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Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-503



Joint Direct Attack Munition (JDAM)

As of FY 2019 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Sensitivity Originator

No originator info Available at this time.

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 Direct Attack Munition (JDAM)

DoD Component

Air Force

Joint Participants

Navy

Responsible Office

Col W. Scott Bell
6033 Elm Lane, Bldg 1247
Hill AFB, UT 84056

william.bell@us.af.mil

Phone: 801-777-5434

Fax: 801-777-2099

DSN Phone: 777-5434

DSN Fax:

Date Assigned: June 15, 2015

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 23, 2001

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 30, 2015

Mission and Description

The Joint Direct Attack Munition (JDAM) program is a joint Air Force/Navy program with the Air Force as the lead acquisition Service. Designated Acquisition Category IC, this program upgrades the existing inventory of general purpose bombs by integrating the bombs with a field installed guidance kit equipped with a Global Positioning System Aided Inertial Navigation System. JDAM provides the capability to accurately and autonomously attack fixed, or relocatable, land and maritime targets under adverse weather conditions from medium and high altitudes. JDAM is integrated with the A-10C, AV-8B, B-1B, B-2A, B-52H, F-15E, F-16 (all blocks), F/A-18A+/C/D/E/F, and F-22A aircraft. Follow-on integration with the MQ-9 and F-35 Joint Strike Fighter (JSF) are in progress (F-35 is integrated with the 2,000 lb. class, but not the 500 lb. class). Laser JDAM (LJDAM) provides moving target capability to the JDAM family of weapons.

JDAM provides an improved aerial delivery capability for existing MK-82/BLU-111/BLU-126/BLU-129 (500 lb.), MK-83/BLU-110 (1,000 lb.), MK-84/BLU-117/BLU-109 (2,000 lb.) warheads. The improved capability is via a strap-on inertial guidance kit with Global Positioning System (GPS) updates. The kit provides autonomous adverse weather delivery accuracy from five meters Circular Error Probable (CEP) when GPS is available to the weapon, to less than 30 meters when GPS is absent or jammed. The laser sensor kit added to the JDAM weapon kit provides ability to attack moving targets when designated by airborne or ground laser.

Executive Summary

Accomplishments

A contract modification was completed to add an additional 8,621 tail kits to the Lot 21 Delivery Order, increasing the Lot 21 total quantity to 45,000 tail kits for all customers.

Boeing and the JDAM supply base have successfully increased JDAM production from 75 kits/day to 165 kits/day (40,000 kits/year) and are on track to produce 180 kits/day (45,000 kits/year) with risk mitigation efforts underway.

Boeing and the Laser JDAM (LJDAM) supply base have successfully increased LJDAM production from 3,500 kits/year to 6,000 kits/year. The Navy Direct Attack Moving Target Capability (DAMTC) Office serves as lead service for Air Force, Navy, and FMS procurements.

JDAM tail kits continue to perform well and deliveries have exceeded the initial production schedule.

Issues

Due to increased quantities and funding within the FYDP, the JDAM program has an APB breach in the Procurement appropriation. An updated APB estimate is currently in coordination.

Inventory stockpiles for both JDAM and LJDAM remain below the objective due to operational usage.

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

Threshold Breaches

APB Breaches

Schedule		<input type="checkbox"/>
Performance		<input type="checkbox"/>
Cost	RDT&E	<input type="checkbox"/>
	Procurement	<input checked="" 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"/>

Explanation of Breach

The Procurement breach was first reported in the December 2016 SAR. An updated APB estimate is currently in coordination.

Nunn-McCurdy Breaches

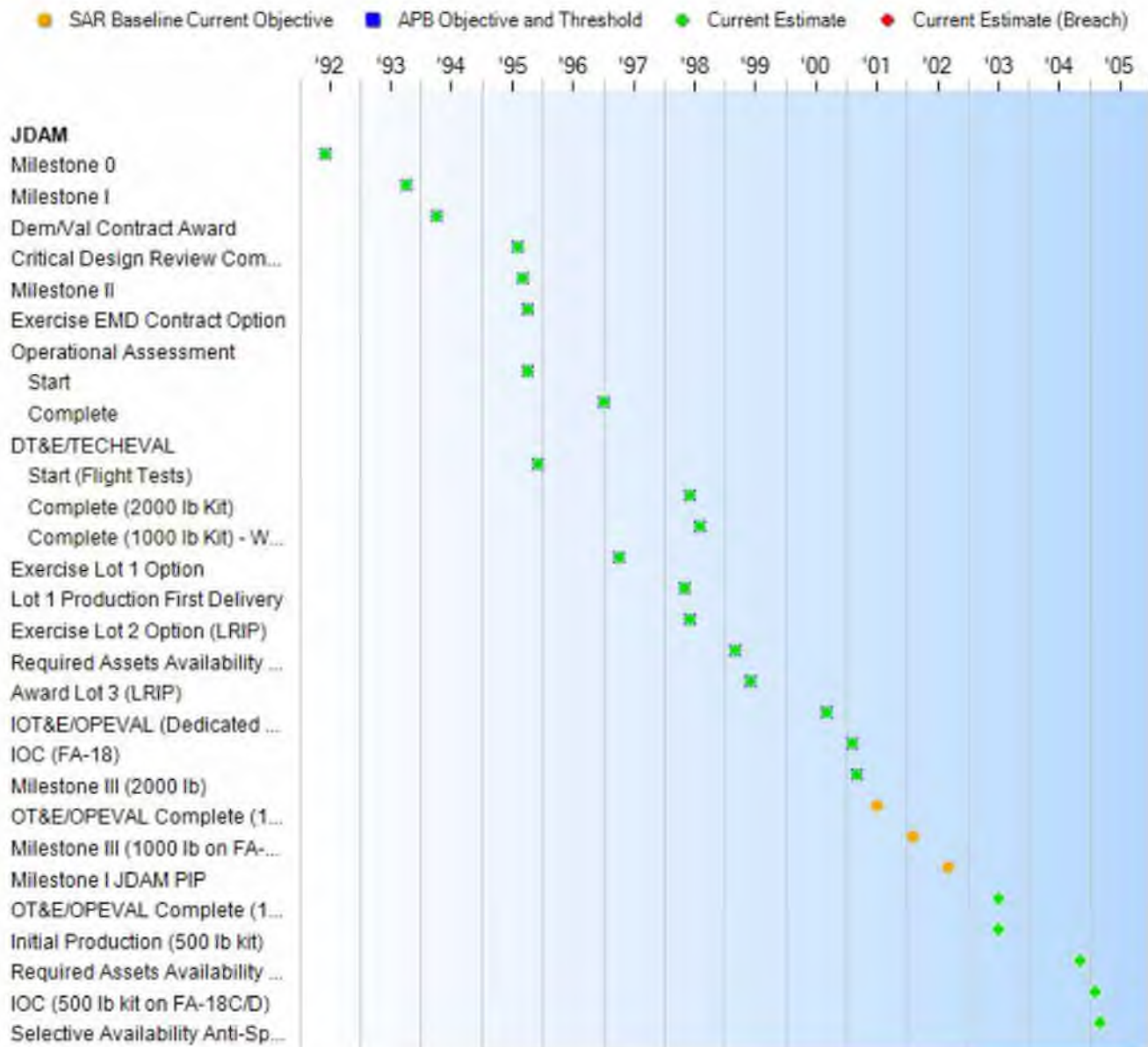
Current UCR Baseline

PAUC	None
APUC	None

Original UCR Baseline

PAUC	None
APUC	None

Schedule



Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate
Milestone 0	Jun 1992	Jun 1992	Jun 1992	Jun 1992
Milestone I	Oct 1993	Oct 1993	Oct 1993	Oct 1993
Dem/Val Contract Award	Apr 1994	Apr 1994	Apr 1994	Apr 1994
Critical Design Review Complete	Aug 1995	Aug 1995	Aug 1995	Aug 1995
Milestone II	Sep 1995	Sep 1995	Sep 1995	Sep 1995
Exercise EMD Contract Option	Oct 1995	Oct 1995	Oct 1995	Oct 1995
Operational Assessment				
Start	Oct 1995	Oct 1995	Oct 1995	Oct 1995
Complete	Mar 1997	Jan 1997	Jan 1997	Jan 1997
DT&E/TECHEVAL				
Start (Flight Tests)	Oct 1995	Dec 1995	Dec 1995	Dec 1995
Complete (2000 lb Kit)	Dec 1997	Jun 1998	Jun 1998	Jun 1998
Complete (1000 lb Kit) - Weapon Only	Feb 1998	Aug 1998	Aug 1998	Aug 1998
Exercise Lot 1 Option	Apr 1997	Apr 1997	Apr 1997	Apr 1997
Lot 1 Production First Delivery	Apr 1998	May 1998	May 1998	May 1998
Exercise Lot 2 Option (LRIP)	Apr 1998	Jun 1998	Jun 1998	Jun 1998
Required Assets Availability (AF)	Mar 1999	Mar 1999	Mar 1999	Mar 1999
Award Lot 3 (LRIP)	Jun 1999	Jun 1999	Jun 1999	Jun 1999
IOT&E/OPEVAL (Dedicated 2000 lb Kit) Complete	Sep 2000	Sep 2000	Sep 2000	Sep 2000
IOC (FA-18)	Nov 2000	Feb 2001	Feb 2001	Feb 2001
Milestone III (2000 lb)	Nov 2000	Mar 2001	Mar 2001	Mar 2001
OT&E/OPEVAL Complete (1000 lb Kit/FA-18C/D)	Jul 2001	N/A	N/A	N/A
Milestone III (1000 lb on FA-18C/D)	Feb 2002	N/A	N/A	N/A
Milestone I JDAM PIP	Sep 2002	N/A	N/A	N/A
OT&E/OPEVAL Complete (1000 lb Kit/FA-18C/D)	N/A	Jul 2003	Jul 2003	Jul 2003
Initial Production (500 lb kit)	N/A	Jul 2003	Jul 2003	Jul 2003
Required Assets Availability (RAA) (500 lb on B-2)	N/A	Nov 2004	Nov 2004	Nov 2004
IOC (500 lb kit on FA-18C/D)	N/A	Feb 2005	Feb 2005	Feb 2005
Selective Availability Anti-Spoofing Module (SAASM)/GPS Anti-Jam Production Award	N/A	Mar 2005	Mar 2005	Mar 2005

Change Explanations

None

Acronyms and Abbreviations

AF - Air Force
Dem/Val - Demonstration/Validation
DT&E - Development Test and Evaluation
GPS - Global Positioning System
IOT&E - Initial Operational Test and Evaluation
lb - Pound
OPEVAL - Operational Evaluation
OT&E - Operational Test and Evaluation
PIP - Product Improvement Program
TECHEVAL - Technical Evaluation

Performance

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Weather Capability				
Adverse	Adverse	(T=O) Adverse	Adverse	Adverse
Accuracy (CEP) (Meters)				
GPS Available, Impact Angles > 60 Deg				
13 Horizontal Targets	5 Horizontal targets	13	4.2 Meters Against Horizontal Targets	5 Meters Against Horizontal Targets
Inflight Re-targeting Capability (captive carry)				
Yes	Yes	(T=O) Yes	Yes	Yes
Carrier Operability				
Yes	Yes	(T=O) Yes	Yes	Yes
Warhead Compatibility				
MK-82/BLU-111, MK-83, Improved 1000-lbs, BLU-113/116/117	MK-82/BLU-111, MK-83, Improved 1000-lbs, BLU-113/116/117	BLU-109, MK-84, MK-83 (F-22)	MK-82/BLU-111/BLU-126/BLU-129, MK-83 (F-22)/BLU-110, MK-84/BLU-117/BLU-109	MK-82/BLU-111/BLU-126/BLU-129, MK-83 (F-22)/BLU-110, MK-84/BLU-117/BLU-109
Aircraft Compatibility				
Bomber				
B-1B, B-2	B-1B, B-2	B-52H	B-52H, B-1B, B-2A	B-52H, B-1B, B-2A
Fighter Attack				
F-16C/D, F/A-18E/F, F-117A, F-15E, F-14A/B/D, P-3, S-3, JSF, A-10	F-16C/D, F/A-18E/F, F-117A, F-15E, F-14A/B/D, P-3, S-3, JSF, A-10	F/A-18C/D, F-22 (MK-83), AV-8B & F/A-18C/D (MK-83)	F-16C/D, F/A-18A+/C/D/E/F, F-15E, AV-8B, A-10C, F-22A, F-35	F-16C/D, F/A-18A+/C/D/E/F, F-15E, AV-8B, A-10C, F-22A, F-35, MQ-9
Mission Reliability				
.90	.90	(T=O) .90	.938	.90
Interoperability				
N/A	Satisfy 100% of critical IERs	(T=O) Satisfy 100% of critical IERs	Satisfied	Satisfied
JDAM PIP Accuracy (CEP) (Meters)				
3	N/A	N/A	N/A	N/A
JDAM PIP Weather Capability				
Adverse	N/A	N/A	N/A	N/A
JDAM PIP Warhead Compatibility				

MK-82, MK-83	N/A	N/A	N/A	N/A
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Requirements Reference

ORD dated March 10, 2001

Change Explanations

None

Acronyms and Abbreviations

CEP - Circular Error Probable

Deg - Degree

GPS - Global Positioning System

PIP - Product Improvement Program

Track to Budget

RDT&E

Appn	BA	PE	
Navy	1319	05	0604618N
	Project	Name	
	2137	JDAM	
			(Sunk)
Air Force	3600	05	0604618F
	Project	Name	
	3890	JDAM	
			(Sunk)
Air Force	3600	04	0604618F
	Project	Name	
	641200	JDAM Development & Prototyping	
			(Sunk)
Air Force	3600	07	0604618F
	Project	Name	
	653891	JDAM M-Code Integration	
	674138	JDAM Development	
			(Sunk)

Procurement

Appn	BA	PE	
Navy	1508	01	0204162N
	Line Item	Name	
	0145	General Purpose Bombs	
	0148	JDAM	
			(Shared)
Navy	1508	01	0206138M
	Line Item	Name	
	0148	JDAM	
			(Sunk)
Air Force	3011	01	0207583F
	Line Item	Name	
	353620	Joint Direct Attack Munition	

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	490.3	572.8	630.1	595.1	517.3	602.3	635.9
Procurement	1810.0	6091.9	6701.1	7918.6 ¹	2089.4	7861.2	10727.7
Flyaway	--	--	--	7476.6	--	--	10157.1
Recurring	--	--	--	7466.7	--	--	10142.1
Non Recurring	--	--	--	9.9	--	--	15.0
Support	--	--	--	442.0	--	--	570.6
Other Support	--	--	--	442.0	--	--	570.6
Initial Spares	--	--	--	0.0	--	--	0.0
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	2300.3	6664.7	N/A	8513.7	2606.7	8463.5	11363.6

¹ APB Breach

Current APB Cost Estimate Reference

Procurement costs and RDT&E costs for this APB are based on the FY 2016 PB dated February 19, 2015 and the O&S cost are based on an ICE dated August 28, 2014

Cost Notes

In accordance with Section 842 of the National Defense Authorization Act for FY 2017, which amended title 10 U.S.C. § 2334, the Director of Cost Assessment and Program Evaluation, and the Secretary of the military department concerned or the head of the Defense Agency concerned, must issue guidance requiring a discussion of risk, the potential impacts of risk on program costs, and approaches to mitigate risk in cost estimates for MDAPs and major subprograms. The information required by the guidance is to be reported in each SAR. This guidance is not yet available; therefore, the information on cost risk is not contained in this SAR.

Unit costs are projected to rise as the modified JDAM hardback enters production, and again as M-Code capability is integrated into the system.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	630	804	804
Procurement	88435	321182	430222
Total	89065	321986	431026

Quantity Notes

The end item unit of measure includes only the JDAM tail kits. Laser JDAM sensors are not included in total quantity.

Cost and Funding

Funding Summary

Appropriation Summary									
FY 2019 President's Budget / December 2017 SAR (TY\$ M)									
Appropriation	Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
RDT&E	612.2	0.0	15.8	0.0	7.9	0.0	0.0	0.0	635.9
Procurement	7203.2	874.4	1153.5	408.4	340.4	394.7	353.1	0.0	10727.7
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 2019 Total	7815.4	874.4	1169.3	408.4	348.3	394.7	353.1	0.0	11363.6
PB 2018 Total	7662.2	877.1	364.9	409.6	434.0	418.7	0.0	0.0	10166.5
Delta	153.2	-2.7	804.4	-1.2	-85.7	-24.0	353.1	0.0	1197.1

Funding Notes

FY 2020-FY 2023 does not include any Overseas Contingency Operations (OCO) funding.

The FY 2016 budget (Air Force) received a reprogramming increase of \$153.2M (OCO) that is included in this report.

Quantity Summary										
FY 2019 President's Budget / December 2017 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Development	804	0	0	0	0	0	0	0	0	804
Production	0	307636	34529	43594	13644	10065	11808	8946	0	430222
PB 2019 Total	804	307636	34529	43594	13644	10065	11808	8946	0	431026
PB 2018 Total	804	300485	35200	13134	15500	15913	15300	0	0	396336
Delta	0	7151	-671	30460	-1856	-5848	-3492	8946	0	34690

Cost and Funding

Annual Funding By Appropriation

Annual Funding							
1319 RDT&E Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1993	--	--	--	--	--	--	23.2
1994	--	--	--	--	--	--	7.8
1995	--	--	--	--	--	--	23.0
1996	--	--	--	--	--	--	25.4
1997	--	--	--	--	--	--	22.1
1998	--	--	--	--	--	--	11.6
1999	--	--	--	--	--	--	6.1
2000	--	--	--	--	--	--	7.2
2001	--	--	--	--	--	--	23.0
2002	--	--	--	--	--	--	27.3
2003	--	--	--	--	--	--	15.5
2004	--	--	--	--	--	--	1.3
2005	--	--	--	--	--	--	0.5
2006	--	--	--	--	--	--	0.3
Subtotal	114	--	--	--	--	--	194.3

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
1993	--	--	--	--	--	--	23.8
1994	--	--	--	--	--	--	7.8
1995	--	--	--	--	--	--	22.7
1996	--	--	--	--	--	--	24.7
1997	--	--	--	--	--	--	21.2
1998	--	--	--	--	--	--	11.0
1999	--	--	--	--	--	--	5.7
2000	--	--	--	--	--	--	6.7
2001	--	--	--	--	--	--	21.0
2002	--	--	--	--	--	--	24.7
2003	--	--	--	--	--	--	13.8
2004	--	--	--	--	--	--	1.1
2005	--	--	--	--	--	--	0.4
2006	--	--	--	--	--	--	0.2
Subtotal	114	--	--	--	--	--	184.8

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
1993	--	--	--	--	--	--	21.5
1994	--	--	--	--	--	--	61.9
1995	--	--	--	--	--	--	62.9
1996	--	--	--	--	--	--	76.4
1997	--	--	--	--	--	--	32.7
1998	--	--	--	--	--	--	21.1
1999	--	--	--	--	--	--	28.7
2000	--	--	--	--	--	--	11.3
2001	--	--	--	--	--	--	9.7
2002	--	--	--	--	--	--	16.5
2003	--	--	--	--	--	--	17.0
2004	--	--	--	--	--	--	36.0
2005	--	--	--	--	--	--	--
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	7.3
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	2.5
2015	--	--	--	--	--	--	2.5
2016	--	--	--	--	--	--	--
2017	--	--	--	--	--	--	9.9
2018	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	15.8
2020	--	--	--	--	--	--	--
2021	--	--	--	--	--	--	7.9
Subtotal	690	--	--	--	--	--	441.6

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
1993	--	--	--	--	--	--	21.9
1994	--	--	--	--	--	--	62.1
1995	--	--	--	--	--	--	62.0
1996	--	--	--	--	--	--	73.9
1997	--	--	--	--	--	--	31.2
1998	--	--	--	--	--	--	20.0
1999	--	--	--	--	--	--	26.9
2000	--	--	--	--	--	--	10.5
2001	--	--	--	--	--	--	8.8
2002	--	--	--	--	--	--	14.9
2003	--	--	--	--	--	--	15.1
2004	--	--	--	--	--	--	31.3
2005	--	--	--	--	--	--	--
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	5.8
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	1.8
2015	--	--	--	--	--	--	1.8
2016	--	--	--	--	--	--	--
2017	--	--	--	--	--	--	6.8
2018	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	10.5
2020	--	--	--	--	--	--	--
2021	--	--	--	--	--	--	5.0
Subtotal	690	--	--	--	--	--	410.3

Annual Funding							
1508 Procurement Procurement of Ammunition, Navy and Marine Corps							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1998	547	10.0	--	--	10.0	10.9	20.9
1999	745	14.6	--	--	14.6	20.6	35.2
2000	916	19.3	--	--	19.3	15.7	35.0
2001	2325	50.2	--	--	50.2	15.4	65.6
2002	14551	292.4	--	--	292.4	10.1	302.5
2003	12280	242.4	--	--	242.4	8.5	250.9
2004	12422	243.7	--	--	243.7	8.2	251.9
2005	6876	142.5	--	--	142.5	8.6	151.1
2006	3288	72.5	--	--	72.5	9.0	81.5
2007	3324	73.9	--	--	73.9	12.7	86.6
2008	1422	35.5	--	--	35.5	7.1	42.6
2009	560	13.3	--	--	13.3	5.2	18.5
2010	--	--	--	--	--	2.0	2.0
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	1137	23.8	--	--	23.8	--	23.8
2015	876	18.7	--	--	18.7	--	18.7
2016	1912	40.0	--	--	40.0	--	40.0
2017	4642	91.2	--	--	91.2	--	91.2
2018	7209	164.3	--	--	164.3	--	164.3
2019	7594	180.9	--	--	180.9	--	180.9
2020	2844	70.5	--	--	70.5	--	70.5
2021	2865	72.4	--	--	72.4	--	72.4
2022	3108	79.9	--	--	79.9	--	79.9
2023	2346	85.0	--	--	85.0	--	85.0
Subtotal	93789	2037.0	--	--	2037.0	134.0	2171.0

Annual Funding							
1508 Procurement Procurement of Ammunition, Navy and Marine Corps							
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	547	9.4	--	--	9.4	10.2	19.6
1999	745	13.5	--	--	13.5	19.1	32.6
2000	916	17.6	--	--	17.6	14.4	32.0
2001	2325	45.3	--	--	45.3	13.9	59.2
2002	14551	261.2	--	--	261.2	9.0	270.2
2003	12280	211.7	--	--	211.7	7.4	219.1
2004	12422	207.3	--	--	207.3	7.0	214.3
2005	6876	117.8	--	--	117.8	7.1	124.9
2006	3288	58.5	--	--	58.5	7.2	65.7
2007	3324	58.2	--	--	58.2	10.1	68.3
2008	1422	27.6	--	--	27.6	5.5	33.1
2009	560	10.2	--	--	10.2	4.0	14.2
2010	--	--	--	--	--	1.5	1.5
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	1137	16.8	--	--	16.8	--	16.8
2015	876	13.0	--	--	13.0	--	13.0
2016	1912	27.4	--	--	27.4	--	27.4
2017	4642	61.3	--	--	61.3	--	61.3
2018	7209	108.4	--	--	108.4	--	108.4
2019	7594	117.1	--	--	117.1	--	117.1
2020	2844	44.8	--	--	44.8	--	44.8
2021	2865	45.1	--	--	45.1	--	45.1
2022	3108	48.7	--	--	48.7	--	48.7
2023	2346	50.8	--	--	50.8	--	50.8
Subtotal	93789	1571.7	--	--	1571.7	116.4	1688.1

Annual Funding							
3011 Procurement Procurement of Ammunition, 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
1997	937	16.6	--	--	16.6	6.4	23.0
1998	1828	33.5	--	--	33.5	5.7	39.2
1999	3778	72.4	--	--	72.4	7.1	79.5
2000	8725	180.1	--	--	180.1	9.1	189.2
2001	8904	189.9	--	--	189.9	13.6	203.5
2002	14392	285.9	--	--	285.9	14.5	300.4
2003	23420	458.5	--	--	458.5	18.6	477.1
2004	20476	404.2	--	--	404.2	20.3	424.5
2005	22880	491.8	--	--	491.8	22.6	514.4
2006	8205	200.8	--	--	200.8	24.4	225.2
2007	7261	163.6	17.1	--	180.7	13.4	194.1
2008	4319	102.1	--	--	102.1	22.0	124.1
2009	6340	149.1	--	--	149.1	16.9	166.0
2010	7488	169.5	7.6	--	177.1	21.3	198.4
2011	14551	350.6	6.9	--	357.5	15.9	373.4
2012	4637	111.5	--	--	111.5	15.7	127.2
2013	4728	113.8	19.9	--	133.7	10.9	144.6
2014	8584	191.5	47.0	--	238.5	12.0	250.5
2015	9980	218.8	34.4	--	253.2	8.4	261.6
2016	29439	636.6	29.7	6.0	672.3	14.9	687.2
2017	28941	635.7	32.9	--	668.6	13.5	682.1
2018	27320	600.6	65.1	--	665.7	44.4	710.1
2019	36000	826.3	108.3	9.0	943.6	29.0	972.6
2020	10800	260.6	63.3	--	323.9	14.0	337.9
2021	7200	189.8	64.2	--	254.0	14.0	268.0
2022	8700	235.6	65.2	--	300.8	14.0	314.8
2023	6600	187.9	66.2	--	254.1	14.0	268.1
Subtotal	336433	7477.3	627.8	15.0	8120.1	436.6	8556.7

Annual Funding							
3011 Procurement Procurement of Ammunition, 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
1997	937	15.7	--	--	15.7	6.0	21.7
1998	1828	31.3	--	--	31.3	5.4	36.7
1999	3778	66.8	--	--	66.8	6.5	73.3
2000	8725	164.3	--	--	164.3	8.3	172.6
2001	8904	171.2	--	--	171.2	12.2	183.4
2002	14392	253.2	--	--	253.2	12.8	266.0
2003	23420	397.6	--	--	397.6	16.2	413.8
2004	20476	342.1	--	--	342.1	17.2	359.3
2005	22880	404.9	--	--	404.9	18.6	423.5
2006	8205	161.0	--	--	161.0	19.6	180.6
2007	7261	128.5	13.5	--	142.0	10.5	152.5
2008	4319	79.1	--	--	79.1	17.0	96.1
2009	6340	114.0	--	--	114.0	12.9	126.9
2010	7488	127.3	5.7	--	133.0	15.9	148.9
2011	14551	258.9	5.1	--	264.0	11.8	275.8
2012	4637	80.9	--	--	80.9	11.4	92.3
2013	4728	81.1	14.1	--	95.2	7.8	103.0
2014	8584	134.7	33.1	--	167.8	8.4	176.2
2015	9980	151.5	23.9	--	175.4	5.8	181.2
2016	29439	433.2	20.2	4.1	457.5	10.1	467.6
2017	28941	425.3	22.0	--	447.3	9.0	456.3
2018	27320	394.5	42.7	--	437.2	29.2	466.4
2019	36000	532.2	69.8	5.8	607.8	18.7	626.5
2020	10800	164.6	40.0	--	204.6	8.8	213.4
2021	7200	117.5	39.7	--	157.2	8.7	165.9
2022	8700	143.0	39.6	--	182.6	8.5	191.1
2023	6600	111.8	39.4	--	151.2	8.3	159.5
Subtotal	336433	5486.2	408.8	9.9	5904.9	325.6	6230.5

TOTAL FUNDING NOTES:

- FY 2016 budget received \$153.2M Above Threshold Reprogramming action adding an additional quantity of 6,826 tail kits.
- FY 2017 funding reflects a \$25M Congressional mark.
- FY 2018 includes OCO funds of \$390.577M, and 16,990 tail kits.
- FY 2019 includes OCO funds of \$738.451M and 28,101 tail kits; No OCO in FY 2020+).

LASER JDAM (NON END ITEM RECURRING FLYAWAY) NOTES:

- FY 2017 Non End Item Related Recurring Flyaway costs include 2,745 Laser JDAM kits (actual, down from 4,131 due to Congressional mark, remaining 1,386 supplemented with FY 2018 funds).
- FY 2018 Non End Item Related Recurring Flyaway costs include 5,382 Laser JDAM kits (1,386 actual; 3,996 projected).
- FY 2019 Non End Item Related Recurring Flyaway costs include 8,700 Laser JDAM kits (projected).
- FY 2020-FY 2023 Non End Item Related Recurring Flyaway costs include 5,000 Laser JDAM kits per year (projected).

NONRECURRING FLYAWAY NOTES:

- FY 2019 Nonrecurring Flyaway costs include \$9M for Laser JDAM facilitization.

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	9/20/1995	1/21/2000
Approved Quantity	425	15998
Reference	Milestone II ADM	LRIP 4 ADM
Start Year	1997	1997
End Year	1998	2000

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Description
Belgium	2/28/2017	36	0.8	JDAM kits
Jordan	2/28/2017	198	4.1	JDAM kits
Korea	2/28/2017	275	6.4	JDAM kits
NATO	2/28/2017	420	8.9	JDAM kits purchased for NATO Single Procurement Agency (NSPA)
Romania	2/28/2017	180	3.7	JDAM kits
Singapore	2/28/2017	5	0.1	JDAM kits
Spain	2/28/2017	15	0.3	JDAM kits
Turkey	2/28/2017	100	2.1	JDAM kits
United Arab Emirates	2/28/2017	1500	32.8	JDAM kits
Belgium	5/31/2016	227	4.7	JDAM Kits
Denmark	5/31/2016	150	3.1	JDAM Kits
Finland	5/31/2016	8	0.2	JDAM Kits
Japan	5/31/2016	6	0.1	JDAM Kits
Korea	5/31/2016	15	0.3	JDAM Kits
Kuwait	5/31/2016	51	1.1	JDAM Kits
Morocco	5/31/2016	70	1.4	JDAM Kits
Oman	5/31/2016	108	2.2	JDAM Kits
Saudi Arabia	5/31/2016	2645	56.2	JDAM Kits
Turkey	5/31/2016	900	19.6	JDAM Kits
United Arab Emirates	5/31/2016	3504	87.9	JDAM Kits
Belgium	11/20/2015	60	1.3	JDAM Kits
Canada	11/20/2015	350	7.9	JDAM Kits
Denmark	11/20/2015	50	1.2	JDAM Kits
Finland	11/20/2015	18	0.4	JDAM Kits
Israel	11/20/2015	100	2.4	JDAM Kits
Netherlands	11/20/2015	300	6.6	JDAM Kits
Singapore	11/20/2015	917	22.0	JDAM Kits
Taiwan	11/20/2015	1	0.0	JDAM Kit
Turkey	11/20/2015	400	9.4	JDAM Kits
Israel	10/31/2014	3000	65.5	JDAM kits
Norway	10/31/2014	238	4.9	JDAM kits
Morocco	10/30/2014	20	0.4	JDAM kits
United Arab Emirates	10/30/2014	3600	74.4	JDAM kits
Oman	7/1/2013		0.9	Fuzes
Belgium	5/15/2013		0.1	Fuzes
Norway	3/8/2013		2.8	Fuzes
Israel	3/7/2013	3113	88.8	JDAM Kits and Support
Korea	3/7/2013	210	7.8	JDAM Kits, Fuzes
Japan	3/1/2013	68	4.2	JDAM Kits
Poland	1/31/2013		1.1	JDAM Manpower
Turkey	12/19/2012	300	13.4	JDAM Kits, Fuzes
Korea	11/27/2012	140	5.1	JDAM Kits, Fuzes

Israel	11/21/2012	1500	40.8	JDAM Kits
Finland	7/15/2012		0.2	Repair and Return, Spares, Support
Korea	5/1/2012	106	3.6	JDAM Kits
Iraq	4/19/2012	358	2.0	Fuzes
Canada	4/17/2012	0	0.2	Fuzes
Saudi Arabia	2/22/2012		5.4	Repair and Return, Spares, Support
Saudi Arabia	2/22/2012	0	61.4	Engineering Support
Saudi Arabia	2/11/2012	600	154.5	JDAM Kits, Precision Laser Guidance Sets, Fuzes
Japan	10/12/2011	16	0.7	JDAM Kits
Japan	10/12/2011	8	0.7	JDAM Kits
Belgium	9/8/2011	180	5.4	JDAM Kits, Fuzes
Malaysia	8/23/2011	0	1.8	JDAM Spares, Test Assets
Canada	8/11/2011	533	15.9	JDAM Kits, Integration Support
Japan	7/15/2011	0	2.7	Fuzes
Chile	6/10/2011	210	8.0	JDAM Kits, Fuzes
Norway	4/26/2011	254	9.5	JDAM Kits
Denmark	4/11/2011	210	8.9	JDAM Kits
Belgium	2/2/2011	30	0.8	Spares
Brazil	1/28/2011	0	0.3	Fuzes
Morocco	9/8/2010	10	6.0	JDAM Kits
Japan	2/9/2010	96	4.9	JDAM Kits, Fuzes
Japan	1/29/2010	31	1.7	JDAM Kits, Fuzes
Singapore	1/27/2010	670	35.5	JDAM Kits
Israel	1/22/2010	150	2.1	Precision Laser Guidance Set
Israel	1/12/2010	150	3.5	JDAM Kits
Netherlands	12/4/2009	0	2.8	Fuzes
South Korea	11/30/2009	0	3.8	JDAM Integration on F-16
Malaysia	9/28/2009	50	5.8	JDAM Kits
Norway	6/10/2009	30	5.2	JDAM Kits, Support
Kuwait	3/31/2009	51	5.9	JDAM Kits, Support
United Arab Emirates	3/24/2009	0	1.1	Repair and Return, Spares, Support
Japan	3/12/2009	120	9.2	JDAM Kits
Finland	2/25/2009	96	7.0	JDAM Kits
Singapore	2/11/2009	35	4.1	JDAM Kits
Japan	2/3/2009	36	3.1	JDAM Kits, Fuzes
Oman	2/2/2009	0	0.8	Repair and Return, Spares, Support
Israel	1/12/2009	2950	71.6	JDAM Kits
Israel	1/12/2009	500	14.9	JDAM Kits
South Korea	12/29/2008		0.4	Fuzes
South Korea	12/16/2008	4	0.5	JDAM Kits
Germany	10/28/2008		0.2	Fuzes
South Korea	9/3/2008		0.2	Fuzes
Israel	7/21/2008		0.6	Engineering Support
Saudi Arabia	7/2/2008	900	44.2	JDAM Kits, Support
South Korea	3/11/2008		2.2	Fuzes
Japan	3/7/2008	36	2.1	JDAM Kits, Fuzes
United Arab Emirates	2/21/2008	300	70.6	JDAM Kits
South Korea	2/19/2008		4.3	Fuzes, Global Positioning System (GPS) Security
South Korea	12/28/2007		0.4	Fuzes

South Korea	12/28/2007		0.4	Fuzes
Australia	12/11/2007		2.6	Engineering Support
Greece	11/20/2007	100	21.9	JDAM Kits, Integration Support
Netherlands	10/24/2007		2.8	Fuzes
Israel	10/2/2007	1000	28.0	JDAM Kits
Israel	9/26/2007	650	17.3	JDAM Kits
Israel	7/13/2007	300	8.3	JDAM Kits
Turkey	5/29/2007		0.4	Fuzes
Israel	3/5/2007	500	12.9	JDAM Kits
Japan	12/18/2006	42	1.8	JDAM Kits
Spain	12/14/2006	40	2.5	JDAM Kits
Pakistan	9/30/2006	500	23.6	JDAM Kits
Israel	7/25/2006		0.1	Engineering Support
Japan	3/27/2006	44	3.5	JDAM Kits
Japan	3/17/2006		0.1	Engineering Support
Turkey	12/28/2005	398	9.9	JDAM Kits
Turkey	12/28/2005		6.9	Integration
Greece	12/13/2005		2.3	Integration Support
Netherlands	10/7/2005	56	1.7	JDAM Kits
Turkey	4/26/2005		4.7	Integration Support
Australia	4/5/2005		0.3	Integration Support
Netherlands	3/1/2005	360	8.7	JDAM Kits, Support
Japan	1/25/2005	27	8.5	JDAM Kits, Integration, Test Assets
Belgium	12/22/2004	300	7.9	JDAM Kits
Israel	8/16/2004		17.6	F-15 Integration
Israel	7/14/2004	840	18.1	JDAM Kits, Integration
Portugal	4/15/2004	50	3.7	JDAM Kits, Support
Netherlands	2/23/2004	350	13.8	JDAM Kits, Support
Oman	2/15/2004	20	0.5	JDAM Kits
Israel	7/3/2003	1000	21.5	JDAM Kits
Poland	4/18/2003	272	10.6	JDAM Kits, Integration, Test Assets
Denmark	12/20/2002	274	11.0	JDAM Kits, Support
United Arab Emirates	8/20/2002	300	9.0	JDAM Kits
South Korea	6/12/2002	14	1.1	JDAM Kits
Oman	5/2/2002	80	3.2	JDAM Kits
Belgium	2/11/2002		0.8	Fuzes
Chile	2/1/2002	12	3.0	JDAM Kits, Integration, Test Assets
Australia	11/28/2000		3.2	Fuzes
Australia	11/28/2000		6.8	Fuzes
United Arab Emirates	8/8/2000		1.3	Integration, Test Assets
Israel	2/9/2000	700	31.5	JDAM Kits, Integration

Notes

Acronyms and Abbreviations

NSPA - NATO Single Procurement Agency

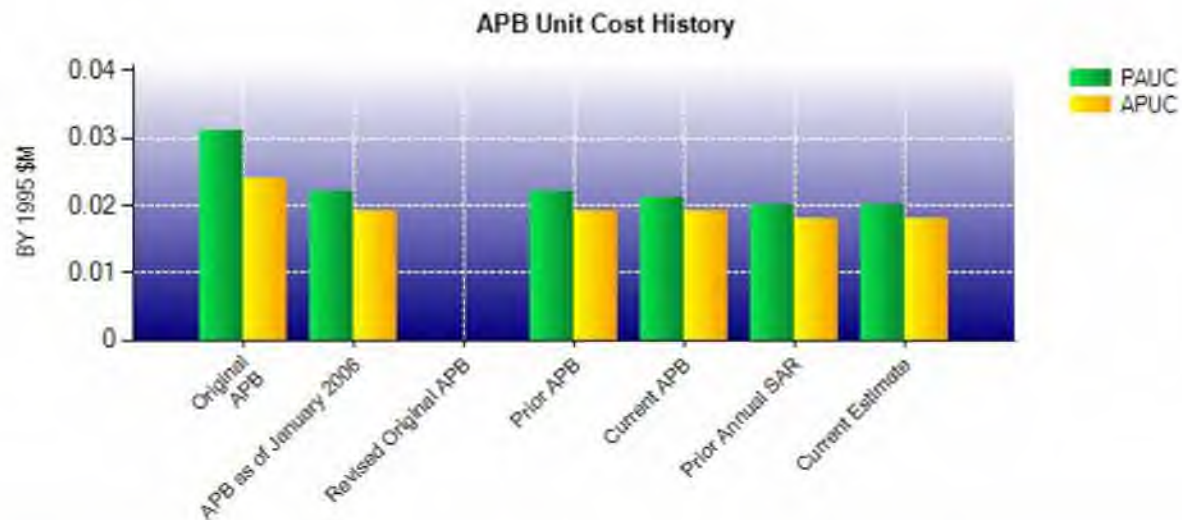
PLGS - Precision Laser Guided Set

Nuclear Costs

None

Unit Cost

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 1995 \$M	BY 1995 \$M	% Change
	Current UCR Baseline (Jun 2015 APB)	Current Estimate (Dec 2017 SAR)	
Program Acquisition Unit Cost			
Cost	6664.7	8513.7	
Quantity	321986	431026	
Unit Cost	0.021	0.020	-4.76
Average Procurement Unit Cost			
Cost	6091.9	7918.6	
Quantity	321182	430222	
Unit Cost	0.019	0.018	-5.26
Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 1995 \$M	BY 1995 \$M	% Change
	Original UCR Baseline (Sep 1995 APB)	Current Estimate (Dec 2017 SAR)	
Program Acquisition Unit Cost			
Cost	2720.4	8513.7	
Quantity	88126	431026	
Unit Cost	0.031	0.020	-35.48
Average Procurement Unit Cost			
Cost	2090.6	7918.6	
Quantity	87496	430222	
Unit Cost	0.024	0.018	-25.00



APB Unit Cost History					
Item	Date	BY 1995 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Sep 1995	0.031	0.024	0.038	0.033
APB as of January 2006	Oct 2002	0.022	0.019	0.025	0.023
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	Oct 2002	0.022	0.019	0.025	0.023
Current APB	Jun 2015	0.021	0.019	0.026	0.024
Prior Annual SAR	Dec 2016	0.020	0.018	0.026	0.024
Current Estimate	Dec 2017	0.020	0.018	0.026	0.025

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	
0.038	-0.002	-0.005	0.002	0.001	-0.005	0.000	0.000	-0.009	0.029

Current SAR Baseline to Current Estimate (TY \$M)									
PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.029	0.000	-0.006	0.000	0.000	0.002	0.000	0.001	-0.003	0.026

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	
0.033	-0.002	-0.003	0.002	0.000	-0.006	0.000	0.000	-0.009	0.024

Current SAR Baseline to Current Estimate (TY \$M)									
APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.024	0.000	-0.002	0.000	0.000	0.002	0.000	0.001	0.001	0.025

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone I	Oct 1993	Oct 1993	Oct 1993	Oct 1993
Milestone II	Oct 1995	Sep 1995	Sep 1995	Sep 1995
Milestone III	Jul 1999	Nov 2000	Nov 2000	Mar 2001
IOC	Sep 1999	Sep 1999	Nov 2000	Feb 2001
Total Cost (TY \$M)	681.5	3392.3	2606.7	11363.6
Total Quantity	378	88126	89065	431026
PAUC	1.803	0.038	0.029	0.026

IOC of February 2001 is specifically for the F/A-18C/D.

Cost Variance

Summary TY \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	517.3	2089.4	--	2606.7
Previous Changes				
Economic	+3.6	+85.2	--	+88.8
Quantity	--	+6813.4	--	+6813.4
Schedule	--	-153.7	--	-153.7
Engineering	+71.5	--	--	+71.5
Estimating	+43.7	+323.5	--	+367.2
Other	--	--	--	--
Support	--	+372.6	--	+372.6
Subtotal	+118.8	+7441.0	--	+7559.8
Current Changes				
Economic	+0.1	-30.2	--	-30.1
Quantity	--	+911.3	--	+911.3
Schedule	--	-52.4	--	-52.4
Engineering	--	--	--	--
Estimating	-0.3	+328.9	--	+328.6
Other	--	--	--	--
Support	--	+39.7	--	+39.7
Subtotal	-0.2	+1197.3	--	+1197.1
Total Changes	+118.6	+8638.3	--	+8756.9
CE - Cost Variance	635.9	10727.7	--	11363.6
CE - Cost & Funding	635.9	10727.7	--	11363.6

Summary BY 1995 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	490.3	1810.0	--	2300.3
Previous Changes				
Economic	--	--	--	--
Quantity	--	+4653.0	--	+4653.0
Schedule	--	-7.5	--	-7.5
Engineering	+49.9	--	--	+49.9
Estimating	+55.1	+399.9	--	+455.0
Other	--	--	--	--
Support	--	+280.4	--	+280.4
Subtotal	+105.0	+5325.8	--	+5430.8
Current Changes				
Economic	--	--	--	--
Quantity	--	+556.6	--	+556.6
Schedule	--	-4.0	--	-4.0
Engineering	--	--	--	--
Estimating	-0.2	+205.2	--	+205.0
Other	--	--	--	--
Support	--	+25.0	--	+25.0
Subtotal	-0.2	+782.8	--	+782.6
Total Changes	+104.8	+6108.6	--	+6213.4
CE - Cost Variance	595.1	7918.6	--	8513.7
CE - Cost & Funding	595.1	7918.6	--	8513.7

Previous Estimate: December 2016

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+0.1
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
Revised estimate to account for budget adjustments for fuel tax withholding (Navy). (Estimating)	-0.1	-0.2
RDT&E Subtotal	-0.2	-0.2

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-30.2
Quantity variance resulting from an increase of 8,955 tail kits from 84,834 to 93,789 (Navy). (Quantity)	+143.7	+234.7
Quantity variance resulting from an increase of 25,735 tail kits from 310,698 to 336,433 (Air Force). (Quantity)	+412.9	+676.6
Acceleration of procurement buy profile due to increased production capacity based on urgent operational need by the Warfighter (Navy). (Schedule)	0.0	-5.4
Additional schedule variance resulting from the acceleration of procurement buy profile due to increased production capacity based on urgent operational need by the Warfighter (Navy). (Schedule)	-8.6	-14.2
Acceleration of procurement buy profile due to increased production capacity based on urgent operational need by the Warfighter (Air Force). (Schedule)	0.0	-46.0
Additional schedule variance resulting from the acceleration of procurement buy profile due to increased production capacity based on urgent operational need by the Warfighter (Air Force). (Schedule)	+4.6	+13.2
Adjustment for current and prior escalation. (Estimating)	+10.2	+14.9
Revised estimate to account for increased demand for Laser JDAM production. Laser JDAM is not the primary unit of measure, so this does not affect quantity variance (Air Force). (Estimating)	+154.4	+248.1
Revised estimate to reflect actuals (Air Force). (Estimating)	+0.5	+1.0
Revised estimate to reflect funding profile on new Navy budget line item (Navy). (Estimating)	+40.1	+64.9
Adjustment for current and prior escalation. (Support)	+0.4	+0.8
Increase in Other Support due to increased need for weapons instrumentation telemetry kits in support of test requirements (Air Force). (Support)	+24.6	+38.9
Procurement Subtotal	+782.8	+1197.3

Contracts

Contract Identification	
Appropriation:	Procurement
Contract Name:	JDAM Lot 19 Production Contract FY15
Contractor:	Boeing
Contractor Location:	6200 JS McDonnell Blvd St Louis, MO 63134
Contract Number:	FA8213-15-D-0002/2
Contract Type:	Firm Fixed Price (FFP)
Award Date:	November 20, 2015
Definitization Date:	April 05, 2016

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
286.7	N/A	13127	286.7	N/A	13127	286.7	286.7

Cost and Schedule Variance Explanations

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

Notes

Data includes Air Force and Navy only. Foreign Military Sales data is not included in the contract price or quantity.

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

Contract Identification

Appropriation: Procurement
Contract Name: JDAM Lot 20 Production Contract FY16
Contractor: Boeing
Contractor Location: 6200 JS McDonnell Blvd
 St Louis, MO 63134
Contract Number: FA8213-15-D-0002/3
Contract Type: Firm Fixed Price (FFP), Fixed Price Incentive(Firm Target) (FPIF)
Award Date: March 31, 2016
Definitization Date: May 31, 2016

Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
325.7	N/A	15000	486.1	683.5	22644	486.1	486.1

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to additional quantities added to the contract and changing from FFP to FPIF.

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because an earned value management waiver was granted by SAE on December 20, 2017 due to nature of the FPIF contract construct and the short production cycle.

Notes

Data includes Air Force and Navy only. Foreign Military Sales data is not included in the contract price or quantity.

Contract Identification

Appropriation: Procurement
Contract Name: JDAM Lot 21 Production Contract FY17
Contractor: Boeing
Contractor Location: 6200 JS McDonnell Blvd
 St Louis, MO 63134
Contract Number: FA8213-17-F-1001
Contract Type: Firm Fixed Price (FFP), Fixed Price Incentive(Firm Target) (FPIF)
Award Date: February 28, 2017
Definitization Date: February 28, 2017

Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
731.8	N/A	33650	927.0	N/A	42271	927.0	927.0

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract modification to maximize production capacity to 45,000 for all customers.

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because an earned value management waiver was granted by SAE on December 20, 2017 due to nature of the FPIF contract construct and the short production cycle.

Notes

Data includes Air Force and Navy only. Foreign Military Sales data is not included in the contract price or quantity.

The ceiling price is TBD pending some calculations for Foreign Military Sales.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	804	804	804	100.00%
Production	265628	265628	430222	61.74%
Total Program Quantity Delivered	266432	266432	431026	61.81%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	11363.6	Years Appropriated	26
Expended to Date	6770.7	Percent Years Appropriated	83.87%
Percent Expended	59.58%	Appropriated to Date	8689.8
Total Funding Years	31	Percent Appropriated	76.47%

The above data is current as of February 12, 2018.

Deliveries and Expenditures include both U.S. Air Force and U.S. Navy.

This report does not include quantities or costs paid for with Defense Emergency Response Funds (DERF). DERF funds acquired 6,348 U.S. Air Force kits and 7,890 U.S. Navy kits.

Operating and Support Cost

Cost Estimate Details

Date of Estimate: August 28, 2014
Source of Estimate: POE
Quantity to Sustain: 437860
Unit of Measure: Total Quantity
Service Life per Unit: 35.00 Years
Fiscal Years in Service: FY 1998 - FY 2049

The JDAM O&S cost estimate was based on the Joint Munitions Operations & Support Model which was tailored to reflect specific JDAM program attributes. This model estimated Air Force and Navy O&S costs for the JDAM tail kits only (excludes other components that make up a complete weapon such as the bomb body and fuze). The ground rules used in the O&S cost estimate are as follows: The total JDAM inventory that had been expended was 90,513 tail kits. JDAM uses a 20 year extended warranty to cover all tail kit repairs except for government induced failures. In the model, one half of a percent of the total JDAM failures were assumed to be induced out-of-warranty failures. The base year of the estimate was FY 2015 (all sunk costs from FY 1998 to FY 2014 are excluded from the estimate). The estimate included calculations for 35 years (FY 2015 to FY 2049) to cover unwarranted failures for 15 years after the warranty period ended. The fiscal years in service is stated to end in FY 2049; however, the actual program complete date is indefinite as long as there is continued demand for JDAM. This end date will not match the end date of the production program due to the indefinite nature of the program.

Sustainment Strategy

The JDAM system support strategy is a 20-year warranty that includes both the tail kit and storage container; bomb bodies and fuzes are not included. Boeing is the Source of Repair under the warranty. Non-warranty repairs and sustaining engineering support are covered under separate technical support contracts with Boeing.

Antecedent Information

No Antecedent

Annual O&S Costs BY1995 \$M		
Cost Element	JDAM Average Annual Cost Per Total Quantity	No Antecedent (Antecedent)
Unit-Level Manpower	0.647	--
Unit Operations	15.671	--
Maintenance	0.001	--
Sustaining Support	3.562	--
Continuing System Improvements	--	--
Indirect Support	0.477	--
Other	--	--
Total	20.358	--

Item	Total O&S Cost \$M			
	JDAM			No Antecedent (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	712.5	783.8	712.5	N/A
Then Year	1494.9	N/A	1494.9	0.0

Equation to Translate Annual Cost to Total Cost

Total O&S Cost = Average Annual Cost x Assumed Life in Years = \$20.358M x 35 years = \$712.5M (BY 1995\$)

O&S Cost Variance		
Category	BY 1995 \$M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2016 SAR	712.5	
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	712.5	

Disposal Estimate Details

Date of Estimate: August 28, 2014
 Source of Estimate: POE
 Disposal/Demilitarization Total Cost (BY 1995 \$M): Total costs for disposal of all Total Quantity are 51.3