASSM-ER

Program Highlights Since Last Report

At the close of calendar year 2022, AGM-158A materiel availability is 97.4% and the AGM-158B material availability is 86.7%

Four JASSM Weapon System Evaluation Program (WSEP) missions were conducted using one AGM-158A and three AGM-158B missiles from various B-1, B-52, and the first launch from an F-16 Block 30.

The AGM-158B-2 resolves obsolescence, enhances software code to C++, the Electronic Safe and Arm Fuze (ESAF), and upgrades the missile control unit. A system-level Critical Design Review (CDR) was conducted in April 2022; action items were resolved and closed in June 2022. A system-level Engineering Change Proposal (ECP) is planned for October 2023. The AGM-158B-2 will be cut in for low-rate initial production (LRIP) in Lot 19.

During CY 2022, the program office completed AGM-158B-2 design reviews and executed one flight test. As a result, EBJ Division leadership approved the AGM-158B-2 for a Lot 19 production cut-in. The ESAF completed its last flight test, and the Director, Operational Test and Evaluation (DOT&E) / Live Fire Test & Evaluation (LFT&E) officials concurred with the test report.

First AGM-158B-2 Flight Test was accomplished at White Sands Missile Range (WSMR) on 3 May 2022. Five follow-on Flight Tests are planned in CY 2023/2024.

The second AGM-158B-2's Flight Test (FT-2) is scheduled for March 2023. This will be the program's first AGM-158B-2 seeker-enabled flight test with a live ESAF and warhead.

Production:
As of December 2022, the program office (AFLCMC/EBJ) delivered 3,609 missiles (16 Lots) to the USAF. Lots 17 and 18 (AGM 158B) are meeting their delivery commitments to the warfighter. Lots 19 and 20 are on contract to produce 925 AGM-158B and AGM 158B-2 missiles.

The JASSM production facility in Troy, Alabama, started producing missiles with the pilot line (eight missiles) in Lot 17, and 18 LRIP began in October 2022 at ten missiles per month for a total of 110, which will complete in CY 2023. Additionally, Full Rate Production (FRP) will begin in 2Q FY 2024 at 45 missiles per month for a total of 540. This additional facility was built to increase capacity to meet the first Inventory Objective (IO) increase from 4,900 to 7,200 missiles.

Impending or Major contract awards or modifications:
The Lot 20 cut-in award is for 245 AGM-158B-2 missiles and is expected in April 2023 along with the ramp rate increase award to expand production to 720. The JASSM Program Office did a contract modification to Lot 20 contract, awarded in June 2022, for tooling, maintenance of the production facilities, and to purchase JASSM Anti-Jamming GPS Receivers (JAGR) units used in AGM-158B-2. The LOT 21 production contract is also expected to be awarded in Apr 2023. The Multi-Year Procurement (MYP) contract is expected to be awarded 1QTR FY2024.

M-Code Global Positioning System (GPS) receiver development contract was awarded in 4Q 2022.

In August 2022, Air Combat Command (ACC) formally changed the AGM-158D requirements resulting in a different materiel solution. This change necessitated funding disconnects in FY 2024-FY2027. The AGM-158D program has full support from HAF/A5/7 and HQ/ACC, and the program office expects Research, Development, Test, and Evaluation (RDT&E) funding disconnects to be resolved through the Budget process. The AGM-158D cost/schedule/performance requirements are stable. The AGM-158D has an updated Systems Requirement Document written IAW MIL Handbook 520 and AFI 631-101. These requirements have been vetted and approved by our ACC customer. The program office has built an estimated cost based on actuals incurred on similar projects. In addition, the program has conducted several risk reduction efforts and prototyping efforts to ensure that our cost and schedule moving forward remain stable.

In September 2022, the program office provided a separate AGM-158D update to SAF/AQP, HAF/A5 and HAF/A8 to socialize preliminary budget disconnects. In November 2022, the new AGM-158D acquisition strategy was approved, enabling AGM-158D to receive in-flight updates and prosecute moving targets/ time-sensitive targets at scale (OI #3). Funding requirements have been briefed via a cost review board process resulting in an approved service cost position by SAF/FMC, which there are funding disconnects in FY 2024-FY 2027. The JASSM program office and ACC are working together to resolve the funding disconnects in the next budget process.

The JASSM program office submitted a Program Deviation Report (PDR) in January 2019 to the Service Acquisition Executive (SAE) for a deviation from the Acquisition Program Baseline (APB) dated November 2017 due to increased IO from 4,900 to 7,200. The program office also submitted an RDT&E program deviation report in January 2020. The RDT&E breach was due to investment in improved missile capabilities for ACC with the AGM-158D variant of JASSM. In April 2022, HAF A5 officially changed the JASSM IO with an additional quantity increase from 7,200 to 10,250 missiles. As a result, the program office is working with SAF/AQP and SAF/AQX to update the 2017 APB no later than the 3rd Quarter of FY 2023. The APB update will incorporate cost data for the new IO that includes the AGM-158D missile insertion into the production line starting in Lot 22 (FY 2024).

Testing Status:

Multiple aircraft integration efforts for JASSM-ER are underway or have been completed. The F-16 Block 40/50 Universal Armament Interface testing was completed in CY2022 with one expenditure in 2Q2022. JASSM and the Strategic Development Planning and Experimentation team completed palletized munitions separation test on a C-130 platform in November 2021 and a live fire palletized demonstration from a MC-130 in December 2021. Both missions were successful. Another demonstration was also made on a C-130 in Norway in November 2022. F-35/JASSM (all variants of F-35 and JASSM) Integration continues progressing. On August 2, 2021, the JASSM Program Office and F-35 Joint Program Office resumed planning to integrate JASSM on the F-35. JASSM test assets were purchased in 2022 (quantity of 6) and 2023 (quantity of 12) for flight testing to start in 2025.

Multiple software efforts support the overall JASSM/JASSM-ER family of weapons. Three Missile Operational Flight Programs (MOFPs) are continually updated to provide increased capability to the currently fielded versions of JASSM BL and JASSM-ER (AGM-158B). A new MOFP is being developed to support the AGM-158B-2 and future JASSM-ER variants. JASSM’s unique mission planning software, which is ingested into the Joint Mission Planning System (JMPS), is continually updated to keep pace with improvements in the JASSM/JASSM-ER MOFPs. Finally, the JASSM Enterprise Software (JES), which contains several software components, is continually updated to support JASSM/JASSM-ER mission planning and post-strike analysis.

History of Significant Developments Since Program Initiation	
History of Significant Developments Since Program Initiation	
Date	**Significant Development Description**
Oct - 2022	New Troy P-72 production facility validation completed and Low-Rate Initial Production (LRIP) began for AGM-158B. The increase in production rate made the new facility necessary (Troy, Alabama).
Jul - 2022	Lot 19 AGM-158B-2 production cut-in awarded.
May - 2022	Electronic Safe and Arm Fuze (ESAF) production cut-in contract awarded for AGM-158B & AGM-158B-2.
Oct - 2021	Construction and security accreditation of the new JASSM production facility in Troy, Alabama completed.
Dec - 2020	A JASSM Separation Test Vehicle (no engine installed) was successfully released from an external hard point on the B-1 bomber during a demonstration at White Sands Missile Range.
Sep - 2020	JASSM Lot 15 which was 360 JASSM-ER's (AGM-158B) delivery completed.
Jan - 2020	JASSM submitted a Program Deviation Report for an RDT&E breach due to investment in improved warfighter capabilities for the JASSM AGM-158B-2 variant.
Oct - 2019	JASSM successfully employed against ISIS in Syria.
Aug - 2019	Lot 14 US missile production completed: 100 BL (AGM-158A) and 240 extended range missiles (AGM-158B). This was LOT 14 combined production of BL and ER missiles.
Apr - 2018	The first operational expenditure of JASSM-BL occurred on April 14, 2018. All 19 missiles launched successfully and engaged their intended target.

Schedule

JASSM-ER

Events	Milestone Baseline Objective	Current Baseline Objective/Threshold		Current Estimate/Actual	Deviation
JASSM-ER MS C	Sep 2010	Jan 2011	Jan 2011	Jan 2011	
JASSM-ER LRIP Contract Award	Jan 2011	Apr 2011	Apr 2011	Apr 2011	
JASSM-ER AA/B1-B	Apr 2013	Mar 2014	Mar 2014	Mar 2014	
JASSM-ER FRP	Dec 2013	Nov 2014	Nov 2014	Nov 2014	

Schedule Note

Known funding disconnect in FY 2024 through FY 2027 poses a schedule risk to the AGM-158D development if it is not rectified.

Performance

JASSM-ER

Performance Characteristics					
Milestone Baseline	**Current Baseline Objective/Threshold**		**Demonstrated Performance**	**Current Estimate/Actual**	**Deviation**
(KPP) - Materiel Availability (CPD Para 6.1.5)					
98%	98%	95%	JASSM: 97% JASSM -ER: 88%	JASSM: 97% JASSM-ER: 88%	
(KPP) - Missile Reliability (CPD para 6.2.8)					
4th Lot 91%	4th Lot 91%	IOT&E 80% 4th Lot 85%	JASSM: 85% JASSM -ER: 93%	JASSM: 93% JASSM-ER: 92%	
(KSA - Net-Ready (CPD para 6.1.3)					
All Operations	All Operations	Joint Critical Operations	All Operations	All Operations	

Requirement Reference

The capability requirements for AGM-158B are identical to the AGM-158A. AGM-158A requirements are provided in the Operational Requirements Document (ORD) dated January 20, 2004. AGM-158B/B-2 requirements are in the Capability Production Document (CPD) dated April 16, 2010.

Performance Note

Availability –JASSM-ER (AGM-158B) Missile Availability Current Estimate changed from 98% to 88% due to the PMG Wire Harness issue.

Reliability – JASSM Demonstrated Performance changed from 86% to 85%. JASSM-ER Demonstrated Performance changed from 91% to 93%. JASSM Current Estimate changed from 94% to 93%. JASSM-ER changed from 90% to 92%. These changes are due to updated reliability calculations from additional flight test events since December 2021 SAR.

The Williams International engine supplier identified a wiring issue due to faulty wire stripping/crimping from a new operator since July 2021. 239 missiles had been accepted before the issue was identified. Corrective actions were made to the engine supplier's manufacturing processes, and Lockheed Martin started collecting data to support a risk assessment to retain the 239 suspect missiles in inventory. The team initially tested 17 available engines. The post-testing results showed wire integrity and good continuity. Lockheed Martin submitted a risk assessment concluding there is very low risk in keeping the missiles in inventory as fully operational weapons. However, the program office, ACC, Navy, and HAF A5 evaluated an executable risk reduction mitigation path, which included increasing the testing sample size and providing higher confidence in the risk assessment. Lockheed Martin will inspect and repair 30 additional missiles for a total of 47 assets analyzed. Results are expected in July 2023.

Acquisition Budget Estimate
JASSM-ER

Total Acquisition Cost

		Milestone APB	Current Baseline		Budget Estimate PB 2024		
Category	**Base Year**	**Objective (BY$M)**	**Objective (BY$M)**	**Threshold (BY$M)**	**BY$M**	**TY$M**	**Deviation**
RDT&E	2010	265.5	519.5	571.5	**1,035.9**	1,358	**Yes**
Procurement	2010	3,366.1	3,297.1	3,626.8	**7,080.8**	9,719.4	**Yes**
MILCON	2010	0	0	0	**0**	0	
Acq. O&M	2010	0	0	0	**0**	0	
Total		3,631.6	3,816.6	4,198.26	8,116.7	11,077.4	
PAUC	2010	1.435	1.317	1.449	1.298	1.772	
APUC	2010	1.346	1.150	1.265	1.138	1.562	

Budget Note

Increased RDT&E to $1,358.0M to support AGM-158D requirements that were refined in August 2022
Procurement decreased due to removal of JASSM BL in alignment with initial and current APB as shown in Total Acquisition Cost table. The quantities have been constrained to budget since JASSM is a buy-to-budget program.

Cost Deviation Explanation

The Procurement and RDT&E breaches were previously reported in the December 2019 SAR. The Procurement APB breach was caused by a JASSM-ER quantity increase from 2,500 to 2,866. The quantity including, BL, increased to 4,900. The FY 2024 PB increases missiles by 3,355 (from 4,900 to 8,255). The RDT&E APB breach is due to investment in improved war-fighter capabilities. A Program Deviation Report (PDR) has been submitted, and an updated APB is in progress.

Total End Item Quantity

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development	31	31
Procurement	2,866	6,221
O&M-Acquired	--	--

Quantity Note

Removal of the 2,034 BL missiles included in the previous SAR brings the Current Estimate Quantity to a total of 6,221. Total including BL missiles is 8,255.

Unit Cost

JASSM-ER

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Category ($M) Base Year: 2010	**Current UCR Baseline**	**Current Estimate**	**% Change**
Program Acquisition Unit Cost			
Cost	3,816.6	8,116.7	
Quantity	2,897	6252	
Unit Cost	1.317	1.298	-1.42%
Average Procurement Unit Cost			
Cost	3,297.1	7,080.8	
Quantity	2,866	6,221	
Unit Cost	1.150	1.138	-1.03%

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Category ($M) Base Year: 2010	**Original UCR Baseline**	**Current Estimate**	**% Change**
Program Acquisition Unit Cost			
Cost	3,631.6	8,116.7	
Quantity	2,531	6,252	
Unit Cost	1.435	1.298	-9.53%
Average Procurement Unit Cost			
Cost	3,366.1	7,080.8	
Quantity	2,500	6,221	
Unit Cost	1.346	1.138	-15.44%

Risks

JASSM-ER

Risk and Sensitivity Analysis

Risk and Sensitivity Analysis
Current Procurement Cost (December - 2022)
1. Increased production from 4,900 to 8,255 missiles. Production costs are sensitive to forecasted Lot quantities and AGM-158B-2 requirements. Program Deviation Report signed by SAF/AQ on February 13, 2019, deferring APB update for increased quantities and AGM-158B-2 requirements to FY 2023. With SAF/AQ coordination, update will be completed in FY 2023 to incorporate April 2022 Inventory Objective memo addressing additional HAF/A5 inventory increase in quantity to 10,250.
Current Baseline Estimate (October - 2015)
1. There are no risks with this baseline estimate.
Original Baseline Estimate (August - 1996)
1. There are no risks with this baseline estimate.

Significant Schedule Risks

Significant Schedule Risks
Current Estimate (December - 2022)
1. There are no risks with this program at this time.

Technologies and Systems Engineering

Significant Technical Risks
Current Estimate (December - 2022)
1. There are no risks with this program at this time.

Low Rate Initial Production

JASSM-ER

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	1/10/2011	1/10/2011
Approved Quantity	100	160
Reference	Milestone C ADM	Milestone C ADM
Start Year	2011	2011
End Year	2013	2014

Contracts & Efforts

Contract Data	
Contract Number	FA8682-20-C-0001
Effort Number	
Modification Number	
Award Date	03/31/2020
Definitization Date	03/31/2020
Order Number	
CAGE Code/CAGE Legal Name	04939/Lockheed Martin Missile and Fire Control
Contract Title	JASSM Production (Lot 17/18)
Contract Address	Orlando, FL
Contracting Office	
Supported Phase	Production
Contract Strategy	
Contract Type	Firm-Fixed-Price
Modification Date	
Work Start Date	
Technical Data Rights	
Work Completed	

Contracts/Effort Price, Quantity, and Performance (TY$M)		
Initial Target Price	Current Target Price	
$818.2	$834.7	
Initial Ceiling Price	Current Ceiling Price	
N/A	$834.7	
Contractor EAC	PM EAC	
$834.7	$834.7	
Initial Quantity	Current Quantity	Delivered Quantity
790	790	0

Contract Note:
The difference between the Initial Contract Price Target and the Current Contract Price Target is due to Contract Modification P00006 - Lot 17/18 Rate Reopener.

Lots 17 and 18 were both awarded under contract number FA8682-20-C-0001 on March 31, 2020. Lot 17 is for 360 USG missiles and 40 FMS missiles at a price of $424.4M, and Lot 18 is for 390 USG missiles at a price of $393.8M. The total Lot 17/18 price is $818.2M and is considered the initial/original contract price. As of today's count, there have been 341 Lot 17 and 13 Lot 18 missiles delivered with signed DD250s.

P00006 - Lot 17/18 Rate Reopener increased the price of Lot 17 Missiles to $431.7M and Lot 18 to $403M for a total contract price of $834.7M.

Contract Data	
Contract Number	FA8682-21-C-0001
Effort Number	
Modification Number	P00020
Award Date	02/22/2021
Definitization Date	02/22/2021
Order Number	-
CAGE Code/CAGE Legal Name	04939/Lockheed Martin Missile and Fire Control
Contract Title	JASSM Production (Lot 19/20)
Contract Address	Orlando, FL
Contracting Office	Eglin JASSM Program Office
Supported Phase	Production
Contract Strategy	
Contract Type	Firm-Fixed-Price
Modification Date	July 28, 2022
Work Start Date	
Technical Data Rights	
Work Completed	

Contracts/Effort Price, Quantity, and Performance (TY$M)		
Initial Target Price	Current Target Price	
$428.4	$990.2	
Initial Ceiling Price	Current Ceiling Price	
N/A	N/A	
Contractor EAC	PM EAC	
$990.2	$990.2	
Initial Quantity	Current Quantity	Delivered Quantity
N/A	N/A	N/A

Contract Note:
JASSM-ER Lot 19 and LRASM Lots 4 and 5 were awarded on February 22, 2021, which included JASSM-ER procurement of 400 missiles for the USAF and LRASM procurement of 137 missiles for USN, USAF, FMS, and OSD Strategic Capabilities Office (SCO. On November 5, 2021, contract modification P00007 awarded Lot 20 for 94 All-Up-Round (AUR JASSM-ER Production Missiles. On February 25, 2022, Lot 20 contract modification P00013 awarded 123 additional AUR JASSM-ER Production Missiles. On March 17, 2022, Lot 20 contract modification P00014 awarded additional 308 AUR JASSM-ER Production Missiles. On July 28, 2022, Lot 19 contract modification P00020 awarded 40 down counted AUR JASSM-ER Production Missiles as AUR JASSM B-2 Production Missiles with increased capability for an additional $18.2M for a total value of $446.6M. Lot 20 was awarded with a quantity of 525 on P00014 for a total value of $543.6M. P00020 increased the price of Lot 19 Missiles to $446.6M and P00014 increased Lot 20 to $543.6M for a total contract price of $990.2M.

- February 22, 2021 Lot 19 + 400 JASSM-ER Lot 19 - 400
- November 5, 2021 - P00007 Lot 20 + 94 AUR JASSM-ER (AGM-158B Lot 20 - 94
- February 25, 2022 – P00013 Lot 20 + 123 AUR JASSM-ER (AGM-158B
- March 17, 2022 – P00014 Lot 20 + 308 AUR JASSM-ER (AGM-158B)
- July 28, 2022 – P00020 Lot 20 - 40

Deliveries and Expenditures

JASSM-ER

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	31	31	31	100.00%
Production	2,763	1,669	6,221	26.83%
Total Program Quantity Delivered	2,794	1,700	6,252	27.19%

Expended and Appropriated (TY $M)	
Years Appropriated to date:	23
Total Years Appropriated Funding (Current Baseline):	7,274
Percent Years Appropriated:	.32%
Then-Year Funding Appropriated as Percentage of Total Acquisition Estimate:	65.70%
Then-Year Funding Expended as Percentage of Total Acquisition Estimate:	28.40%
Total Acquisition Cost:	$11,077.4

Deliveries and Expenditures Note

Total Deliveries in this table excludes JASSM BL. Total Acquisition does not include Consolidated Asset Management (CAM O&M). Expended to Date and Appropriated to Date exclude CAM O&M. Includes Large Lot Procurement amount of $769.672M in FY 2024.

The Total Program Quantity Delivered number decreased from 44.9% to 27.2% due to an overall quantity increases. The JASSM BL quantities are now excluded from calculations to align with the JASSM-ER only APB.

Operating and Support Costs

JASSM-ER

O&S Cost Breakdown:

Category (BY2010$ Million)	JASSM ER
Unit-Level Manpower	$131.3
Unit Operations	$0.0
Maintenance	$285.1
Sustaining Support	$699.1
Continued System Improvements	$917.2
Other	$0.0
Total	$2,032.7

Cost Estimate Source: POE dated February 15, 2023

O&S Cost Note: Assumed 20-year shelf-life for all JASSM-ER variants. Quantities assume 11,027 JASSM-ER.

Total Program O&S Cost Compared with Baseline					
Base Year: 2010	Current Baseline				
	Objective (BY$M)	Threshold (BY$M)	Current Estimate (BY$M)	Current Estimate (TY$M)	Deviation
Total O&S	$622.5	$684.8	**$2,032.7**	$4,391.0	Yes

O&S Cost Deviation Explanation

Increase in Current Estimate resulting from new shelf-life assumptions, added variants and increased quantities. Total Disposal not discretely included in Current APB. The 2017 APB O&S Cost ends in FY 2033 using a total quantity of 4,900 and a Baseline 15-year shelf life. The FY 2023 O&S Cost ends in FY 2060 using a total quantity of 13,061 and an assumed 20-year shelf life for BL and ER, also added the ER AGM-158 B-2, B-3, and D variants.

Operating and Support Costs - Disposal and Unitized Costs

JASSM-ER

Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost: The Average Annual O&S Cost represents a complex variance mix and utilizes assets in inventory testing.

Sustainment Factors	System Name: JASSM-ER	Antecedent System Name: JASSM
Quantity to Sustain	11,027	2,034
Unit of Measure	Missile	Missile
Unit Expected Service Life	20	20

Base Year: 2010

	System Name: JASSM-ER	Antecedent System Name: JASSM
Unit-Level Manpower	$0.6	$1.2
Unit Operations	$0.0	$0.0
Maintenance	$1.3	$0.4
Sustaining Support	$3.2	$0.7
Continued System Improvements	$4.2	$5.7
Other	$0.9	$0.0
Total O&S	$9.2	$8.0

Disposal/Demilitarization Cost Estimate

(Base Year $Millions)	System Name: JASSM-ER	Antecedent System Name: JASSM
Total Disposal	$75.6	$12.4

Cost Estimate Source - Disposal	
Type:	Program Office Estimate
Approval Authority and Date:	Center Cost Staff (FZC) 2/15/2023
Note:	
Assumed 20-year shelf-life for all JASSM-ER variants. Quantities assume 2,034 JASSM BL and 11,027 JASSM-ER.	