



# Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-555



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

As of FY 2017 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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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)

## Program Information

**Program Name**

Joint Air-to-Surface Standoff Missile (JASSM)

**DoD Component**

Air Force

**Joint Participants**

Department of the Navy

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## References

### JASSM Baseline

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**SAR Baseline (Production Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated April 4, 2011

**Approved APB**

Air Force Acquisition Executive (AFAE) Approved Acquisition Program Baseline (APB) dated March 20, 2015

### JASSM-ER

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**SAR Baseline (Production Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated April 4, 2011

**Approved APB**

Air Force Acquisition Executive (AFAE) Approved Acquisition Program Baseline (APB) dated March 20, 2015

## Mission and Description

### Introduction:

The Joint Air-to-Surface Standoff Missile (JASSM) is a next generation cruise missile enabling the U.S. Air Force to destroy the enemy's war-sustaining capabilities from outside its area air defenses. It is precise, lethal, survivable, flexible, and adverse-weather capable. JASSM's inherent accuracy (three meters (m) or less using the Imaging Infrared (IIR) seeker and less than 13 m with Global Positioning System (GPS)/Inertial Navigation System (INS) only) reduces the number of weapons and sorties required to destroy a target.

### Mission:

JASSM 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 on schedule.

### Description:

JASSM Baseline (BL) and JASSM-Extended Range (ER) are low observable, highly survivable, subsonic cruise missiles which carry a 1000-pound class, hardened, penetrating warhead with a robust blast fragmentation capability. The missiles employ an IIR seeker system to attack fixed, point targets requiring precision targeting. The missiles use GPS/INS for mid-course navigation and as a back up for terminal guidance. A launch can occur over a wide range of altitudes and at ranges greater than 200 nautical miles (nm) (Baseline) or greater than 500 nm (ER). JASSM Baseline and JASSM-ER (Lots 1-10) have a 15-year warranty. Lot 11 and out will be under Contractor Logistics Support.

### CONOPS:

JASSM 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 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 may be employed independently or the missile may be used as part of a composite package.

## Executive Summary

Pursuant to section 2432 of title 10, United States Code, this is the final SAR submission for the JASSM BL subprogram, because the subprogram is 90% or more expended.

During CY 2015, the Defense Contract Management Agency accepted 34 of 40 JASSM-ER LRIP Lot 3 missiles, the remaining 8 JASSM BL Lot 10 missiles, and 148 of 190 BL Lot 11 missiles. Production began on BL Lot 12 and ER LRIP Lot 4 in November 2015. JASSM BL is in sustained production with over 1,520 missiles currently in inventory. ER continues with LRIP, having 90 missiles in its inventory.

The BL and ER Lot 13 Production Contract was awarded to Lockheed Martin (LM) on October 9, 2015 for 100 BL and 140 ER missiles. ER Lot 14a was awarded on December 1, 2015 for 100 JASSM BL missiles and 140 ER missiles. Lot 14b is expected to be exercised for 100 additional ER missiles upon funding availability. Unit prices for JASSM-ER decreased by 17% for Lot 13 and 22% for Lot 14. Total quantity for the two lots is 200 BL, 380 ER, and 86 FMS.

On April 15, 2015, the fourth and fifth of five planned Product Verification Test (PVT) launches were completed and achieved all major test objectives for the Guidance Navigation and Control/Aerodynamic (GN&C) (inverted) flight performance capability. This test will provide important data to assess flight performance improvements in the new missile Operational Flight Program. The missile flights were nominal; all test objectives appear to have been met.

The last two of the planned five GN&C/Aero software flights, PVT 13 and 14, were flown on April 15, 2015. The B-52 released both JASSM missiles from high altitude. Both missiles completed their planned missions, destroying their intended targets. Lessons learned from this series of flights will enable us to continue evaluating inverted flight and high altitude employments. Another product verification flight test, PVT 15, was conducted on November 23, 2015 with a JASSM-ER missile employed. The missile included a new Missile Control Unit, Trimble Global Positioning System (GPS) software version 0615, and Universal Armament Interface Missile Operational Flight Program 52.0.06. The missile was released by a B-1 in a degraded GPS environment and appeared to be successful.

During CY 2015, eight successful Weapon System Evaluation Program (WSEP) events were conducted delivering JASSM BL and JASSM-ER from five aircraft platforms. Air Combat Command's (ACC) May 2015 WSEP evaluations of JASSM BL were completed with three missiles. The first missile was employed by B-52 on May 4, 2015 in the presence of significant degraded GPS environment. The second missile was employed by F-16 on May 11, 2015 in a degraded GPS environment. This missile was loaded with black keys (same GPS crypto as failed missile in 2014 WSEP); F-16 is the only platform capable of loading black keys. The third missile, which was the first lot 10 JASSM BL employed, was released from a B-2 on May 12, 2015. All of the missiles successfully flew their intended route and all appeared nominal. On August 11, 2015, two JASSM-ERs were launched from B-1B aircraft during a WSEP mission. Both missiles appeared to function nominally. This marks the first employment of a JASSM-ER missile in WSEP, ACC's follow-on operational test and evaluation program. Additionally, on August 13, 2015, a JASSM BL missile was launched from an F-15E which also appeared to function normally. The last WSEP missiles launched in CY 2015 were on November 4, 2015. Two JASSM-ERs were successfully employed from B-1B aircraft. Both appeared to function nominally and ended in high-order detonation.

Demonstrated reliability for both variants of JASSM meet or exceed specification; BL at 87% (requirement is 85%) and ER at 92% (requirement at LRIP Lot 4 is 85%).

BL Material Availability ( $A_m$ ) is 81% (below the 95% requirement);  $A_m$  decreased from 84.2% in 2015 due to the ACC world-wide inspection on BL missiles from Lots 2-7 in September 2015. 642 missiles were inspected and 137 were determined to be unserviceable. The  $A_m$  get well plan moved from November 2017 to April 2019. LM has continually met warranty repair commitments of 24 per quarter throughout the year.

ER  $A_m$  increased from 96.7% to 100% after of the two missiles that failed for the engine heatshield were repaired and are now serviceable.

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

## Threshold Breaches

### JASSM Baseline

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APB Breaches		
Schedule		<input type="checkbox"/>
Performance		<input type="checkbox"/>
Cost	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
O&S Cost		<input type="checkbox"/>
Unit Cost	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

Nunn-McCurdy Breaches		
<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	PAUC	None
	APUC	None

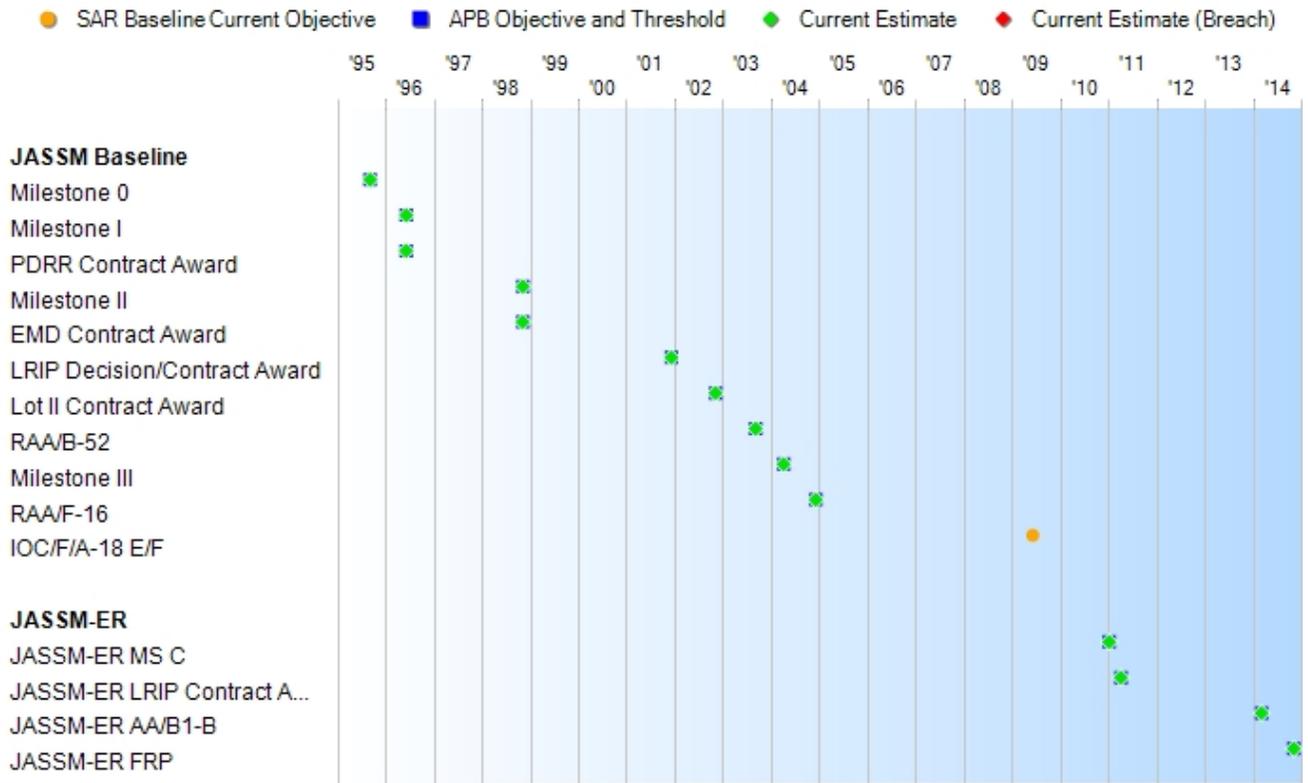
### JASSM-ER

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APB Breaches		
Schedule		<input type="checkbox"/>
Performance		<input type="checkbox"/>
Cost	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
O&S Cost		<input type="checkbox"/>
Unit Cost	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

Nunn-McCurdy Breaches		
<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	PAUC	None
	APUC	None

# Schedule



## JASSM Baseline

Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate
Milestone 0	Sep 1995	Sep 1995	Sep 1995	Sep 1995
Milestone I	Jun 1996	Jun 1996	Jun 1996	Jun 1996
PDRR Contract Award	Jun 1996	Jun 1996	Jun 1996	Jun 1996
Milestone II	Nov 1998	Nov 1998	Nov 1998	Nov 1998
EMD Contract Award	Nov 1998	Nov 1998	Nov 1998	Nov 1998
LRIP Decision/Contract Award	Jan 2001	Dec 2001	Dec 2001	Dec 2001
Lot II Contract Award	Jan 2002	Nov 2002	Nov 2002	Nov 2002
RAA/B-52	Sep 2002	Sep 2003	Sep 2003	Sep 2003
Milestone III	Oct 2003	Apr 2004	Apr 2004	Apr 2004
RAA/F-16	Dec 2003	Dec 2004	Dec 2004	Dec 2004
IOC/F/A-18 E/F	Jun 2009	N/A	N/A	N/A

### Change Explanations

None

### Acronyms and Abbreviations

PDRR - Program Definition and Risk Reduction  
 RAA - Required Assets Available

**JASSM-ER**

Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate
JASSM-ER MS C	Jan 2007	Jan 2011	Jan 2011	Jan 2011
JASSM-ER LRIP Contract Award	Jan 2011	Apr 2011	Apr 2011	Apr 2011
JASSM-ER AA/B1-B	Dec 2008	Mar 2014	Mar 2014	Mar 2014
JASSM-ER FRP	Dec 2013	Nov 2014	Nov 2014	Nov 2014

**Change Explanations**

None

**Acronyms and Abbreviations**

AA - Assets Available

MS - Milestone

## Performance

### JASSM Baseline

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
<b>Carrier Operability (KPP)</b>				
Compatible with carrier ops	Compatible with carrier ops	Compatible with carrier ops	N/A	None
<b>Interoperability (KPP)</b>				
100% of top-level IER	100% of top-level IER	100% of top-level IER designated critical	100% of top-level IER	100% of top-level IER

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

### Requirements Reference

Operational Requirements Document (ORD) dated January 20, 2004

### Change Explanations

None

### Notes

The Carrier Operability KPP was eliminated when the Department of the Navy withdrew from the JASSM program.

### Acronyms and Abbreviations

IER - Information Exchange Requirement  
 ops - operations

**JASSM-ER**

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
<b>Materiel Availability (KPP) (CPD Para 6.1.5)</b>				
.98	.98	.95	1.0	.97
<b>Net-Ready (KPP) (CPD para 6.1.3)</b>				
All Ops	All Ops	Joint Critical Ops	All Ops	All Ops
<b>Missile Reliability (KSA) (CPD para 6.2.8)</b>				
4th Lot .91	4th Lot .91	IOT&E .80 4th Lot .85	IOT&E .95	4th Lot .91

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

**Requirements Reference**

Capability Production Document (CPD) dated April 16, 2010, JASSM-ER Annex to the JASSM Operational Requirements Document (ORD) and ORD III dated January 31, 2005, and the ORD 303-95-III dated January 20, 2004

**Change Explanations**

None

**Acronyms and Abbreviations**

IOT&E - Initial Operational Test and Evaluation  
 KSA - Key System Attributes  
 Ops - Operations  
 para - paragraph

## Track to Budget

### JASSM Baseline

RDT&E			
Appn	BA	PE	
Navy	1319	07	0604312N
	<b>Project</b>	<b>Name</b>	
	2242	Joint Air-to-Surface Standoff Missile (Shared) (Sunk)	
Air Force	3600	07	0207325F
	<b>Project</b>	<b>Name</b>	
	674515	Joint Air-to-Surface Standoff Missile (Shared) (Sunk)	
	675356	JASSM Extended Range (JASSM-ER) (Shared) (Sunk)	

Procurement			
Appn	BA	PE	
Air Force	3020	04	0207325F
	<b>Line Item</b>	<b>Name</b>	
	000999	Initial Spares	
Air Force	3020	02	0207325F
	<b>Line Item</b>	<b>Name</b>	
	654515	Joint Air-to-Surface Standoff Missile (Shared) (Sunk)	
	JASSM0	Joint Air-to-Surface Standoff Missile	

### JASSM-ER

RDT&E			
Appn	BA	PE	
Air Force	3600	07	0207325F
	<b>Project</b>	<b>Name</b>	
	674515	Joint Air-to-Surface Standoff Missile (Shared) (Sunk)	
	675356	JASSM Extended Range (JASSM-ER)	

Procurement			
Appn	BA	PE	
Air Force	3020	04	0207325F
	<b>Line Item</b>	<b>Name</b>	
	000999	Initial Spares	
Air Force	3020	02	0207325F
	<b>Line Item</b>	<b>Name</b>	
	654515	Joint Air-to-Surface Standoff Missile (Shared) (Sunk)	
	JASSM0	Joint Air-to-Surface Standoff Missile	

## Cost and Funding

### Cost Summary - Total Program

Total Acquisition Cost - Total Program							
Appropriation	BY 2010 \$M			BY 2010 \$M	TY \$M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	1405.8	1485.1	--	1505.6	1199.8	1304.5	1326.7
Procurement	3648.7	5157.5	--	5213.3	3756.2	5954.3	5937.8
Flyaway	--	--	--	4286.8	--	--	4857.4
Recurring	--	--	--	4286.8	--	--	4857.4
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	926.5	--	--	1080.4
Other Support	--	--	--	923.6	--	--	1076.7
Initial Spares	--	--	--	2.9	--	--	3.7
MILCON	31.0	0.0	--	0.0	25.1	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	5085.5	6642.6	N/A	6718.9	4981.1	7258.8	7264.5

## Cost and Funding

### Cost Summary - JASSM Baseline

Total Acquisition Cost - JASSM Baseline							
Appropriation	BY 2010 \$M			BY 2010 \$M	TY \$M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	1246.7	1189.7	1308.7	1182.0	1053.2	1000.8	992.0
Procurement	1612.8	1860.4	2046.4	1836.3	1601.4	1894.7	1858.4
Flyaway	--	--	--	1387.4	--	--	1401.6
Recurring	--	--	--	1387.4	--	--	1401.6
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	448.9	--	--	456.8
Other Support	--	--	--	448.5	--	--	456.3
Initial Spares	--	--	--	0.4	--	--	0.5
MILCON	31.0	0.0	0.0	0.0	25.1	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2890.5	3050.1	N/A	3018.3	2679.7	2895.5	2850.4

#### Current APB Cost Estimate Reference

Service Cost Position dated October 10, 2014

#### Confidence Level

Confidence Level of cost estimate for current APB: 50%

The Service Cost Position represents the expected value cost for the program. It takes into consideration relevant risks including ordinary levels of external and unforeseen events. It aims to provide sufficient resources to execute the program under normal conditions encountering average levels of technical, schedule, and programmatic risk.

Total Quantity - JASSM Baseline			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	87	87	87
Procurement	2853	2054	2034
Total	2940	2141	2121

## Cost Summary - JASSM-ER

Total Acquisition Cost - JASSM-ER							
Appropriation	BY 2010 \$M			BY 2010 \$M	TY \$M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	159.1	295.4	324.9	323.6	146.6	303.7	334.7
Procurement	2035.9	3297.1	3626.8	3377.0	2154.8	4059.6	4079.4
Flyaway	--	--	--	2899.4	--	--	3455.8
Recurring	--	--	--	2899.4	--	--	3455.8
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	477.6	--	--	623.6
Other Support	--	--	--	475.1	--	--	620.4
Initial Spares	--	--	--	2.5	--	--	3.2
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2195.0	3592.5	N/A	3700.6	2301.4	4363.3	4414.1

### Current APB Cost Estimate Reference

Service Cost Position dated October 10, 2014

### Confidence Level

Confidence Level of cost estimate for current APB: 50%

The Service Cost Position represents the expected value cost for the program. It takes into consideration relevant risks including ordinary levels of external and unforeseen events. It aims to provide sufficient resources to execute the program under normal conditions encountering average levels of technical, schedule, and programmatic risk.

### Cost Notes

M-Code funding totaling \$60.8M was added to JASSM's FY 2017 PB. The M-Code requirement was not included in the current APB. As a result of the additional funding the program is \$2.3M under the RDT&E threshold. JASSM is working on new estimates to include M-Code and future updates to the APB.

Total Quantity - JASSM-ER			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E		7	31
Procurement		2500	2846
Total		2507	2877

## Cost and Funding

### Funding Summary - Total Program

Appropriation Summary									
FY 2017 President's Budget / December 2015 SAR (TY\$ M)									
Appropriation	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
RDT&E	1201.2	9.8	30.0	20.3	26.0	4.5	4.6	30.3	1326.7
Procurement	2251.4	426.4	432.0	440.9	448.4	455.8	463.8	1019.1	5937.8
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2017 Total	3452.6	436.2	462.0	461.2	474.4	460.3	468.4	1049.4	7264.5
PB 2016 Total	3451.3	454.2	442.1	450.0	457.5	465.7	464.9	1049.3	7235.0
Delta	1.3	-18.0	19.9	11.2	16.9	-5.4	3.5	0.1	29.5

## Cost and Funding

### Funding Summary - JASSM Baseline

Appropriation Summary									
FY 2017 President's Budget / December 2015 SAR (TY\$ M)									
Appropriation	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
RDT&E	992.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	992.0
Procurement	1784.3	74.1	0.0	0.0	0.0	0.0	0.0	0.0	1858.4
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2017 Total	2776.3	74.1	0.0	0.0	0.0	0.0	0.0	0.0	2850.4
PB 2016 Total	2731.3	74.1	0.0	0.0	0.0	0.0	0.0	0.0	2805.4
Delta	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.0

Quantity Summary										
FY 2017 President's Budget / December 2015 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Development	87	0	0	0	0	0	0	0	0	87
Production	0	1934	100	0	0	0	0	0	0	2034
PB 2017 Total	87	1934	100	0	0	0	0	0	0	2121
PB 2016 Total	87	1934	100	0	0	0	0	0	0	2121
Delta	0	0	0	0	0	0	0	0	0	0

## Funding Summary - JASSM-ER

Appropriation Summary									
FY 2017 President's Budget / December 2015 SAR (TY\$ M)									
Appropriation	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
RDT&E	209.2	9.8	30.0	20.3	26.0	4.5	4.6	30.3	334.7
Procurement	467.1	352.3	432.0	440.9	448.4	455.8	463.8	1019.1	4079.4
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2017 Total	676.3	362.1	462.0	461.2	474.4	460.3	468.4	1049.4	4414.1
PB 2016 Total	720.0	380.1	442.1	450.0	457.5	465.7	464.9	1049.3	4429.6
Delta	-43.7	-18.0	19.9	11.2	16.9	-5.4	3.5	0.1	-15.5

Quantity Summary										
FY 2017 President's Budget / December 2015 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Development	31	0	0	0	0	0	0	0	0	31
Production	0	300	240	360	360	360	360	360	526	2866
PB 2017 Total	31	300	240	360	360	360	360	360	526	2897
PB 2016 Total	31	275	260	360	360	360	360	360	531	2897
Delta	0	25	-20	0	0	0	0	0	-5	0

## Cost and Funding

### Annual Funding By Appropriation - JASSM Baseline

Annual Funding - JASSM Baseline							
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
1998	--	--	--	--	--	--	5.3
1999	--	--	--	--	--	--	1.8
2000	--	--	--	--	--	--	3.4
2001	--	--	--	--	--	--	2.0
2002	--	--	--	--	--	--	5.9
2003	--	--	--	--	--	--	16.1
2004	--	--	--	--	--	--	20.8
Subtotal	6	--	--	--	--	--	55.3

Annual Funding - JASSM Baseline							
1319   RDT&E   Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2010 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1998	--	--	--	--	--	--	6.5
1999	--	--	--	--	--	--	2.2
2000	--	--	--	--	--	--	4.1
2001	--	--	--	--	--	--	2.4
2002	--	--	--	--	--	--	6.9
2003	--	--	--	--	--	--	18.5
2004	--	--	--	--	--	--	23.2
Subtotal	6	--	--	--	--	--	63.8

Annual Funding - JASSM Baseline							
3600   RDT&E   Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1996	--	--	--	--	--	--	27.6
1997	--	--	--	--	--	--	160.7
1998	--	--	--	--	--	--	163.8
1999	--	--	--	--	--	--	121.7
2000	--	--	--	--	--	--	154.4
2001	--	--	--	--	--	--	118.6
2002	--	--	--	--	--	--	82.8
2003	--	--	--	--	--	--	35.0
2004	--	--	--	--	--	--	9.8
2005	--	--	--	--	--	--	11.5
2006	--	--	--	--	--	--	22.4
2007	--	--	--	--	--	--	10.5
2008	--	--	--	--	--	--	3.5
2009	--	--	--	--	--	--	4.1
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	2.8
2014	--	--	--	--	--	--	0.1
2015	--	--	--	--	--	--	7.4
Subtotal	81	--	--	--	--	--	936.7

Annual Funding - JASSM Baseline							
3600   RDT&E   Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	BY 2010 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1996	--	--	--	--	--	--	34.5
1997	--	--	--	--	--	--	198.4
1998	--	--	--	--	--	--	200.8
1999	--	--	--	--	--	--	147.8
2000	--	--	--	--	--	--	184.6
2001	--	--	--	--	--	--	139.7
2002	--	--	--	--	--	--	96.6
2003	--	--	--	--	--	--	40.3
2004	--	--	--	--	--	--	11.0
2005	--	--	--	--	--	--	12.6
2006	--	--	--	--	--	--	23.8
2007	--	--	--	--	--	--	10.9
2008	--	--	--	--	--	--	3.6
2009	--	--	--	--	--	--	4.1
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	2.6
2014	--	--	--	--	--	--	0.1
2015	--	--	--	--	--	--	6.8
Subtotal	81	--	--	--	--	--	1118.2

Annual Funding - JASSM Baseline 3020   Procurement   Missile Procurement, Air Force								
Fiscal Year	Quantity	TY \$M						
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program	
2001	--	--	0.2	--	0.2	--	0.2	
2002	76	33.6	--	--	33.6	9.1	42.7	
2003	100	36.5	--	--	36.5	15.5	52.0	
2004	240	90.2	--	--	90.2	10.7	100.9	
2005	288	112.2	--	--	112.2	27.0	139.2	
2006	75	69.9	--	--	69.9	28.8	98.7	
2007	163	124.8	--	--	124.8	35.9	160.7	
2008	111	103.5	--	--	103.5	56.5	160.0	
2009	134	129.0	--	--	129.0	51.7	180.7	
2010	3	2.6	--	--	2.6	17.2	19.8	
2011	167	146.5	--	--	146.5	19.9	166.4	
2012	174	153.6	--	--	153.6	24.8	178.4	
2013	183	148.1	--	--	148.1	19.3	167.4	
2014	120	100.1	--	--	100.1	77.7	177.8	
2015	100	86.0	--	--	86.0	53.4	139.4	
2016	100	64.8	--	--	64.8	9.3	74.1	
Subtotal	2034	1401.4	0.2	--	1401.6	456.8	1858.4	

Annual Funding - JASSM Baseline 3020   Procurement   Missile Procurement, Air Force								
Fiscal Year	Quantity	BY 2010 \$M						
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program	
2001	--	--	0.2	--	0.2	--	0.2	
2002	76	38.7	--	--	38.7	10.4	49.1	
2003	100	41.6	--	--	41.6	17.6	59.2	
2004	240	100.5	--	--	100.5	11.9	112.4	
2005	288	121.4	--	--	121.4	29.2	150.6	
2006	75	73.6	--	--	73.6	30.3	103.9	
2007	163	128.1	--	--	128.1	36.9	165.0	
2008	111	104.3	--	--	104.3	57.0	161.3	
2009	134	128.3	--	--	128.3	51.4	179.7	
2010	3	2.5	--	--	2.5	16.9	19.4	
2011	167	140.7	--	--	140.7	19.1	159.8	
2012	174	145.0	--	--	145.0	23.4	168.4	
2013	183	136.7	--	--	136.7	17.8	154.5	
2014	120	91.1	--	--	91.1	70.8	161.9	
2015	100	77.4	--	--	77.4	48.0	125.4	
2016	100	57.3	--	--	57.3	8.2	65.5	
Subtotal	2034	1387.2	0.2	--	1387.4	448.9	1836.3	

## Annual Funding By Appropriation - JASSM-ER

Annual Funding - JASSM-ER							
3600   RDT&E   Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2003	--	--	--	--	--	--	13.6
2004	--	--	--	--	--	--	15.7
2005	--	--	--	--	--	--	31.8
2006	--	--	--	--	--	--	35.2
2007	--	--	--	--	--	--	22.5
2008	--	--	--	--	--	--	8.3
2009	--	--	--	--	--	--	20.6
2010	--	--	--	--	--	--	26.5
2011	--	--	--	--	--	--	19.3
2012	--	--	--	--	--	--	5.6
2013	--	--	--	--	--	--	2.9
2014	--	--	--	--	--	--	2.2
2015	--	--	--	--	--	--	5.0
2016	--	--	--	--	--	--	9.8
2017	--	--	--	--	--	--	30.0
2018	--	--	--	--	--	--	20.3
2019	--	--	--	--	--	--	26.0
2020	--	--	--	--	--	--	4.5
2021	--	--	--	--	--	--	4.6
2022	--	--	--	--	--	--	6.1
2023	--	--	--	--	--	--	6.1
2024	--	--	--	--	--	--	6.1
2025	--	--	--	--	--	--	6.0
2026	--	--	--	--	--	--	6.0
Subtotal	31	--	--	--	--	--	334.7

Annual Funding - JASSM-ER							
3600   RDT&E   Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	BY 2010 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2003	--	--	--	--	--	--	15.7
2004	--	--	--	--	--	--	17.6
2005	--	--	--	--	--	--	34.8
2006	--	--	--	--	--	--	37.4
2007	--	--	--	--	--	--	23.3
2008	--	--	--	--	--	--	8.4
2009	--	--	--	--	--	--	20.6
2010	--	--	--	--	--	--	26.2
2011	--	--	--	--	--	--	18.7
2012	--	--	--	--	--	--	5.3
2013	--	--	--	--	--	--	2.7
2014	--	--	--	--	--	--	2.0
2015	--	--	--	--	--	--	4.6
2016	--	--	--	--	--	--	8.8
2017	--	--	--	--	--	--	26.6
2018	--	--	--	--	--	--	17.7
2019	--	--	--	--	--	--	22.2
2020	--	--	--	--	--	--	3.8
2021	--	--	--	--	--	--	3.8
2022	--	--	--	--	--	--	4.9
2023	--	--	--	--	--	--	4.8
2024	--	--	--	--	--	--	4.7
2025	--	--	--	--	--	--	4.5
2026	--	--	--	--	--	--	4.5
Subtotal	31	--	--	--	--	--	323.6

Annual Funding - JASSM-ER 3020   Procurement   Missile Procurement, Air Force							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2010	30	52.4	--	--	52.4	4.3	56.7
2011	--	--	--	--	--	1.8	1.8
2012	30	52.3	--	--	52.3	4.6	56.9
2013	40	62.1	--	--	62.1	6.6	68.7
2014	60	89.8	--	--	89.8	3.5	93.3
2015	140	174.7	--	--	174.7	15.0	189.7
2016	240	315.7	--	--	315.7	36.6	352.3
2017	360	394.9	--	--	394.9	37.1	432.0
2018	360	402.6	--	--	402.6	38.3	440.9
2019	360	409.6	--	--	409.6	38.8	448.4
2020	360	416.3	--	--	416.3	39.5	455.8
2021	360	423.7	--	--	423.7	40.1	463.8
2022	360	420.4	--	--	420.4	46.3	466.7
2023	166	241.3	--	--	241.3	47.5	288.8
2024	--	--	--	--	--	18.7	18.7
2025	--	--	--	--	--	19.3	19.3
2026	--	--	--	--	--	19.8	19.8
2027	--	--	--	--	--	20.4	20.4
2028	--	--	--	--	--	21.0	21.0
2029	--	--	--	--	--	21.6	21.6
2030	--	--	--	--	--	22.2	22.2
2031	--	--	--	--	--	22.8	22.8
2032	--	--	--	--	--	23.4	23.4
2033	--	--	--	--	--	24.1	24.1
2034	--	--	--	--	--	24.8	24.8
2035	--	--	--	--	--	25.5	25.5
Subtotal	2866	3455.8	--	--	3455.8	623.6	4079.4

Annual Funding - JASSM-ER 3020   Procurement   Missile Procurement, Air Force							
Fiscal Year	Quantity	BY 2010 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2010	30	51.3	--	--	51.3	4.2	55.5
2011	--	--	--	--	--	1.7	1.7
2012	30	49.4	--	--	49.4	4.3	53.7
2013	40	57.3	--	--	57.3	6.1	63.4
2014	60	81.8	--	--	81.8	3.1	84.9
2015	140	157.2	--	--	157.2	13.5	170.7
2016	240	279.0	--	--	279.0	32.4	311.4
2017	360	342.6	--	--	342.6	32.1	374.7
2018	360	342.6	--	--	342.6	32.6	375.2
2019	360	341.7	--	--	341.7	32.3	374.0
2020	360	340.5	--	--	340.5	32.3	372.8
2021	360	339.6	--	--	339.6	32.2	371.8
2022	360	330.4	--	--	330.4	36.3	366.7
2023	166	186.0	--	--	186.0	36.6	222.6
2024	--	--	--	--	--	14.1	14.1
2025	--	--	--	--	--	14.3	14.3
2026	--	--	--	--	--	14.4	14.4
2027	--	--	--	--	--	14.5	14.5
2028	--	--	--	--	--	14.7	14.7
2029	--	--	--	--	--	14.8	14.8
2030	--	--	--	--	--	14.9	14.9
2031	--	--	--	--	--	15.0	15.0
2032	--	--	--	--	--	15.1	15.1
2033	--	--	--	--	--	15.2	15.2
2034	--	--	--	--	--	15.4	15.4
2035	--	--	--	--	--	15.5	15.5
Subtotal	2866	2899.4	--	--	2899.4	477.6	3377.0

## Low Rate Initial Production

### JASSM Baseline

Item	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	12/21/2001	12/21/2003
<b>Approved Quantity</b>	176	416
<b>Reference</b>	Milestone III ADM	FY 2004 Congressional Add
<b>Start Year</b>	2001	2001
<b>End Year</b>	2003	2003

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the MDA signing an ADM authorizing entry into LRIP on December 21, 2001. The December 2001 LRIP ADM approved the procurement of 76 missiles in Lot 1 and 100 missiles in Lot 2. In the summer of 2003, Congressional language for the FY 2004 budget dictated that the JASSM program remain in LRIP for Lot 3, which added an additional 240 missiles (increasing the total LRIP quantity from 176 to 416, which equates to 17 percent of expected total procurement).

### JASSM-ER

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

The January 10, 2011 ADM approved LRIP of 100 to 190 JASSM-ER missiles. JASSM-ER's current LRIP estimate has shifted to 160 missiles.

## Foreign Military Sales

### JASSM Baseline

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

### JASSM-ER

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None

## Nuclear Costs

### JASSM Baseline

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None

### JASSM-ER

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None

## Unit Cost

### JASSM Baseline

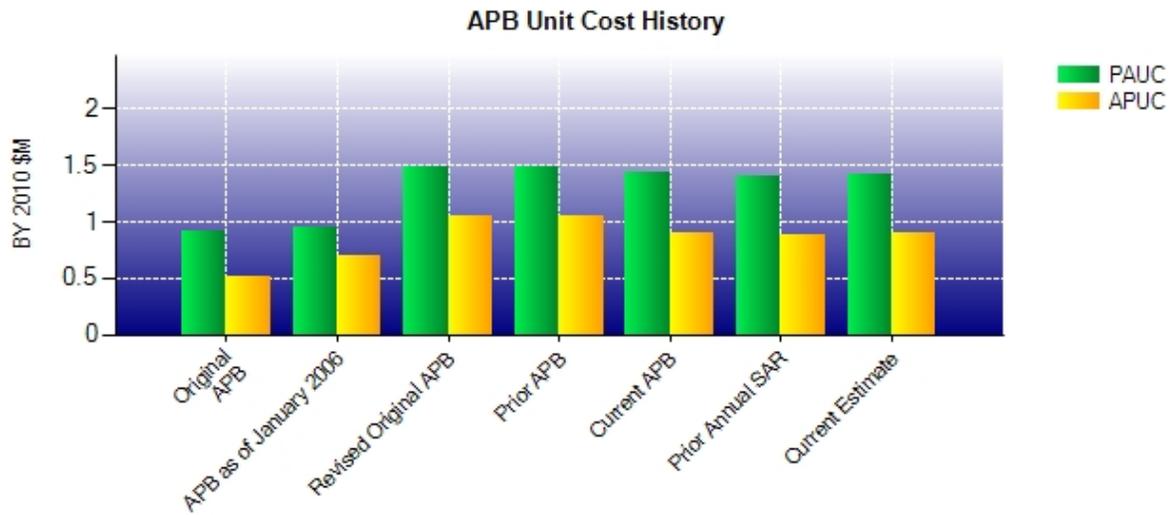
#### Unit Cost Report

Item	BY 2010 \$M	BY 2010 \$M	% Change
	Current UCR Baseline (Mar 2015 APB)	Current Estimate (Dec 2015 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	3050.1	3018.3	
Quantity	2141	2121	
Unit Cost	1.425	1.423	-0.14
<b>Average Procurement Unit Cost</b>			
Cost	1860.4	1836.3	
Quantity	2054	2034	
Unit Cost	0.906	0.903	-0.33

Item	BY 2010 \$M	BY 2010 \$M	% Change
	Revised Original UCR Baseline (Apr 2011 APB)	Current Estimate (Dec 2015 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	3679.4	3018.3	
Quantity	2487	2121	
Unit Cost	1.479	1.423	-3.79
<b>Average Procurement Unit Cost</b>			
Cost	2503.2	1836.3	
Quantity	2400	2034	
Unit Cost	1.043	0.903	-13.42

JASSM Baseline

**Unit Cost History**



Item	Date	BY 2010 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Nov 1998	0.914	0.516	0.840	0.504
APB as of January 2006	Jul 2004	0.951	0.699	0.914	0.702
Revised Original APB	Apr 2011	1.479	1.043	1.468	1.110
Prior APB	Apr 2011	1.479	1.043	1.468	1.110
Current APB	Mar 2015	1.425	0.906	1.352	0.922
Prior Annual SAR	Dec 2014	1.402	0.880	1.323	0.890
Current Estimate	Dec 2015	1.423	0.903	1.344	0.914

**SAR Unit Cost History**

Current SAR Baseline to Current Estimate (TY \$M)									
Initial PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.911	0.031	0.067	0.179	0.065	-0.087	0.000	0.178	0.433	1.344

Current SAR Baseline to Current Estimate (TY \$M)									
Initial APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.561	0.029	-0.071	0.186	0.068	-0.045	0.000	0.186	0.353	0.914

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone I	Jun 1996	Jun 1996	Jun 1996	Jun 1996
Milestone II	Jun 1998	Nov 1998	Nov 1998	Nov 1998
Milestone III	Apr 2001	Jul 2002	Oct 2003	Apr 2004
IOC	Jun 2001	Sep 2002	Sep 2002	Sep 2003
Total Cost (TY \$M)	811.3	2073.3	2679.7	2850.4
Total Quantity	44	2469	2940	2121
PAUC	18.439	0.840	0.911	1.344

In the chart above, IOC represents Required Assets Available (RAA) for B-52 at Barksdale Air Force Base. RAA was achieved on September 24, 2003.

## JASSM-ER

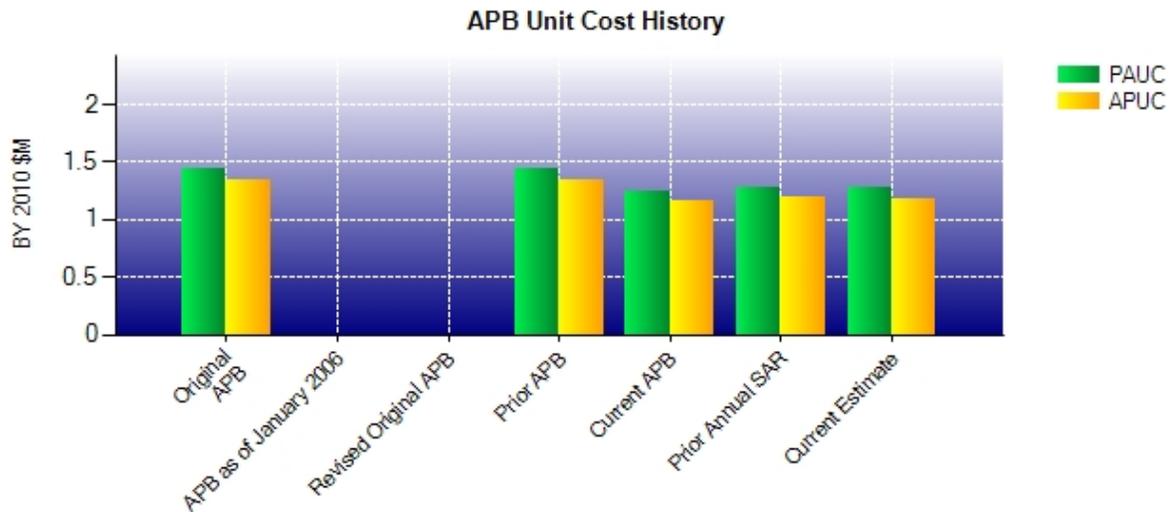
**Unit Cost Report**

Item	BY 2010 \$M	BY 2010 \$M	% Change
	Current UCR Baseline (Mar 2015 APB)	Current Estimate (Dec 2015 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	3592.5	3700.6	
Quantity	2877	2897	
Unit Cost	1.249	1.277	+2.24
<b>Average Procurement Unit Cost</b>			
Cost	3297.1	3377.0	
Quantity	2846	2866	
Unit Cost	1.159	1.178	+1.64

Item	BY 2010 \$M	BY 2010 \$M	% Change
	Original UCR Baseline (Apr 2011 APB)	Current Estimate (Dec 2015 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	3631.6	3700.6	
Quantity	2531	2897	
Unit Cost	1.435	1.277	-11.01
<b>Average Procurement Unit Cost</b>			
Cost	3366.1	3377.0	
Quantity	2500	2866	
Unit Cost	1.346	1.178	-12.48

JASSM-ER

**Unit Cost History**



Item	Date	BY 2010 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Apr 2011	1.435	1.346	1.733	1.648
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	Apr 2011	1.435	1.346	1.733	1.648
Current APB	Mar 2015	1.249	1.159	1.517	1.426
Prior Annual SAR	Dec 2014	1.274	1.192	1.529	1.448
Current Estimate	Dec 2015	1.277	1.178	1.524	1.423

**SAR Unit Cost History**

Current SAR Baseline to Current Estimate (TY \$M)									
Initial PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.918	0.031	0.022	-0.066	0.127	0.301	0.000	0.191	0.606	1.524

Current SAR Baseline to Current Estimate (TY \$M)									
Initial APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.862	0.030	0.015	-0.058	0.102	0.279	0.000	0.193	0.561	1.423

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A		N/A	N/A	N/A
Milestone B		N/A	N/A	N/A
Milestone C		N/A	N/A	Jan 2011
IOC		N/A	N/A	Mar 2014
Total Cost (TY \$M)		N/A	N/A	4414.1
Total Quantity		N/A	N/A	2897
PAUC		N/A	N/A	1.524

In the chart above, IOC represents Required Assets Available (RAA) for B-1B Dyess Air Force Base. RAA achieved was on March 21, 2014.

## Cost Variance

### JASSM Baseline

Summary TY \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	1053.2	1601.4	25.1	2679.7
Previous Changes				
Economic	+7.7	+62.1	--	+69.8
Quantity	--	-605.6	--	-605.6
Schedule	--	+378.7	--	+378.7
Engineering	--	+137.8	--	+137.8
Estimating	-66.0	-73.6	-25.1	-164.7
Other	--	--	--	--
Support	--	+309.7	--	+309.7
Subtotal	-58.3	+209.1	-25.1	+125.7
Current Changes				
Economic	-0.3	-3.7	--	-4.0
Quantity	--	--	--	--
Schedule	--	-0.1	--	-0.1
Engineering	--	--	--	--
Estimating	-2.6	-17.1	--	-19.7
Other	--	--	--	--
Support	--	+68.8	--	+68.8
Subtotal	-2.9	+47.9	--	+45.0
Total Changes	-61.2	+257.0	-25.1	+170.7
CE - Cost Variance	992.0	1858.4	--	2850.4
CE - Cost & Funding	992.0	1858.4	--	2850.4

Summary BY 2010 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	1246.7	1612.8	31.0	2890.5
Previous Changes				
Economic	--	--	--	--
Quantity	--	-455.9	--	-455.9
Schedule	--	-93.3	--	-93.3
Engineering	--	+88.7	--	+88.7
Estimating	-62.3	+326.3	-31.0	+233.0
Other	--	--	--	--
Support	--	+310.7	--	+310.7
Subtotal	-62.3	+176.5	-31.0	+83.2
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-2.4	-15.5	--	-17.9
Other	--	--	--	--
Support	--	+62.5	--	+62.5
Subtotal	-2.4	+47.0	--	+44.6
Total Changes	-64.7	+223.5	-31.0	+127.8
CE - Cost Variance	1182.0	1836.3	--	3018.3
CE - Cost & Funding	1182.0	1836.3	--	3018.3

Previous Estimate: December 2014

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-0.3
Adjustment for current and prior escalation. (Estimating)	+0.3	+0.3
Reduction due to Air Force higher priorities in FY 2014. (Estimating)	-2.7	-2.9
<b>RDT&amp;E Subtotal</b>	<b>-2.4</b>	<b>-2.9</b>

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-3.7
Adjustment for current and prior escalation. (Estimating)	+2.5	+2.9
Acceleration of procurement buy profile between FY 2013 and FY 2014 resulted in the realignment of missiles. (Schedule)	0.0	-0.1
Revised estimate to reflect the additional funds needed to support the test support and program tooling requirements (FY 2013-FY 2015). (Estimating)	-18.0	-20.0
Adjustment for current and prior escalation. (Support)	+0.9	+0.8
Increase in Other Support to realign cost between subprograms to support Lot 14 Factory Tooling and Test Equipment (FY 2014-FY 2015). (Support)	+61.6	+68.0
<b>Procurement Subtotal</b>	<b>+47.0</b>	<b>+47.9</b>

## Cost Variance

### JASSM-ER

Summary TY \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	146.6	2154.8	--	2301.4
Previous Changes				
Economic	+2.5	+116.2	--	+118.7
Quantity	+64.9	+356.8	--	+421.7
Schedule	-25.8	-164.7	--	-190.5
Engineering	+14.7	+292.5	--	+307.2
Estimating	+77.1	+762.8	--	+839.9
Other	--	--	--	--
Support	--	+631.2	--	+631.2
Subtotal	+133.4	+1994.8	--	+2128.2
Current Changes				
Economic	-0.4	-28.9	--	-29.3
Quantity	--	--	--	--
Schedule	--	-1.2	--	-1.2
Engineering	+60.7	--	--	+60.7
Estimating	-5.6	+38.0	--	+32.4
Other	--	--	--	--
Support	--	-78.1	--	-78.1
Subtotal	+54.7	-70.2	--	-15.5
Total Changes	+188.1	+1924.6	--	+2112.7
CE - Cost Variance	334.7	4079.4	--	4414.1
CE - Cost & Funding	334.7	4079.4	--	4414.1

Summary BY 2010 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	159.1	2035.9	--	2195.0
Previous Changes				
Economic	--	--	--	--
Quantity	+50.4	+272.0	--	+322.4
Schedule	-7.2	-6.7	--	-13.9
Engineering	+10.8	+200.3	--	+211.1
Estimating	+62.5	+429.6	--	+492.1
Other	--	--	--	--
Support	--	+484.9	--	+484.9
Subtotal	+116.5	+1380.1	--	+1496.6
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+53.0	--	--	+53.0
Estimating	-5.0	+31.0	--	+26.0
Other	--	--	--	--
Support	--	-70.0	--	-70.0
Subtotal	+48.0	-39.0	--	+9.0
Total Changes	+164.5	+1341.1	--	+1505.6
CE - Cost Variance	323.6	3377.0	--	3700.6
CE - Cost & Funding	323.6	3377.0	--	3700.6

Previous Estimate: December 2014

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-0.4
Adjustment for current and prior escalation. (Estimating)	+0.2	+0.2
Revised estimate to reflect latest actuals. (Estimating)	-1.0	-1.3
Reduction due to Air Force higher priorities in FY 2014. (Estimating)	-1.0	-1.0
Congressional reduction in FY 2016 which drove new estimate and extended scheduled events into FY 2017. (Estimating)	-2.8	-3.0
Reduction for Small Business Innovation Research in FY 2015. (Estimating)	-0.4	-0.5
Additional funding received between FY 2017-2019 for M-Code requirements. (Engineering)	+53.0	+60.7
<b>RDT&amp;E Subtotal</b>	<b>+48.0</b>	<b>+54.7</b>

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-28.9
Adjustment for current and prior escalation. (Estimating)	+3.7	+4.1
Acceleration of procurement buy profile in FY 2015; Lot 13 negotiations yielded an additional 25 missiles. (Schedule)	0.0	-1.2
Congressional reduction in FY 2016. (Estimating)	-13.3	-15.0
Revised estimate to reflect actuals. (Estimating)	+40.6	+48.9
Adjustment for current and prior escalation. (Support)	+0.6	+0.7
Decrease in Other Support to realign cost between subprograms to support Lot 14 Factory Tooling, Test Equipment (FY 2014-FY 2015), and reduction for Air Force higher priorities (FY 2017-FY 2021). (Support)	-70.6	-78.8
<b>Procurement Subtotal</b>	<b>-39.0</b>	<b>-70.2</b>

## Contracts

### Contract Identification

**Appropriation:** Procurement  
**Contract Name:** JASSM Production (Lot 11 Baseline/LRIP Lot 3 ER)  
**Contractor:** Lockheed Martin--Missile & Fire Control  
**Contractor Location:** 5600 West Sand Lake Road  
 Orlando, FL 32819  
**Contract Number:** FA8682-14-C-0069  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** December 19, 2013  
**Definitization Date:** December 19, 2013

Contract Price								
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
225.8	N/A	230	263.1	N/A	230	263.1	263.1	

### Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the following contract modifications: Fuze Highly Accelerated Stress Screening Chamber Repair, F-15 Universal Armament Interface Capability, Radio Frequency Switch Last Time Buy, Value Engineering Change Proposal Lube Pump, Telemetry Instrumentation Kit Conversion JASSM BL to JASSM-ER, Service Life Extension Program, and JASSM-ER Weapon System Evaluation Program 2015.

### Cost and Schedule Variance Explanations

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

### Notes

Funding identified here only represents production funding placed on contract to support 230 missiles; 190 JASSM BL and 40 JASSM-ER missiles.

This contract is more than 90% complete; therefore, this is the final report for this contract.

**Contract Identification**

**Appropriation:** Procurement  
**Contract Name:** JASSM Production (Lot 12 Baseline/LRIP Lot 4 ER)  
**Contractor:** Lockheed Martin--Missile & Fire Control  
**Contractor Location:** 5600 West Sand Lake Road  
 Orlando, FL 32819  
**Contract Number:** FA8682-14-C-0084  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** December 19, 2013  
**Definitization Date:** December 19, 2013

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
214.8	N/A	210	228.0	N/A	210	228.0	228.0

**Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the following contract modifications: Actuator Control Card, Lots 12 and 4 Systems Engineering Program Support/Program Tooling and Test Equipment, and JASSM-ER Standard Data Protocol (DS 101) Value Engineering Change Proposal.

**Cost and Schedule Variance Explanations**

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

**Notes**

The funding identified here only represents production funding placed on contract to support 210 missiles; 150 JASSM BL and 60 JASSM-ER missiles.

**Contract Identification**

**Appropriation:** Procurement  
**Contract Name:** JASSM Production (Lot 13)  
**Contractor:** Lockheed Martin Corporation Missile and Fire Control  
**Contractor Location:** 5600 W. Sand Lake Road  
 Orlando, FL 32819-8907  
**Contract Number:** FA8682-16-C-0005/13  
**Contract Type:** Fixed Price Incentive(Firm Target) (FPIF)  
**Award Date:** October 09, 2015  
**Definitization Date:** October 09, 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	
263.3	N/A	240	263.3	N/A	240	263.3	263.3	

**Cost and Schedule Variance Explanations**

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

**Notes**

This is the first time this contract is being reported.

The funding identified here only represents production funding placed on contract to support 240 missiles; 100 BL and 140 ER missiles.

**Contract Identification**

**Appropriation:** Procurement  
**Contract Name:** JASSM Production (Lot 14)  
**Contractor:** Lockheed Martin Corporation Fire and Missile Control  
**Contractor Location:** 5600 West Sand Lake Road  
 Orlando, FL 32819  
**Contract Number:** FA8682-16-C-0005/14  
**Contract Type:** Fixed Price Incentive(Firm Target) (FPIF)  
**Award Date:** December 01, 2015  
**Definitization Date:** December 01, 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
371.0	N/A	340	388.4	N/A	340	388.4	388.4

**Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the addition of contract mod P00004 for \$17.4M.

**Cost and Schedule Variance Explanations**

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

**Notes**

This is the first time this contract is being reported.  
 Lot 14 total quantity of 340 is comprised of 100 BL and 240 ER missiles.

## Deliveries and Expenditures

### JASSM Baseline

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	87	87	87	100.00%
Production	1494	1681	2034	82.65%
Total Program Quantity Delivered	1581	1768	2121	83.36%

### Expended and Appropriated (TY \$M)

Total Acquisition Cost	2850.4	Years Appropriated	21
Expended to Date	2565.3	Percent Years Appropriated	100.00%
Percent Expended	90.00%	Appropriated to Date	2850.4
Total Funding Years	21	Percent Appropriated	100.00%

The above data is current as of March 03, 2016.

Production deliveries (DD Form 250) for Lots 1-10 total 1,494. The total of Lot 11 deliveries to-date are 183 missiles, and the total for Lot 12 is four missiles. The total JASSM BL missiles delivered to-date are 1,681.

### JASSM-ER

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	31	31	31	100.00%
Production	60	100	2866	3.49%
Total Program Quantity Delivered	91	131	2897	4.52%

### Expended and Appropriated (TY \$M)

Total Acquisition Cost	4414.1	Years Appropriated	14
Expended to Date	446.5	Percent Years Appropriated	42.42%
Percent Expended	10.12%	Appropriated to Date	1038.4
Total Funding Years	33	Percent Appropriated	23.52%

The above data is current as of March 03, 2016.

Production deliveries (DD Form 250) to-date for Lot 9/ER LRIP 1 through Lot 11/ER LRIP 3 total 100 JASSM-ER missiles.

## Operating and Support Cost

### JASSM Baseline

#### Cost Estimate Details

Date of Estimate:	October 10, 2014
Source of Estimate:	SCP
Quantity to Sustain:	2054
Unit of Measure:	Total Quantity
Service Life per Unit:	15.00 Years
Fiscal Years in Service:	FY 2003 - FY 2032

RDT&E quantities are not counted towards JASSM sustainment efforts. Additionally, during FY 2016 PB reviews in December 2014, the JASSM Baseline quantity profile changed from 2,054 to 2,034. The O&S estimate will be updated in the next SAR to reflect this change.

#### Sustainment Strategy

The sustainment and readiness plan/estimate for JASSM has evolved to a combination of 15-year Warranty and Contractor Logistics Support (CLS). Lots 1-10 will continue to be supported under a Warranty construct, while Lots 11-14 will be aligned under a CLS logistics strategy.

JASSM Baseline and JASSM-ER are wooden rounds, meaning there is no routine maintenance required. Also, because production quantities have varied from lot-to-lot and assets continue to be expended during testing, an average unit cost is not a good indicator of operating and sustainment. For those reasons, total O&S costs are reported.

#### Antecedent Information

No Antecedent

Cost Element	Annual O&S Costs BY2010 \$M	
	JASSM Baseline Average Annual Cost Per Total Quantity	No Antecedent (Antecedent) No Antecedent
Unit-Level Manpower	1.655	0.000
Unit Operations	0.000	0.000
Maintenance	0.556	0.000
Sustaining Support	5.479	0.000
Continuing System Improvements	3.319	0.000
Indirect Support	1.511	0.000
Other	0.000	0.000
Total	12.520	--

Item	Total O&S Cost \$M			
	JASSM Baseline			No Antecedent (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	375.6	413.2	375.6	N/A
Then Year	428.6	N/A	428.6	N/A

**Equation to Translate Annual Cost to Total Cost**

Total O&S Cost = service life \* average annual cost = 30 \* \$12.520M = \$375.600M

O&S Cost Variance		
Category	BY 2010 \$M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2014 SAR	375.6	
Programmatic/Planning Factors	0.0	
Cost Estimating Methodology	0.0	
Cost Data Update	0.0	
Labor Rate	0.0	
Energy Rate	0.0	
Technical Input	0.0	
Other	0.0	
Total Changes	0.0	
Current Estimate	375.6	

**Disposal Estimate Details**

**Date of Estimate:** October 10, 2014  
**Source of Estimate:** SCP  
**Disposal/Demilitarization Total Cost (BY 2010 \$M):** Total costs for disposal of all Total Quantity are 45.4

## JASSM-ER

### Cost Estimate Details

<b>Date of Estimate:</b>	October 10, 2014
<b>Source of Estimate:</b>	SCP
<b>Quantity to Sustain:</b>	2846
<b>Unit of Measure:</b>	Total Quantity
<b>Service Life per Unit:</b>	15.00 Years
<b>Fiscal Years in Service:</b>	FY 2013 - FY 2040

RDT&E quantities are not counted towards JASSM sustainment efforts. Additionally, during FY 2016 PB reviews in December 2014, the JASSM Baseline quantity profile changed from 2,054 to 2,034. The O&S estimate will be updated in the next SAR to reflect this change.

### Sustainment Strategy

The sustainment and readiness plan/estimate for JASSM has evolved to a combination of 15-year Warranty and Contractor Logistics Support (CLS). Lots 1-10 will continue to be supported under a Warranty construct, while Lots 11-14 will be aligned under a CLS logistics strategy.

JASSM Baseline and JASSM-ER are wooden rounds, meaning there is no routine maintenance required. Also, because production quantities have varied from lot-to-lot and assets continue to be expended during testing, an average unit cost is not a good indicator of operating and sustainment. For those reasons, total O&S costs are reported.

### Antecedent Information

No Antecedent

Cost Element	Annual O&S Costs BY2010 \$M	
	JASSM-ER Average Annual Cost Per Total Quantity	No Antecedent (Antecedent) No Antecedent
Unit-Level Manpower	3.117	0.000
Unit Operations	0.000	0.000
Maintenance	2.328	0.000
Sustaining Support	9.472	0.000
Continuing System Improvements	5.403	0.000
Indirect Support	1.912	0.000
Other	0.000	0.000
<b>Total</b>	<b>22.232</b>	<b>--</b>

Item	Total O&S Cost \$M			
	JASSM-ER			No Antecedent (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	622.5	684.8	622.5	N/A
Then Year	908.6	N/A	908.6	N/A

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

Total O&S Cost = service life \* average annual cost = 28 \* \$22.232M = \$622.500M

O&S Cost Variance		
Category	BY 2010 \$M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2014 SAR	622.5	
Programmatic/Planning Factors	0.0	
Cost Estimating Methodology	0.0	
Cost Data Update	0.0	
Labor Rate	0.0	
Energy Rate	0.0	
Technical Input	0.0	
Other	0.0	
Total Changes	0.0	
Current Estimate	622.5	

#### Disposal Estimate Details

**Date of Estimate:** October 10, 2014  
**Source of Estimate:** SCP  
**Disposal/Demilitarization Total Cost (BY 2010 \$M):** Total costs for disposal of all Total Quantity are 64.3