



## Selected Acquisition Report (SAR)

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



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

As of FY 2011 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**

AirForce

**Joint Participants**

Department of the Navy

## Responsible Office

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**Date**

**Assigned:** June 1, 2008

## References

**SAR Baseline (Production Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated November 9, 1998

**Approved APB**

Air Force Acquisition Executive Approved Acquisition Program Baseline (APB) dated July 14, 2004

## Mission and Description

### Introduction:

The JASSM is a next generation cruise missile enabling the USAF 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 (3 meters or less using the Imaging Infrared [IIR] seeker and less than 13 meters 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 and JASSM-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. JASSM and JASSM-ER have a 15-year warranty and are stored in their container. A launch can occur over a wide range of altitudes and at ranges greater than 200nm (Baseline) or greater than 500nm (Extended Range).

### 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

In May 2008 the Defense Acquisition Executive (DAE) signed an Acquisition Decision Memorandum (ADM) approving certification of separate JASSM Baseline and JASSM-Extended Range (ER) program increments, which required submittal of new Acquisition Strategies and an Acquisition Program Baseline (APB). The ADM also required the Air Force to return for a Defense Acquisition Board (DAB) to brief results from Lot 5 missile reliability testing prior to Lot 8 production contract award. By January 2009, the JASSM Program Office had forwarded the JASSM and JASSM-ER Acquisition Strategies and a consolidated APB to Office of the Secretary of Defense (OSD). These documents detailed the restructured program and were designed to replace the 2007 pre-Nunn-McCurdy program documents.

On January 30, 2009 the JASSM Baseline program completed two tests of the Lot 5 Reliability Assessment Program (RAP). When combined with the results of the November 2008 Lot 5 RAP flights, the cumulative mission success was 50% (3 successes out of 6 flights). As a result, in early February 2009 OSD returned the Acquisition Strategies and APB to the Air Force. OSD requested revision of the documents upon resolution of Lot 5 test status and Lot 8 production contract award.

Final JASSM Lot 5 RAP testing resumed on February 12, 2009 with three successes in four flights. The Test Data Scoring Board formally scored the Lot 5 RAP program as six successes out of ten tests, or 60% successful. On March 6, 2009 the JASSM team briefed the Overarching Integrated Product Team (OIPT) on options for the program path forward. The OIPT concurred with the Program Office's recommendation to delay the Lot 8 Defense Acquisition Board (DAB) until after successful completion of a 16-flight Lot 6 Reliability Assessment test that demonstrated corrective actions for the Lot 5 test failures. With the delay in the Lot 8 production contract past February 2009, a gap between Lot 7 and Lot 8 production was incurred, negatively impacting critical missile component suppliers of the engine and the carbon fiber hull of the missile. The program office began formulating plans for an orderly shutdown and to minimize the production break and limit reliability impacts to Lot 8.

In February 2009, Lockheed Martin sent the DAE a letter committing to voluntarily recall all Lot 5 missiles to inspect and, if necessary, retrofit the missiles with known corrective actions at Lockheed Martin's expense. In April 2009, Lockheed formally committed to retrofit all Lot 5 missiles and any Lot 6 missiles built without corrective actions. Lockheed also agreed to modify the Lot 6 and Lot 7 contracts to add Lot Acceptance Criteria for successful testing prior to government acceptance of the missiles.

On June 9, 2009 the Air Force Program Executive Officer for Weapons and the Lockheed Martin Vice-President for Strike Weapons met with the JASSM program team to discuss program status and the path forward to Lot 8 contract award. The key message was that the critical path ran through completion of open Failure Review Boards (FRBs) and implementation of corrective actions into test missiles to support a successful reliability assessment test program. Subsequently, the Program Office recommended conducting Lot 7 Reliability Assessment testing in advance of Lot 6 testing, as Lot 7 missiles produced with all corrective actions "in line" would be available before the Lot 6 missiles could be retrofitted with the corrections. On July 17, 2009 Office of the Under Secretary of Defense for Acquisition Technology and Logistics (OUSD (AT&L)) approved the recommendation to fly Lot 7 reliability tests first and use the results as the basis for the Lot 8 production decision.

By early August 2009, all FRBs had been cleared for flight with Lot 5 corrective actions implemented in the Lot 6 and Lot 7 production lines. Additionally, Lockheed Martin had completed qualification of fixes for a 2007 engine no-start flight failure and a 2008 Wing Retraction Device failure and had implemented them in the Lot 7 production line. The 16-shot Lot 7 RAP program was flown from August 27, 2009 through October 4, 2009 with missiles launched from F-16 and B-52 aircraft. The Test Data Scoring Board scored the missions as 15 successes, 1 failure (failure to detonate), and 2 no-tests, resulting in a 94% success rate.

While the JASSM Baseline program was working resolution of the Lot 5 failures, the JASSM-ER program continued to execute their System Development and Demonstration effort. On June 3, 2009 the JASSM Program Office and Lockheed Martin definitized a \$23M JASSM-ER contract for production of 12 Integrated Test (IT) and Initial Operational Test and

Evaluation (IOT&E) missiles, as well as for technical support. The JASSM-ER test team successfully completed the fourth in a series of IT evaluation flights on August 18, 2009 by flying more than 500 nautical miles before hitting and destroying the target. Another JASSM-ER IT flight was successfully completed on November 9, 2009. Results of the JASSM-ER test program to-date are six successes out of six tests (includes a single Development Test flight).

The positive results of the JASSM Baseline Lot 7 reliability tests, as well as the Program Office's plans for Lot 8 contract award given resolution of the FY10 budget, were briefed at a Lot 8 OIPT on November 18, 2009. Also, based on positive Lot 7 reliability results and IIPT/OIPT support, the Government accepted delivery of all Lot 6 missiles (163 total) in late December 2009. Additionally, the final FY10 budget confirmed a House Appropriations Committee-Defense (HAC-D) supported FY09 mark of \$60M, which left sufficient funding to support the Lot 8 contract award.

The Program Office is developing the JASSM and JASSM-ER Acquisition Strategies and combined APB for submittal to OSD.

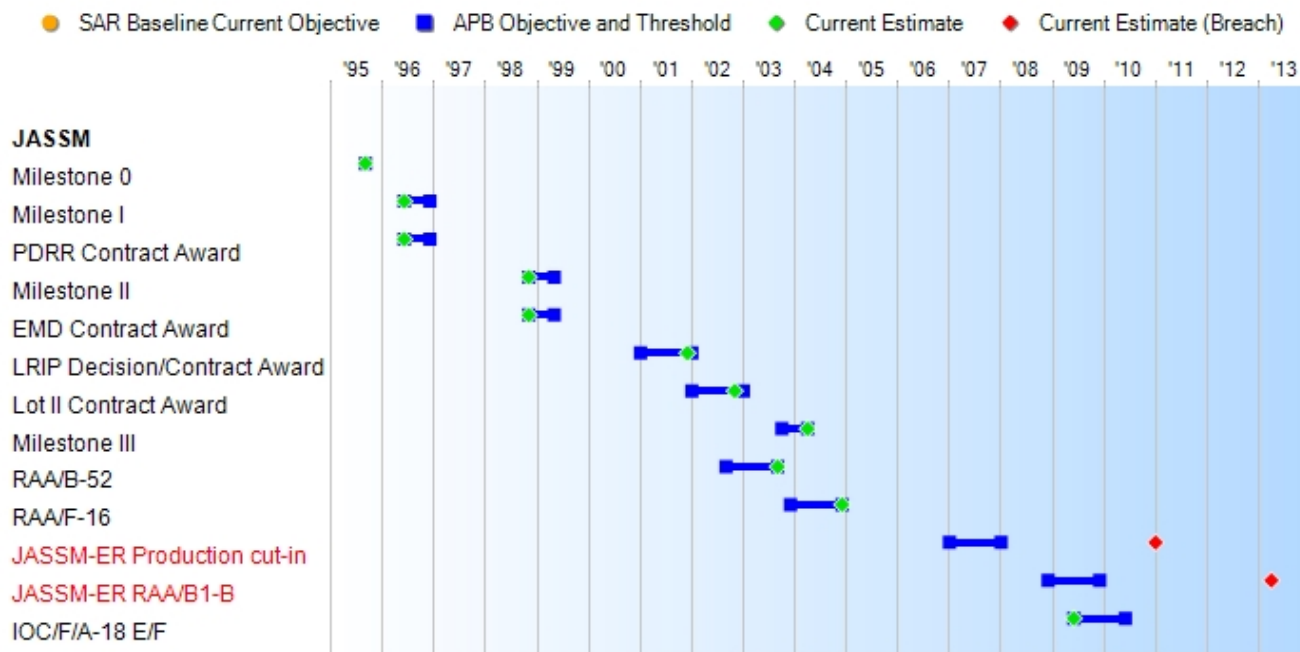
There are no significant software issues associated with the program at this time.



## Threshold Breaches

APB Breaches		Explanation of Breach
<b>Schedule</b>	<input checked="" type="checkbox"/>	<p>Unit Cost Program Acquisition Unit Cost (PAUC) and Average Procurement Unit Cost (APUC) - In accordance with the FY 2006 National Defense Authorization Act (Public Law 109-163), the Department is required to report Nunn-McCurdy unit cost breaches to the "original" Acquisition Program Baseline (APB), i.e., the APB established at Milestone (MS) B (previously MS II). Accordingly, this program reported a critical Nunn-McCurdy cost breach to the APUC and PAUC of at least 50% to the "original" APB. This cost breach was reported in the December 2006 SAR and the program entered a Nunn-McCurdy deferred certification status. A Plan of Action and Milestones has since been completed. The program was certified per Acquisition Decision Memorandum (ADM) dated May 1, 2008. The Program office is completing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010. Additional unit cost breach information is provided in the Unit Cost Information section of this SAR.</p> <p>Cost Procurement Breach was previously reported in the December 2007 Selected Acquisition Report (SAR)- Current APB reflects JASSM as one program. Proposed APB reflects JASSM Baseline and JASSM ER as subprograms with updated cost parameters. An APUC CRITICAL breach to the current and original UCR baseline was reported in December 2007 SAR. The PAUC to the current UCR baseline changed from a SIGNIFICANT to a CRITICAL breach due to the addition of the JASSM-Extended Range (ER) missile and program delays due to Nunn-McCurdy. The PAUC to the original baseline changed from NONE to CRITICAL also due to the addition of the JASSM-Extended Range (ER) missile and program delays due to Nunn-McCurdy.</p> <p>In February 2007, there was a schedule breach to the Acquisition Program Baseline (APB) for JASSM-Extended Range (ER) Production cut-in of two years and JASSM-ER Required Assets Available (RAA)/B1-B of three years. The schedule breach was further exacerbated by the Nunn-McCurdy deferral. Previously reported in the December 2007 Selected Acquisition Report (SAR).</p>
<b>Performance</b>	<input type="checkbox"/>	
<b>Cost</b>		
RDT&E	<input type="checkbox"/>	
Procurement	<input checked="" type="checkbox"/>	
MILCON	<input type="checkbox"/>	
Acq O&M	<input type="checkbox"/>	
<b>O&amp;S Cost</b>	<input type="checkbox"/>	
<b>Unit Cost</b>		
PAUC	<input checked="" type="checkbox"/>	
APUC	<input checked="" type="checkbox"/>	
Nunn-McCurdy Breaches		
<b>Current UCR Baseline</b>		
PAUC	Critical	
APUC	Critical	
<b>Original UCR Baseline</b>		
PAUC	Critical	
APUC	Critical	

# Schedule



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	Dec 1996	Jun 1996
PDRR Contract Award	Jun 1996	Jun 1996	Dec 1996	Jun 1996
Milestone II	Nov 1998	Nov 1998	May 1999	Nov 1998
EMD Contract Award	Nov 1998	Nov 1998	May 1999	Nov 1998
LRIP Decision/Contract Award	Jan 2001	Jan 2001	Jan 2002	Dec 2001
Lot II Contract Award	Jan 2002	Jan 2002	Jan 2003	Nov 2002
Milestone III	Oct 2003	Oct 2003	Apr 2004	Apr 2004
RAA/B-52	Sep 2002	Sep 2002	Sep 2003	Sep 2003
RAA/F-16	Dec 2003	Dec 2003	Dec 2004	Dec 2004
JASSM-ER Production cut-in	Jan 2007	Jan 2007	Jan 2008	Jan 2011 <sup>1</sup> (Ch-1)
JASSM-ER RAA/B1-B	Dec 2008	Dec 2008	Dec 2009	Apr 2013 <sup>1</sup> (Ch-2)
IOC/F/A-18 E/F	Jun 2009	Jun 2009	Jun 2010	Jun 2009

<sup>1</sup> APB Breach

### Change Explanations

(Ch-1) -JASSM Extended Range (ER) cut-in delayed from Jan 2010 to Jan 2011 - Current schedule reflects initial APB parameters. Nunn McCurdy certification Acquisition Decision Memorandum (ADM) dated May 1, 2008. Program office is currently working a post Nunn-McCurdy APB. New APB expected approval date, July 2010.

(Ch-2) -Required Assets Available RAA/B1-B from Jul 2012 to Apr 2013 - Nunn-McCurdy certification deferral and delays in Lot 8 Award drove a slip in the Operational Testing completion. This pushes achieving ER Required Assets Available (B-1) from July 2012 to April 2013. Program office is currently working a post Nunn-McCurdy APB. New APB expected approval date, July 2010.

### Notes

JASSM-Extended Range (ER):

-FY06-FY08 budget reductions and Congressional language, followed by Nunn-McCurdy certification deferral resulted in a change from an ER production cut-in in 2007 to a Milestone C Decision & Low-Rate Initial Production (LRIP) award in FY10 -FY11. Required Assets Available (RAA) for JASSM-ER for the B1-B is 30 missiles.

-The Program office is working a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010. Scheduled events will be adjusted to delete JASSM-ER production cut-in and Initial Operational Capability (IOC)/F/A-18 E/F and add Milestone-C Decision and Low-Rate Initial Production (LRIP) events.

### Acronyms and Abbreviations

EMD - Engineering and Manufacturing Development

ER - Extended Range

IOC - Initial Operational Capability

JASSM - Joint Air-to-Surface Standoff Missile

LRIP - Low Rate Initial Production

PDRR - Program Definition and Risk Reduction

RAA - Required Assets Available

SAR - Selected Acquisition Report

## Performance

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
<b>Carrier Operability</b>				
Yes	Yes	Yes	TBD	Yes
<b>Interoperability</b>				
100% of top level IERs designated critical	100% of the top level IERs designated critical	100% of the top level IERs	TBD	100% of the top level IERs designated critical

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

### Requirements Reference

Operational Requirements Document (ORD) CAF 303-95-III dated January 20, 2004.

### Change Explanations

None

## Track to Budget

### RDT&E

Appn	BA	PE		
Air Force	3600	07	0207325F	
	<b>Project</b>	<b>Name</b>		
	4515	Joint Air-to-Surface Standoff Missile		
Navy	1319	07	0604312N	
	<b>Project</b>	<b>Name</b>		
		Joint Air-to-Surface Standoff Missile (Shared) (Sunk)		
Air Force	3600	07	0207325F	
	<b>Project</b>	<b>Name</b>		
	5356	Joint Air-to-Surface Standoff Missile		

### Procurement

Appn	BA	PE		
Air Force	3020	02	0207325F	
	<b>Line Item</b>	<b>Name</b>		
	654515	Joint Air-to-Surface Standoff Missile		

## Cost and Funding

### Cost Summary

Total Acquisition Cost							
Appropriation	BY 1995 \$M			BY 1995 \$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	1096.6	1096.6	1261.1	1122.3	1199.8	1199.8	1261.3
Procurement	2901.4	2901.4	3336.6	4397.0 <sup>1</sup>	3756.2	3756.2	6450.0
Flyaway	--	--	--	4267.3	--	--	6269.9
Recurring	--	--	--	4267.3	--	--	6269.9
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	129.7	--	--	180.1
Other Support	--	--	--	129.7	--	--	180.1
Initial Spares	--	--	--	0.0	--	--	0.0
MILCON	18.4	18.4	21.2	0.0	25.1	25.1	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	4016.4	4016.4	N/A	5519.3	4981.1	4981.1	7711.3

<sup>1</sup> APB Breach

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E		94	118
Procurement		5353	4900
Total		5447	5018

#### Quantity Notes

Total Program Quantity includes 118 fully configured Research Development Testing and Evaluation missiles (112 total for the Air Force of which 31 are planned for JASSM Extended Range development, and six total for the Navy prior to exiting the program in 2004).

## Cost and Funding

### Funding Summary

Appropriation Summary									
FY 2011 President's Budget / December 2009 SAR (TY\$ M)									
Appropriation	Prior	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
RDT&E	1136.8	29.5	20.0	4.8	4.6	4.8	4.8	56.0	1261.3
Procurement	894.1	52.5	215.8	237.4	240.5	270.0	280.8	4258.9	6450.0
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 2011 Total	2030.9	82.0	235.8	242.2	245.1	274.8	285.6	4314.9	7711.3
PB 2009 Total	2102.6	241.5	242.4	250.4	254.8	351.6	371.0	2251.5	6065.8
Delta	-71.7	-159.5	-6.6	-8.2	-9.7	-76.8	-85.4	2063.4	1645.5

Quantity Summary										
FY 2011 President's Budget / December 2009 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Development	118	0	0	0	0	0	0	0	0	118
Production	0	1153	0	171	169	175	193	190	2849	4900
PB 2011 Total	118	1153	0	171	169	175	193	190	2849	5018
PB 2009 Total	106	1317	255	260	260	250	360	363	1835	5006
Delta	12	-164	-255	-89	-91	-75	-167	-173	1014	12

## Cost and Funding

### Annual Funding By Appropriation

Annual Funding								
1319   RDT&E   Research, Development, Test, and Evaluation, Navy								
Fiscal Year	Quantity	TY \$M						Total Program
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support		
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 1319   RDT&E   Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 1995 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1998	--	--	--	--	--	--	5.0
1999	--	--	--	--	--	--	1.7
2000	--	--	--	--	--	--	3.1
2001	--	--	--	--	--	--	1.8
2002	--	--	--	--	--	--	5.3
2003	--	--	--	--	--	--	14.4
2004	--	--	--	--	--	--	18.0
Subtotal	6	--	--	--	--	--	49.3

Annual Funding							
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	--	--	--	--	--	--	48.6
2004	--	--	--	--	--	--	25.5
2005	--	--	--	--	--	--	43.3
2006	--	--	--	--	--	--	57.6
2007	--	--	--	--	--	--	33.0
2008	--	--	--	--	--	--	11.8
2009	--	--	--	--	--	--	32.1
2010	--	--	--	--	--	--	29.5
2011	--	--	--	--	--	--	20.0
2012	--	--	--	--	--	--	4.8
2013	--	--	--	--	--	--	4.6
2014	--	--	--	--	--	--	4.8
2015	--	--	--	--	--	--	4.8
2016	--	--	--	--	--	--	5.0
2017	--	--	--	--	--	--	5.0
2018	--	--	--	--	--	--	5.0
2019	--	--	--	--	--	--	5.0
2020	--	--	--	--	--	--	5.0
2021	--	--	--	--	--	--	5.0
2022	--	--	--	--	--	--	5.0
2023	--	--	--	--	--	--	5.0
2024	--	--	--	--	--	--	5.0
2025	--	--	--	--	--	--	5.5
2026	--	--	--	--	--	--	5.5
Subtotal	112	--	--	--	--	--	1206.0

Annual Funding							
3600   RDT&E   Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	BY 1995 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1996	--	--	--	--	--	--	26.7
1997	--	--	--	--	--	--	153.4
1998	--	--	--	--	--	--	155.4
1999	--	--	--	--	--	--	114.3
2000	--	--	--	--	--	--	142.8
2001	--	--	--	--	--	--	108.2
2002	--	--	--	--	--	--	74.7
2003	--	--	--	--	--	--	43.3
2004	--	--	--	--	--	--	22.1
2005	--	--	--	--	--	--	36.7
2006	--	--	--	--	--	--	47.4
2007	--	--	--	--	--	--	26.4
2008	--	--	--	--	--	--	9.3
2009	--	--	--	--	--	--	24.9
2010	--	--	--	--	--	--	22.6
2011	--	--	--	--	--	--	15.1
2012	--	--	--	--	--	--	3.6
2013	--	--	--	--	--	--	3.4
2014	--	--	--	--	--	--	3.5
2015	--	--	--	--	--	--	3.4
2016	--	--	--	--	--	--	3.5
2017	--	--	--	--	--	--	3.4
2018	--	--	--	--	--	--	3.4
2019	--	--	--	--	--	--	3.3
2020	--	--	--	--	--	--	3.3
2021	--	--	--	--	--	--	3.2
2022	--	--	--	--	--	--	3.1
2023	--	--	--	--	--	--	3.1
2024	--	--	--	--	--	--	3.0
2025	--	--	--	--	--	--	3.3
2026	--	--	--	--	--	--	3.2
Subtotal	112	--	--	--	--	--	1073.0

Annual Funding 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	
2002	76	37.1	--	--	37.1	5.6	42.7	
2003	100	39.7	--	--	39.7	12.3	52.0	
2004	240	95.5	--	--	95.5	5.4	100.9	
2005	288	134.7	--	--	134.7	4.5	139.2	
2006	75	93.8	--	--	93.8	4.9	98.7	
2007	163	155.9	--	--	155.9	4.8	160.7	
2008	111	154.0	--	--	154.0	6.0	160.0	
2009	100	124.0	--	--	124.0	15.7	139.7	
2010	--	--	52.5	--	52.5	--	52.5	
2011	171	209.4	--	--	209.4	6.4	215.8	
2012	169	230.8	--	--	230.8	6.6	237.4	
2013	175	233.8	--	--	233.8	6.7	240.5	
2014	193	259.7	--	--	259.7	10.3	270.0	
2015	190	270.4	--	--	270.4	10.4	280.8	
2016	280	414.5	--	--	414.5	7.4	421.9	
2017	280	421.7	--	--	421.7	7.5	429.2	
2018	280	428.1	--	--	428.1	7.7	435.8	
2019	280	437.5	--	--	437.5	7.8	445.3	
2020	280	388.9	--	--	388.9	7.9	396.8	
2021	280	396.0	--	--	396.0	8.1	404.1	
2022	280	403.6	--	--	403.6	8.2	411.8	
2023	280	411.4	--	--	411.4	8.4	419.8	
2024	280	405.3	--	--	405.3	8.6	413.9	
2025	329	471.6	--	--	471.6	8.7	480.3	
Subtotal	4900	6217.4	52.5	--	6269.9	180.1	6450.0	

Annual Funding 3020   Procurement   Missile Procurement, Air Force								
Fiscal Year	Quantity	BY 1995 \$M						
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program	
2001	--	--	--	--	--	0.2	0.2	
2002	76	33.0	--	--	33.0	5.0	38.0	
2003	100	34.9	--	--	34.9	10.9	45.8	
2004	240	82.3	--	--	82.3	4.6	86.9	
2005	288	112.8	--	--	112.8	3.8	116.6	
2006	75	76.4	--	--	76.4	4.0	80.4	
2007	163	123.8	--	--	123.8	3.9	127.7	
2008	111	120.2	--	--	120.2	4.7	124.9	
2009	100	95.5	--	--	95.5	12.1	107.6	
2010	--	--	40.0	--	40.0	--	40.0	
2011	171	157.2	--	--	157.2	4.8	162.0	
2012	169	170.4	--	--	170.4	4.9	175.3	
2013	175	169.8	--	--	169.8	4.8	174.6	
2014	193	185.4	--	--	185.4	7.4	192.8	
2015	190	189.8	--	--	189.8	7.3	197.1	
2016	280	286.1	--	--	286.1	5.1	291.2	
2017	280	286.2	--	--	286.2	5.1	291.3	
2018	280	285.7	--	--	285.7	5.2	290.9	
2019	280	287.1	--	--	287.1	5.1	292.2	
2020	280	251.0	--	--	251.0	5.1	256.1	
2021	280	251.3	--	--	251.3	5.1	256.4	
2022	280	251.8	--	--	251.8	5.1	256.9	
2023	280	252.4	--	--	252.4	5.1	257.5	
2024	280	244.5	--	--	244.5	5.2	249.7	
2025	329	279.7	--	--	279.7	5.2	284.9	
Subtotal	4900	4227.3	40.0	--	4267.3	129.7	4397.0	

## Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	1/31/2001	12/21/2001
<b>Approved Quantity</b>	176	416
<b>Reference</b>	ADM	N/A
<b>Start Year</b>	2001	2001
<b>End Year</b>	2003	2003

The initial APB (Nov 9, 1998) Objective/Threshold for Low-Rate Initial Production (LRIP) was January 31, 2001. Engine modifications and airframe changes impacted production readiness as the LRIP milestone approached. OSD agreed the program required more time to mature the manufacturing process, and the Defense Acquisition Executive ultimately signed the Acquisition Decision Memorandum authorizing entry into LRIP on December 21, 2001. The December 2001 LRIP decision 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).

## **Foreign Military Sales**

Classified FMS information is provided in the classified annex to this submission.  
None

## **Nuclear Costs**

None.

## Unit Cost

### Unit Cost Report

Item	BY 1995 \$M	BY 1995 \$M	% Change
	Current UCR Baseline (Jul 2004 APB)	Current Estimate (Dec 2009 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	4016.4	5519.3	
Quantity	5447	5018	
Item	0.737	1.100	<b>+49.25<sup>1</sup></b>
<b>Average Procurement Unit Cost</b>			
Cost	2901.4	4397.0	
Quantity	5353	4900	
Unit Cost	0.542	0.897	<b>+65.50<sup>1</sup></b>

Item	BY 1995 \$M	BY 1995 \$M	% Change
	Original UCR Baseline (Nov 1998 APB)	Current Estimate (Dec 2009 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	1749.5	5519.3	
Quantity	2469	5018	
Unit Cost	0.709	1.100	<b>+55.15<sup>1</sup></b>
<b>Average Procurement Unit Cost</b>			
Cost	960.0	4397.0	
Quantity	2400	4900	
Unit Cost	0.400	0.897	<b>+124.25<sup>1</sup></b>

Unit Cost	TY \$M		TY % Change
	Current UCR Baseline (Jul 2004 APB)	Current Estimate (Dec 2009 SAR)	
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	4981.1	7711.3	
Unit Cost	0.914	1.537	<b>+68.16</b>
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	3756.2	6450.0	
Unit Cost	0.702	1.316	<b>+87.46</b>



Unit Cost	TY \$M		TY % Change
	Original UCR Baseline (Nov 1998 APB)	Current Estimate (Dec 2009 SAR)	
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	2073.3	7711.3	
Unit Cost	0.840	1.537	+82.98
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	1209.6	6450.0	
Unit Cost	0.504	1.316	+161.11

<sup>1</sup> Nunn-McCurdy Breach

The Program Office reported a Nunn-McCurdy breach in the December 2006 SAR. The Program was certified May 01, 2008. The Program Office is developing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010.

Unit Cost Breach Data		
Changes From Previous SAR	\$M/Qty.	Percent
PAUC (BY \$M)	0.343	+45.31
APUC (BY \$M)	0.334	+59.33
PAUC Quantity	24	0.00
PAUC (TY \$M)	0.553	+56.20
APUC (TY \$M)	0.542	+70.03

Initial SAR Information - Dec 2001	BY1995 \$M	TY \$M
Program Acquisition Cost	2574.3	3119.6

**Unit Cost PAUC Changes**

The July 2004 APB PAUC increased from 0.737 (BY95\$) to 1.100 (BY95\$). The primary driver for this increase is the deferment of planned quantity buys because of changes to fiscal profile (Procurement). Changes in the fiscal profile have reduced missile buys by 55% across FY06-FY17 and lengthened the production program by eight years. Additional drivers are increased reliability assessment testing for the Baseline missile (Procurement), increased Integrated (IT) and Operational Testing (OT) for the ER variant (RDT&E) and increases due to reduced quantity buys and the production break (Procurement). The Program Office reported a Nunn-McCurdy breach in the December 2006 SAR. The Program was certified May 01, 2008. The Program Office is developing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010.

**Unit Cost APUC Changes**

The July 2004 APB APUC increased from 0.542 (BY95\$) to 0.897 (BY95\$). The primary driver for this increase is the deferment of planned quantity buys because of changes to fiscal profile. Changes in the fiscal profile have reduced missile buys by 55% across FY06-FY17 and lengthened the production program by eight years. Additional drivers are increased reliability assessment testing for the Baseline missile and increases due to reduced quantity buys and the production break. The Program Office reported a Nunn-McCurdy breach in the December 2006 SAR. The Program was certified May 01, 2008. The Program Office is developing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010.

2010.

### **Impact of Performance or Schedule Changes**

In February 2007, there was a schedule breach to the Acquisition Program Baseline (APB) for JASSM-Extended Range (ER) Production cut-in of two years and JASSM-ER Required Assets Available (RAA)/B1-B of three years. The schedule breach was further exacerbated by the Nunn-McCurdy deferral. The Program Office is developing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010.

### **Program Management or Control**

The Program Office reported a Nunn-McCurdy breach in the December 2006 SAR. The Program was certified May 01, 2008. The Program Office is developing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010.

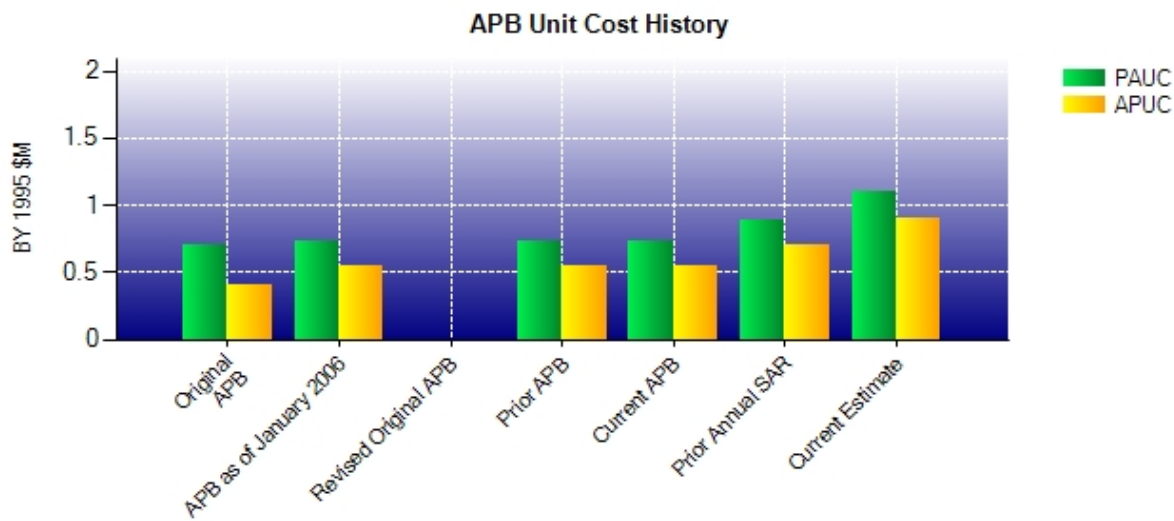
### **Cost Control Actions**

The Program Office intends to control Contractor Costs through multiple methods. First, the Program Office will obtain and utilize Contractor Cost Data Reporting tools, to secure cost controls and better insight into production costs. Next, the Program Office is pursuing Long Term Pricing Agreements between the Prime and Sub-Contractors. This is intended to allow for various contracting strategies and stabilize supplier base and supplier pricing. An additional method to control costs requires fiscal profile and quantity stability which can only be achieved by continued focus on missile reliability. Finally, the Program Office will continue to solicit and incorporate Independent Cost Assessments (e.g. via internal AAC staff or CAPE) into management plans.

### **Nunn-McCurdy Comments**

The Program Office reported a Nunn-McCurdy breach in the December 2006 SAR. The Program was certified May 01, 2008. The Program Office is developing a post Nunn-McCurdy APB. The new APB is expected to be approved by July 2010.

**Unit Cost History**



Item	Date	BY 1995 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Nov 1998	0.709	0.400	0.840	0.504
APB as of January 2006	Jul 2004	0.737	0.542	0.914	0.702
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	Mar 2004	0.737	0.542	0.914	0.702
Current APB	Jul 2004	0.737	0.542	0.914	0.702
Prior Annual SAR	Dec 2007	0.892	0.703	1.212	1.010
Current Estimate	Dec 2009	1.100	0.897	1.537	1.316

**SAR Unit Cost History**

Initial SAR Baseline to Current SAR Baseline (TY \$M)									
Initial PAUC Development Estimate	Changes								PAUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.840	-0.021	-0.142	0.049	0.089	0.083	0.000	0.016	0.074	0.914

Current SAR Baseline to Current Estimate (TY \$M)									
PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.914	0.006	0.024	0.093	0.092	0.401	0.000	0.007	0.623	1.537

Initial SAR Baseline to Current SAR Baseline (TY \$M)									
Initial APUC Development Estimate	Changes								APUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.504	-0.016	0.039	0.030	0.075	0.053	0.000	0.017	0.198	0.702

Current SAR Baseline to Current Estimate (TY \$M)									
APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.702	0.005	-0.007	0.101	0.092	0.416	0.000	0.007	0.614	1.316

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	4981.1	7711.3
Total Quantity	44	2469	5447	5018
PAUC	18.439	0.840	0.914	1.537

Initial Operational Capability (IOC) represents Required Assets Available (RAA) for B-52 declared at Barksdale Air Force Base on September 24, 2003.

## Cost Variance

Summary TY \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	1199.8	3756.2	25.1	4981.1
Previous Changes				
Economic	+7.1	+171.4	--	+178.5
Quantity	+22.2	-345.4	--	-323.2
Schedule	-25.8	+238.8	--	+213.0
Engineering	+14.7	--	--	+14.7
Estimating	-100.1	+1118.7	-25.1	+993.5
Other	--	--	--	--
Support	--	+8.2	--	+8.2
Subtotal	-81.9	+1191.7	-25.1	+1084.7
Current Changes				
Economic	+1.0	-147.5	--	-146.5
Quantity	+42.7	--	--	+42.7
Schedule	--	+256.0	--	+256.0
Engineering	--	+448.6	--	+448.6
Estimating	+99.7	+918.3	--	+1018.0
Other	--	--	--	--
Support	--	+26.7	--	+26.7
Subtotal	+143.4	+1502.1	--	+1645.5
Adjustments	--	--	--	--
Total Changes	+61.5	+2693.8	-25.1	+2730.2
Current Estimate	1261.3	6450.0	--	7711.3

Summary BY 1995 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	1096.6	2901.4	18.4	4016.4
Previous Changes				
Economic	--	--	--	--
Quantity	+17.8	-248.7	--	-230.9
Schedule	-20.8	--	--	-20.8
Engineering	+10.8	--	--	+10.8
Estimating	-83.3	+788.2	-18.4	+686.5
Other	--	--	--	--
Support	--	+4.1	--	+4.1
Subtotal	-75.5	+543.6	-18.4	+449.7
Current Changes				
Economic	--	--	--	--
Quantity	+32.6	--	--	+32.6
Schedule	--	--	--	--
Engineering	--	+304.4	--	+304.4
Estimating	+68.6	+631.8	--	+700.4
Other	--	--	--	--
Support	--	+15.8	--	+15.8
Subtotal	+101.2	+952.0	--	+1053.2
Adjustments	--	--	--	--
Total Changes	+25.7	+1495.6	-18.4	+1502.9
Current Estimate	1122.3	4397.0	--	5519.3

Previous Estimate: December 2007

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+1.0
Quantity increase of 12 test missiles from 106 to 118. (Quantity)	+32.6	+42.7
Revised estimate due to Nunn- McCurdy certification process in FY07. (Estimating)	+69.4	+100.7
Adjustment for current and prior escalation. (Estimating)	-0.8	-1.0
<b>RDT&amp;E Subtotal</b>	<b>+101.2</b>	<b>+143.4</b>

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-147.5
Procurement buys decreased by 35% (4,196 to 2,747) across FY06-20 due to changes in fiscal profile. In addition, the production program extended five years from 2020 to 2025. (Schedule)	0.0	+256.0
Adjustment for current and prior escalation. (Estimating)	+5.3	+6.9
Increases to missile hardware cost due to reduced annual quantity and a missile production break. (Estimating)	+680.5	+992.4
Joint Program Office (JPO) Technical Support requirement decreased starting in FY10. (Estimating)	-54.0	-81.0
Increased test requirements and reliability programs (Engineering)	+304.4	+448.6
Adjustment for current and prior escalation. (Support)	+0.1	+0.1
Increase in Other Support. An adjustment to System Engineering Support is due to the 5 year extension to the Production program. (Support)	+15.7	+26.6
<b>Procurement Subtotal</b>	<b>+952.0</b>	<b>+1502.1</b>

## Contracts

### Contract Identification

**Appropriation:** Procurement  
**Contract Name:** JASSM PROD (Lot 6)  
**Contractor:** Lockheed-Martin  
**Contractor Location:** Orlando, FL 32819  
**Contract Number:** FA8682-07-D-0117/1  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** January 31, 2007  
**Definitization Date:** January 31, 2007

### Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
128.0	128.0	163	128.9	128.9	163	128.0	128.0

### Cost and Schedule Variance Explanations

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

### Notes

This is the first time this contract is being reported.



**Contract Identification**

**Appropriation:** RDT&E  
**Contract Name:** JASSM PROD (Lot 7)  
**Contractor:** Lockheed-Martin  
**Contractor Location:** Orlando, FL 32819  
**Contract Number:** FA8682-07-D-0117/2  
**Contract Type:** Fixed Price Incentive(Firm Target) (FPIF)  
**Award Date:** June 13, 2008  
**Definitization Date:** June 13, 2008

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
92.2	107.1	111	92.2	121.1	111	92.2	92.2

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/31/2009)	+9.1	-2.1
Previous Cumulative Variances	--	--
Net Change	+9.1	-2.1
Percent Variance	+22.92%	-5.02%
Percent Complete	+47.83%	

**Cost and Schedule Variance Explanations****General Contract Variance Explanation**

The unfavorable net Schedule Variance (SV) can be attributed to borrow-payback transactions of Lot 7 wings and body parts, resulting in a reduction of the earned value taken in prior periods. There is no impact to the Lot 7 missile delivery schedule. No corrective action is required.

The favorable net Cost Variance (CV) can be attributed to underruns of labor in Engineering Production Support, Program Support for Reliability, and Quality mainly due to the stretchout of Lot 6 production, the push out of Lot 7 production, as well as the break between the Reliability Assurance Program flights and the restart of Lot 7.

**Notes**

This is the first time this contract is being reported.

## Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	94	94	118	79.66%
Production	960	960	4900	19.59%
Total Program Quantity Delivered	1054	1054	5018	21.00%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	7711.3	Years Appropriated	15
Expended to Date	1817.8	Percent Years Appropriated	48.39%
Percent Expended	23.57%	Appropriated to Date	2112.9
Total Funding Years	31	Percent Appropriated	27.40%

The Development and Production deliveries are adjusted to reflect the actual deliveries to date.

## Operating and Support Cost

### Assumptions and Ground Rules

The JASSM Operating and Support (O&S) estimate includes requirements for 4,900 missiles. The sustainment and readiness plan/estimate for JASSM has evolved to one of total Contractor Logistics Support (CLS). Previous classifications of sustainment functions have now been realigned to reflect this logistics strategy. A 15-year warranty is assumed with a 20-year shelf life and the subsequent demilitarization of the weapon. The JASSM program office will function as a logistics center. The latest O&S cost estimate was May 2008. There is no antecedent system for JASSM

Cost Estimate Reference:

None

Sustainment Strategy:

None

Antecedent Information:

None

Unitized O&S Costs BY1995 \$K			
Cost Element	JASSM		N/A (Antecedent)
	Avg Annual Cost Per Missile		
Mission Pay & Allowance	0.000		--
Unit Level Consumption	0.000		--
Intermediate Maintenance	0.000		--
Depot Maintenance	0.000		--
Contractor Support	2.400		--
Sustaining Support	0.000		--
Indirect	0.000		--
Other	--		--
<b>Total</b>	<b>2.400</b>		<b>--</b>

Unitized Cost Comments:

None

Item	Total O&S Cost \$M			
	JASSM			N/A (Antecedent)
	Current Production APB Objective/Threshold	Current Estimate		
<b>Base Year</b>	366.2	421.1	234.9	N/A
<b>Then Year</b>	0.0	N/A	430.4	N/A

Total O&S Cost Comment

None

### Disposal Estimate Details

**Date of Estimate:**

**Source of Estimate:**

**Disposal/Demilitarization Total Cost (BY 1995 \$M):**