

# **Selected Acquisition Report (SAR)**

RCS: DD-A&T(Q&A)823-766



# Joint Standoff Weapon - Baseline Variant and Unitary Warhead Variant (JSOW)

As of FY 2016 President's Budget

Defense Acquisition Management Information Retrieval (DAMIR)

### **Table of Contents**

Common Acronyms and Abbreviations for MDAP Programs	3
Program Information	5
Responsible Office	5
References	5
Mission and Description	6
Executive Summary	7
Threshold Breaches	8
Schedule	9
Performance	13
Track to Budget	16
Cost and Funding	17
Low Rate Initial Production	35
Foreign Military Sales	36
Nuclear Costs	37
Unit Cost	38
Cost Variance	46
Contracts	52
Deliveries and Expenditures	54
Operating and Support Cost	55

### 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)

JSOW December 2014 SAR

### **Program Information**

#### **Program Name**

Joint Standoff Weapon - Baseline Variant and Unitary Warhead Variant (JSOW)

#### **DoD Component**

Navy

### **Responsible Office**

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Assigned: January 16, 2014

#### References

#### **BASELINE/BLU-108**

### **SAR Baseline (Production Estimate)**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated July 10, 1999

#### **Approved APB**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated December 20, 2004

#### **UNITARY**

### **SAR Baseline (Production Estimate)**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated December 20, 2004

#### **Approved APB**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated August 5, 2009

### **Mission and Description**

The Joint Standoff Weapon (JSOW) is an air-to-ground weapon designed to attack a variety of targets during day, night, and adverse weather conditions. JSOW enhances aircraft survivability by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems. The JSOW launch-and-leave capability allows several target kills per aircraft sortie. The common JSOW variant nomenclature is JSOW-A (Baseline), JSOW-A-1, JSOW-B (BLU -108), JSOW-C (Unitary), and JSOW-C-1 (Network Enabled Weapon Moving Maritime Target Capability).

The JSOW program developed a Baseline weapon for use against fixed, area targets. The JSOW Baseline variant includes a kinematically efficient airframe and integrated Global Positioning System/Inertial Navigation System capability, and a BLU-97/B submunition payload. The JSOW-A-1 configuration carries a BLU-111 warhead and is being marketed by Raytheon to FMS customers. The JSOW-B variant incorporates the Sensor Fuzed Weapon submunition (BLU-108) into the baseline vehicle. The JSOW-B variant provides a standoff delivery capability against massed armor and land combat vehicles.

JSOW-C and C-1 variants both use the Unitary lethal package, termed Bomb Royal Ordnance Augmented Charge (BROACH), which is produced by BAE Systems. The BROACH incorporates an advanced multi-stage warhead, which allows the warfighter to attack blast/frag sensitive and hardened point targets. JSOW-C uses an Imaging Infrared (IIR) seeker with embedded Autonomous Targeting Acquisition software, increasing accuracy and lethality. The IIR affords the mission planner precise aimpoint selection and target discrimination. An anti-tamper/anti-spoofing capability was inserted in the guidance electronics unit with FY 2006 production. The JSOW-C-1 adds a weapon data link and seeker upgrade to attack moving maritime targets in addition to the JSOW-C stationary land target mission set.

Through adherence to international standards for weapons interfaces and minimized weight and dimension considerations, JSOW is compatible with Navy, Air Force and North Atlantic Treaty Organization aircraft. JSOW is a Navy-led, joint program.

### **Executive Summary**

This is the final SAR submission for the JSOW program because future procurement has been terminated after FY 2015.

Based on the FY 2016 PB decision of the DoD that JSOW-C-1 procurement is terminated after FY 2015, the program will develop a transition plan to begin a smooth and orderly shutdown of JSOW production and transition of the program to operations and sustainment. This plan will focus on the following main areas: completion of JSOW-C-1 Operational Test, use of RDT&E and procurement dollars in FY 2016 through FY 2019 to support Captive Air Training Missiles, Telemetry Instrumentation Kits, testing and training activities, and ongoing sustainment activities to support all JSOW inventory through 2036, all of which fulfill current U.S. Navy Munitions Requirements and represent a significant value to the Government.

JSOW is in the post Milestone III production phase transitioning to sustainment, with final JSOW-A dispenser variant deliveries completed in July 2007; JSOW-C Unitary variant production completed deliveries in June 2010. JSOW-C-1 deliveries commenced October 2010 with 1,067 weapons delivered through FY 2012 (FRP-8). FY 2013 (FRP-9) and FY 2014 (FRP-10) production lots are currently on contract with an anticipated third quarter FY 2015 contract award for FY 2015 (FRP-11). The JSOW program continues to meet all CPD, KPP, Key System Attributes, and APB schedule and performance thresholds.

JSOW-C-1 is an Engineering Change Proposal modification to the JSOW-C Unitary variant. JSOW-C-1 will provide the U.S. Navy with an Anti-Surface Warfare stand-off weapon that can precisely strike Moving Maritime Targets. The JSOW-C-1 program has successfully executed Developmental Test and Integrated Test phases, scoring all direct hits, and demonstrating aimpoint accuracy for Moving Maritime Targets and retention of the Stationary Land Target capability. JSOW -C-1 will complete Operational Test in 2015 and is expected to achieve IOC in 2016 with threshold platform F/A-18E/F H10E System Configuration Set.

Due to procurement termination, the FY 2016 PB weapon production quantities were zeroed for both the JSOW Baseline/BLU-108 and JSOW-C-1 Unitary variants. This has resulted in significant and critical Nunn-McCurdy unit cost breaches. Specifically, the Baseline variant PAUC increased 20% above the current APB; the Unitary variant PAUC increased 46% and the Unitary variant APUC increased 28% above the current APB. The quantity reductions were the result of a DoD weapons/target pairing assessment that deemed that with the delivery of weapons from the FY 2015 procurement contract sufficient JSOW-C-1 assets would be in inventory to address the target set requirements allocated to the Department of the Navy rather than any program execution or cost concerns. The information required by 10 USC 2433(g) (1) (A) - (F) is included in this report. In accordance with 10 USC 2433(g)(2), the Secretary of Defense certification is not required to be submitted for termination or cancellation of a program.

A Program Deviation Report (PDR) was signed by the Program Manager on February 23, 2015. The Program Executive Officer for Strike Weapons and Unmanned Aviation endorsed and forwarded the PDR to the Milestone Decision Authority, the Assistant Secretary of the Navy for Research, Development and Acquisition, on March 3, 2015.

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

### **Threshold Breaches**

#### **BASELINE/BLU-108**

APB Breaches							
Schedule							
Performance	<b>!</b>						
Cost	RDT&E						
	Procurement						
	MILCON						
	Acq O&M						
O&S Cost							
<b>Unit Cost</b>	PAUC	V					
	APUC	V					

### **Explanation of Breach**

JSOW Baseline/BLU-108 unit cost breaches are the result of termination of JSOW procurement, which reduces the overall quantity by 817 weapons in comparison to the APB.

### **Nunn-McCurdy Breaches**

**Current UCR Baseline** 

PAUC Significant APUC None

**Original UCR Baseline** 

PAUC None APUC None

#### **UNITARY**

**Unit Cost** 

### **APB Breaches**

Schedule 
Performance

Cost RDT&E □

Procurement 
MILCON

Acq O&M

O&S Cost

PAUC ☑ APUC ☑

### **Nunn-McCurdy Breaches**

**Current UCR Baseline** 

PAUC Critical APUC Critical

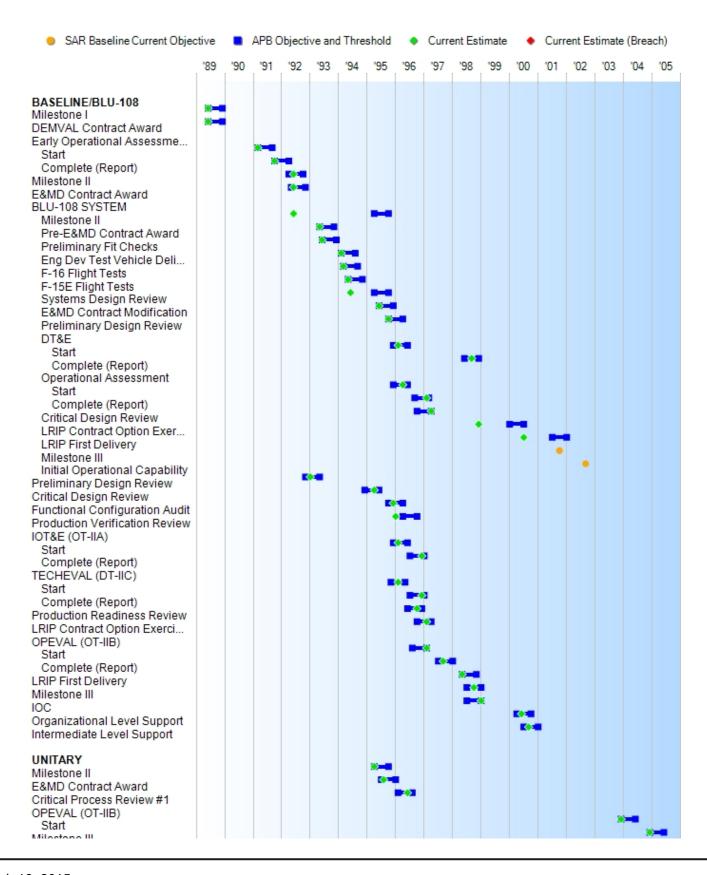
**Original UCR Baseline** 

PAUC None APUC None

#### **Explanation of Breach**

JSOW Unitary unit cost breaches are the result of termination of JSOW procurement, which reduces the overall quantity by 3,815 weapons in comparison to the APB.

#### **Schedule**



### BASELINE/BLU-108

Schedule Events							
Events	SAR Baseline Production Estimate	Proc	ent APB duction e/Threshold	Current Estimate			
Milestone I	Jun 1989	Jun 1989	Dec 1989	Jun 1989			
DEMVAL Contract Award	Jun 1989	Jun 1989	Dec 1989	Jun 1989			
Early Operational Assessment (OT-I)							
Start	Mar 1991	Mar 1991	Sep 1991	Mar 1991			
Complete (Report)	Oct 1991	Oct 1991	Apr 1992	Oct 1991			
Milestone II	Apr 1992	Apr 1992	Oct 1992	Jun 1992			
E&MD Contract Award	May 1992	May 1992	Nov 1992	Jun 1992			
BLU-108 SYSTEM							
Milestone II	Apr 1995	Apr 1995	Oct 1995	Jun 1992			
Pre-E&MD Contract Award	May 1993	May 1993	Nov 1993	May 1993			
Preliminary Fit Checks	Jun 1993	Jun 1993	Dec 1993	Jun 1993			
Eng Dev Test Vehicle Delivery	Feb 1994	Feb 1994	Aug 1994	Feb 1994			
F-16 Flight Tests	Mar 1994	Mar 1994	Sep 1994	Mar 1994			
F-15E Flight Tests	May 1994	May 1994	Nov 1994	May 1994			
Systems Design Review	Apr 1995	Apr 1995	Oct 1995	Jun 1994			
E&MD Contract Modification	Jun 1995	Jun 1995	Dec 1995	Jun 1995			
Preliminary Design Review	Oct 1995	Oct 1995	Apr 1996	Oct 1995			
DT&E							
Start	Dec 1995	Dec 1995	Jun 1996	Feb 1996			
Complete (Report)	Jun 1998	Jun 1998	Dec 1998	Sep 1998			
Operational Assessment							
Start	Dec 1995	Dec 1995	Jun 1996	Apr 1996			
Complete (Report)	Sep 1996	Sep 1996	Mar 1997	Feb 1997			
Critical Design Review	Oct 1996	Oct 1996	Apr 1997	Apr 1997			
LRIP Contract Option Exercised	Jan 2000	Jan 2000	Jul 2000	Dec 1998			
LRIP First Delivery	Jul 2001	Jul 2001	Jan 2002	Jul 2000			
Milestone III	Oct 2001	N/A	N/A	N/A			
Initial Operational Capability	Sep 2002	N/A	N/A	N/A			
Preliminary Design Review	Nov 1992	Nov 1992	May 1993	Jan 1993			
Critical Design Review	Dec 1994	Dec 1994	Jun 1995	Apr 1995			
Functional Configuration Audit	Oct 1995	Oct 1995	Apr 1996	Dec 1995			
Production Verification Review	Apr 1996	Apr 1996	Oct 1996	Jan 1996			
IOT&E (OT-IIA)	1 200	1 - 7 - 7					
,		I					

Start	Dec 1995	Dec 1995	Jun 1996	Feb 1996
Complete (Report)	Jul 1996	Jul 1996	Jan 1997	Dec 1996
TECHEVAL (DT-IIC)				
Start	Nov 1995	Nov 1995	May 1996	Feb 1996
Complete (Report)	Jul 1996	Jul 1996	Jan 1997	Dec 1996
Production Readiness Review	Jun 1996	Jun 1996	Dec 1996	Oct 1996
LRIP Contract Option Exercised	Oct 1996	Oct 1996	Apr 1997	Feb 1997
OPEVAL (OT-IIB)				
Start	Aug 1996	Aug 1996	Feb 1997	Feb 1997
Complete (Report)	Jul 1997	Jul 1997	Jan 1998	Sep 1997
LRIP First Delivery	May 1998	May 1998	Nov 1998	May 1998
Milestone III	Jul 1998	Jul 1998	Jan 1999	Oct 1998
IOC	Jul 1998	Jul 1998	Jan 1999	Jan 1999
Organizational Level Support	Apr 2000	Apr 2000	Oct 2000	Jun 2000
Intermediate Level Support	Jul 2000	Jul 2000	Jan 2001	Sep 2000

### **Change Explanations**

None

## **Acronyms and Abbreviations**

**DEMVAL - Demonstration and Validation** 

DEV - Development

DT - Developmental Test

DT&E - Developmental Test and Evaluation

E&MD - Engineering and Manufacturing Development

IOT&E - Initial Operational Test and Evaluation

OPEVAL - Operational Evaluation

OT - Operational Test

**TECHEVAL - Technical Evaluation** 

### **UNITARY**

Schedule Events								
Events	vents Production Production			Current Estimate				
Milestone II	Apr 1995	Apr 1995	Oct 1995	Apr 1995				
E&MD Contract Award	Jul 1995	Jul 1995	Jan 1996	Aug 1995				
Critical Process Review #1	Feb 1996	Feb 1996	Aug 1996	Jun 1996				
OPEVAL (OT-IIB)								
Start	Dec 2003	Dec 2003	Jun 2004	Dec 2003				
Milestone III	Dec 2004	Dec 2004	Jun 2005	Dec 2004				
IOC	Aug 2004	Aug 2004	Feb 2005	Feb 2005				

### **Change Explanations**

None

### **Acronyms and Abbreviations**

E&MD - Engineering and Manufacturing Development OPEVAL - Operational Evaluation OT - Operational Test

December 2014 SAR

### **Performance**

#### **BASELINE/BLU-108**

Performance Characteristics								
SAR Baseline Production Estimate	Produ	nt APB uction Threshold	Demonstrated Performance	Current Estimate				
Survivability								
IAW Sys Spec (SD - 901-1)	IAW Sys Spec (SD- 901-1) IAW Sys Spec (SD- 901-1)		IAW Sys Spec (SD - 901-1)	IAW Sys Spec (SD - 901-1)				
Range (nm from laun	ch at specified condit	ions)						
Low Altitude (nm)								
>or=15 (200 ft MSL, .8 IMN)	>or=15 (200 ft MSL, .8 IMN)	>or=12 (500 ft MSL, .8 IMN)	12 (500 ft MSL, .8 IMN)	>or=15 (200 ft MSL, .8 IMN)				
High (nm @ 30K ft	High (nm @ 30K ft MSL, .8 IMN)							
>50	>50	>40	50	>50				

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

### Requirements Reference

Operational Requirements Document (ORD) dated December 10, 2002

### **Change Explanations**

None

### **Acronyms and Abbreviations**

ft - feet

IAW - In Accordance With

IMN - Indicated Mach Number

K - Thousand

MSL - Mean Sea Level

nm - Nautical Miles

Spec - Specification

Sys - System

### **UNITARY**

	Performance Characteristics							
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate				
Survivability								
IAW Sys spec SD-901 -1	IAW Sys spec SD-901 -1	IAW Sys spec SD- 901-1	IAW Sys spec SD-901-1	IAW Sys spec SD-901-1				
Accuracy (CE	EP)							
Weapon (ft	:)							
10	10	10	4.49	4.49				
Weapon (A	ir Vehicle) (ft)							
70	70	91	35.4	35.4				
Range (nm fr	om launch at	specified c	onditions)					
Low Altitud	de (nm)							
>or=15 (200 ft MSL, .8 IMN)	>or=15 (200 ft MSL, .8 IMN)	>or=12 (500 ft MSL, .8 IMN)	12 nm (500 ft MSL, 0.8 IMN)	12 nm (500 ft MSL, 0.8 IMN)				
High (nm @	@ 30K ft MSL,	.8 IMN)						
>50	>50	>40	50 nm (25K ft MSL, 0.8 IMN)	50 nm (25K ft MSL, 0.8 IMN)				
Accuracy, (S	EP) Weapon (	ft)						
N/A	10	20	2.2 ft (DT1) 3.6 ft (DT2) 2.2 ft (IT1) 15.5 ft (IT2)	13 ft SEP (Based on Simulation Data)				
Weapon Data	a Link							
N/A	3rd Party compatible waveform	IFTU from F/A-18 E/F	Demonstrated IFTU capability with F/A-18E/F during developmental and integration testing. 3rd Party compatible waveform demonstrated with the LSRS platform during the Joint Capability Test Demonstration. Confirmed during Trident Warrior 2013 testing with E2D.	Demonstrated IFTU capability with F/A-18E/F during developmental and integration testing. 3rd Party compatible waveform demonstrated with the LSRS platform during the Joint Capability Test Demonstration. Confirmed during Trident Warrior 2013 testing with E2D.				
	lability (Susta	ainment)						
N/A	>or=.95	>or=.95	99.5	99.5				
Net-Ready K	ı							
N/A	Std Definition	Std Definition	Compliant by design. Received NMSC Stage 4. Received Navy SPAWAR certification for use with F/A-18E/F H10E SCS.	Compliant by design. Received NMSC Stage 4. Navy SPAWAR and Joint Interoperability Certification testing is scheduled to complete with F/A-18E/F H10E SCS.				

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

#### Requirements Reference

Capability Production Document (CPD) dated February 2, 2009

### **Change Explanations**

None

### **Acronyms and Abbreviations**

CEP - Circular Error Probable

DT - Developmental Test

ft - Feet

IAW - In Accordance With

IFTU - In-Flight Target Update

IMN - Indicated Mach Number

IT - Integration Test

K - Thousand

KPP - Key Performance Parameter

LSRS - Littoral Surveillance Radar System

MSL - Mean Sea Level

nm - nautical mile

NMSC - Navy-Marine Corps Spectrum Center

SCS - System Configuration Set

SEP - Spherical Error Probable

SPAWAR - Space & Naval Warfare Systems Command

Spec - Specification

Std - Standard

Sys - System

# **Track to Budget**

### **BASELINE/BLU-108**

DT&E				
		ВА	PE	
Appn Navy	1319	05	0604727N	
INAVy		ject	Name	
	2068	jout	Joint Standoff Weapon (Navy)	(Sunk)
Air Force	3600	05	0604727F	(Guint)
	Pro		Name	
	1000		Joint Standoff Weapon (Air Force)	(Sunk)
ocurement				
		DA.	PE	
Appn	1507	02	0204162N	
Navy	Line		Name	
	2230	iteiii	JSOW	(Sunk)
Navy	1507	06	0204162N	(Sulik)
INAVy	Line		Name	
	6120	itom	Spares and Repair Parts	(Shared) (Sunk)
Air Force	3020	02	0207324F	(Onaroa) (Carity
	Line		Name	
	JSOW	1	JSOW Missile Procurement Air Force	(Shared) (Sunk)
NITARY				
DT&E				
Appn		ВА	PE	
Navy	1319	05	0604727N	
·	Pro	ject	Name	
	2068		Joint Standoff Weapon (Navy)	
rocurement				
			25	
Appn	4505	BA	PE	
Navy	1507	02	0204162N	
	Line	Item	Name	
No. a.	2230	06	JSOW 0204162N	
Navy	1507 <b>Line</b>	06	0204162N	
		πem	Name	(Charad)
	6120		Spares and Repair Parts	(Shared)

# **Cost and Funding**

# **Cost Summary - Total Program**

Total Acquisition Cost - Total Program									
	B	/ 1990 \$M		BY 1990 \$M	TY \$M				
Appropriation	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate		
RDT&E	836.8	887.8		915.7	992.5	1052.9	1097.6		
Procurement	4685.5	2636.7		1784.8	6852.4	3862.5	2502.1		
Flyaway				1750.6			2454.9		
Recurring				1445.4			2034.2		
Non Recurring				305.2			420.7		
Support				34.2			47.2		
Other Support				31.1			42.5		
Initial Spares				3.1			4.7		
MILCON	21.8	0.0		0.0	28.6	0.0	0.0		
Acq O&M	0.0	0.0		0.0	0.0	0.0	0.0		
Total	5544.1	3524.5	N/A	2700.5	7873.5	4915.4	3599.7		

### **Cost and Funding**

# Cost Summary - BASELINE/BLU-108

Total Acquisition Cost - BASELINE/BLU-108									
	B	Y 1990 \$M		BY 1990 \$M	TY \$M				
Appropriation	SAR Baseline Production Estimate	Current Produc Objective/T	ction	Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate		
RDT&E	554.0	564.1	620.5	563.6	645.0	643.6	643.6		
Procurement	2990.5	941.7	1035.9	799.3	4225.1	1235.2	1016.3		
Flyaway				778.2			989.8		
Recurring				614.7			784.4		
Non Recurring				163.5			205.4		
Support				21.1			26.5		
Other Support				20.3			25.4		
Initial Spares				0.8			1.1		
MILCON	21.8	0.0		0.0	28.6	0.0	0.0		
Acq O&M	0.0	0.0		0.0	0.0	0.0	0.0		
Total	3566.3	1505.8	N/A	1362.9	4898.7	1878.8	1659.9		

Total Quantity - BASELINE/BLU-108								
Quantity	SAR Baseline Quantity Production Estimate		Current Estimate					
RDT&E	0	0	0					
Procurement	16124	3334	2517					
Total	16124	3334	2517					

### **Quantity Notes**

Current APB: 3,334 procurement missiles include 2,800 Navy Baselines, 523 Air Force Baselines, and 11 Air Force BLU-108s.

Current Estimate: 2,517 procurement missiles include 1,983 Navy Baselines, 523 Air Force Baselines, and 11 Air Force BLU-108s.

### **Cost Summary - UNITARY**

Total Acquisition Cost - UNITARY									
	B	/ 1990 \$M		BY 1990 \$M	TY \$M				
Appropriation	SAR Baseline Production Estimate	Current Produc Objective/T	ction	Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate		
RDT&E	282.8	323.7	356.1	352.1	347.5	409.3	454.0		
Procurement	1695.0	1695.0	1864.5	985.5	2627.3	2627.3	1485.8		
Flyaway				972.4			1465.1		
Recurring				830.7			1249.8		
Non Recurring				141.7			215.3		
Support				13.1			20.7		
Other Support				10.8			17.1		
Initial Spares				2.3			3.6		
MILCON	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		
Total	1977.8	2018.7	N/A	1337.6	2974.8	3036.6	1939.8		

#### **Confidence Level**

Confidence Level of cost estimate for current APB: 50%

The current estimate seeks to provide sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule and programmatic risk, and external interference. It is consistent with average resource expenditures on historical efforts.

	Total Quantity - UNITARY								
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate						
RDT&E	0	0	0						
Procurement	7000	7000	3185						
Total	7000	7000	3185						

# **Cost and Funding**

# **Funding Summary - Total Program**

	Appropriation Summary									
FY 2016 President's Budget / December 2014 SAR (TY\$ M)										
Appropriation	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
RDT&E	1087.2	4.4	0.4	0.4	0.4	0.4	0.5	3.9	1097.6	
Procurement	2361.6	108.7	21.4	2.8	6.4	1.2	0.0	0.0	2502.1	
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 2016 Total	3448.8	113.1	21.8	3.2	6.8	1.6	0.5	3.9	3599.7	
PB 2015 Total	3449.3	135.4	160.6	0.6	0.6	0.6	209.5	1493.1	5449.7	
Delta	-0.5	-22.3	-138.8	2.6	6.2	1.0	-209.0	-1489.2	-1850.0	

# **Cost and Funding**

# **Funding Summary - BASELINE/BLU-108**

	Appropriation Summary									
FY 2016 President's Budget / December 2014 SAR (TY\$ M)										
Appropriation	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
RDT&E	643.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	643.6	
Procurement	1016.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1016.3	
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 2016 Total	1659.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1659.9	
PB 2015 Total	1659.9	0.0	0.0	0.0	0.0	0.0	0.0	213.7	1873.6	
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-213.7	-213.7	

	Quantity Summary										
FY 2016 President's Budget / December 2014 SAR (TY\$ M)											
Quantity	Quantity Undistributed Prior FY FY FY FY FY FY TO TO TOTAL										
Development	0	0	0	0	0	0	0	0	0	0	
Production	0	2517	0	0	0	0	0	0	0	2517	
PB 2016 Total	0	2517	0	0	0	0	0	0	0	2517	
PB 2015 Total 0 2517 0 0 0 0 0 0 817 3334										3334	
Delta	0	0	0	0	0	0	0	0	-817	-817	

# **Funding Summary - UNITARY**

	Appropriation Summary									
FY 2016 President's Budget / December 2014 SAR (TY\$ M)										
Appropriation	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
RDT&E	443.6	4.4	0.4	0.4	0.4	0.4	0.5	3.9	454.0	
Procurement	1345.3	108.7	21.4	2.8	6.4	1.2	0.0	0.0	1485.8	
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 2016 Total	1788.9	113.1	21.8	3.2	6.8	1.6	0.5	3.9	1939.8	
PB 2015 Total	PB 2015 Total 1789.4 135.4 160.6 0.6 0.6 0.6 209.5 1279.4 3576.1									
Delta	-0.5	-22.3	-138.8	2.6	6.2	1.0	-209.0	-1275.5	-1636.3	

### **Funding Notes**

JSOW FY 2016 PB profile reflects JSOW production termination after FY 2015.

	Quantity Summary									
FY 2016 President's Budget / December 2014 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	2985	200	0	0	0	0	0	0	3185
PB 2016 Total	0	2985	200	0	0	0	0	0	0	3185
PB 2015 Total	15 Total 0 2985 200 200 0 0 517 3098								7000	
Delta	0	0	0	-200	0	0	0	-517	-3098	-3815

# **Cost and Funding**

# **Annual Funding By Appropriation - BASELINE/BLU-108**

	Annual Funding - BASELINE/BLU-108 1319   RDT&E   Research, Development, Test, and Evaluation, Navy										
				TY \$M							
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1987							1.0				
1988							19.2				
1989							13.5				
1990							8.5				
1991							16.5				
1992							45.8				
1993							58.8				
1994							80.9				
1995							104.3				
1996							46.9				
1997							35.2				
1998							8.2				
1999							5.4				
2000							0.1				
2001											
2002											
2003											
2004			<b></b>				4.9				
Subtotal							449.2				

	Annual Funding - BASELINE/BLU-108 1319   RDT&E   Research, Development, Test, and Evaluation, Navy										
				BY 1990 \$		•					
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1987							1.1				
1988							20.3				
1989							13.7				
1990							8.3				
1991							15.6				
1992							42.0				
1993							52.7				
1994							71.1				
1995							89.9				
1996							39.8				
1997							29.5				
1998							6.8				
1999							4.4				
2000							0.1				
2001											
2002											
2003											
2004							3.7				
Subtotal							399.0				

	Annual Funding - BASELINE/BLU-108 3600   RDT&E   Research, Development, Test, and Evaluation, Air Force										
		TY \$M									
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1993							5.4				
1994							23.1				
1995							51.7				
1996							41.8				
1997							22.0				
1998							21.5				
1999							17.2				
2000							10.2				
2001			_ <b></b>			<b></b>	1.5				
Subtotal							194.4				

	Annual Funding - BASELINE/BLU-108 3600   RDT&E   Research, Development, Test, and Evaluation, Air Force										
		BY 1990 \$M									
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1993				<b></b>			4.8				
1994							20.3				
1995							44.5				
1996							35.3				
1997							18.4				
1998							17.8				
1999							14.1				
2000							8.2				
2001			<b></b>				1.2				
Subtotal							164.6				

	Annual Funding - BASELINE/BLU-108 1507   Procurement   Weapons Procurement, Navy										
			TY \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1996				24.3	24.3		24.3				
1997	100	46.2		12.8	59.0	1.8	60.8				
1998	135	58.1		10.7	68.8	3.6	72.4				
1999	328	83.2		33.9	117.1	2.5	119.6				
2000	454	103.4		10.5	113.9	0.9	114.8				
2001	29	120.0		33.4	153.4	2.2	155.6				
2002											
2003	490	104.0		19.9	123.9	0.6	124.5				
2004	231	65.7		3.9	69.6	0.7	70.3				
2005	216	52.2		10.3	62.5	0.6	63.1				
Subtotal	1983	632.8		159.7	792.5	12.9	805.4				

	Annual Funding - BASELINE/BLU-108 1507   Procurement   Weapons Procurement, Navy											
			BY 1990 \$M									
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program					
1996				20.4	20.4	<b></b>	20.4					
1997	100	38.3		10.6	48.9	1.5	50.4					
1998	135	47.6		8.8	56.4	3.0	59.4					
1999	328	67.4		27.5	94.9	2.0	96.9					
2000	454	82.6		8.4	91.0	0.7	91.7					
2001	29	94.7		26.4	121.1	1.7	122.8					
2002												
2003	490	79.6		15.1	94.7	0.5	95.2					
2004	231	48.8		2.9	51.7	0.5	52.2					
2005	216	37.7		7.5	45.2	0.4	45.6					
Subtotal	1983	496.7		127.6	624.3	10.3	634.6					

	Annual Funding - BASELINE/BLU-108 3020   Procurement   Missile Procurement, Air Force										
			TY \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1998	45	21.3			21.3		21.3				
1999	86	27.1		4.2	31.3	2.0	33.3				
2000	74	19.9		3.1	23.0	4.3	27.3				
2001				21.7	21.7	6.4	28.1				
2002				9.7	9.7	0.5	10.2				
2003	22	9.4		2.7	12.1	0.1	12.2				
2004	307	73.9		4.3	78.2	0.3	78.5				
Subtotal	534	151.6		45.7	197.3	13.6	210.9				

	Annual Funding - BASELINE/BLU-108 3020   Procurement   Missile Procurement, Air Force									
		BY 1990 \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
1998	45	17.4			17.4		17.4			
1999	86	21.9		3.4	25.3	1.6	26.9			
2000	74	15.9		2.5	18.4	3.4	21.8			
2001				17.1	17.1	5.1	22.2			
2002				7.5	7.5	0.4	7.9			
2003	22	7.2		2.1	9.3	0.1	9.4			
2004	307	55.6	<b></b>	3.3	58.9	0.2	59.1			
Subtotal	534	118.0		35.9	153.9	10.8	164.7			

# **Annual Funding By Appropriation - UNITARY**

	Annual Funding - UNITARY 1319   RDT&E   Research, Development, Test, and Evaluation, Navy						
				TY \$M			
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1992				<del></del>			1.9
1993							4.6
1994							2.4
1995							10.3
1996							30.9
1997							47.0
1998							65.9
1999							39.5
2000							28.2
2001							26.7
2002							30.4
2003							16.8
2004							
2005							10.6
2006							14.2
2007							26.8
2008							30.8
2009							21.8
2010							11.6
2011							11.6
2012							6.8
2013							4.4
2014							0.4
2015							4.4
2016							0.4
2017							0.4
2018							0.4
2019							0.4
2020							0.5
2021							0.5
2022							0.5
2023							0.5
2024							0.5
2025							0.5
2026							0.5
2027							0.5
2028			<b></b>				0.4
Subtotal							454.0

	Annual Funding - UNITARY 1319   RDT&E   Research, Development, Test, and Evaluation, Navy							
				BY 1990 \$1				
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program	
1992	<b></b>	<b></b>			<b></b>	<b></b>	1.7	
1993							4.1	
1994							2.1	
1995							8.9	
1996							26.2	
1997							39.4	
1998							54.8	
1999							32.4	
2000							22.8	
2001							21.3	
2002							24.0	
2003							13.1	
2004								
2005							7.8	
2006							10.2	
2007							18.7	
2008							21.1	
2009							14.8	
2010							7.7	
2011							7.6	
2012							4.4	
2013							2.8	
2014							0.3	
2015							2.7	
2016							0.2	
2017							0.2	
2018							0.2	
2019							0.2	
2020							0.3	
2021							0.3	
2022							0.3	
2023							0.3	
2024							0.3	
2025							0.3	
2026							0.2	
2027							0.2	
2028	<b></b>		<b></b>	<del></del> _	<b></b>	<b></b>	0.2	
Subtotal							352.1	

Annual Funding - UNITARY 1507   Procurement   Weapons Procurement, Navy										
		TY \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
2001				4.5	4.5		4.5			
2002										
2003	42	29.1		5.8	34.9		34.9			
2004	97	39.4		7.7	47.1		47.1			
2005	189	66.4		11.9	78.3	0.3	78.6			
2006	420	119.6		22.4	142.0	2.4	144.4			
2007	388	112.0		11.3	123.3	1.0	124.3			
2008	370	117.2		11.2	128.4	0.9	129.3			
2009	281	124.1		19.2	143.3	0.6	143.9			
2010	313	125.9		15.4	141.3	0.7	142.0			
2011	225	117.1		10.3	127.4	0.8	128.2			
2012	246	118.6		9.9	128.5	0.7	129.2			
2013	202	94.3		25.0	119.3	0.7	120.0			
2014	212	97.5		13.6	111.1	7.8	118.9			
2015	200	88.6		17.1	105.7	3.0	108.7			
2016				19.6	19.6	1.8	21.4			
2017				2.8	2.8		2.8			
2018				6.4	6.4		6.4			
2019				1.2	1.2		1.2			
Subtotal	3185	1249.8		215.3	1465.1	20.7	1485.8			

Annual Funding - UNITARY 1507   Procurement   Weapons Procurement, Navy										
		BY 1990 \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
2001				3.6	3.6		3.6			
2002										
2003	42	22.3		4.4	26.7		26.7			
2004	97	29.3		5.7	35.0		35.0			
2005	189	48.0		8.6	56.6	0.2	56.8			
2006	420	84.4		15.7	100.1	1.7	101.8			
2007	388	77.3		7.8	85.1	0.7	85.8			
2008	370	79.6		7.7	87.3	0.6	87.9			
2009	281	83.1		12.9	96.0	0.4	96.4			
2010	313	82.9		10.1	93.0	0.5	93.5			
2011	225	75.6		6.7	82.3	0.5	82.8			
2012	246	75.4		6.4	81.8	0.4	82.2			
2013	202	59.0		15.7	74.7	0.4	75.1			
2014	212	60.1		8.4	68.5	4.8	73.3			
2015	200	53.7		10.4	64.1	1.8	65.9			
2016				11.6	11.6	1.1	12.7			
2017				1.6	1.6		1.6			
2018				3.7	3.7		3.7			
2019				0.7	0.7		0.7			
Subtotal	3185	830.7		141.7	972.4	13.1	985.5			

### **Low Rate Initial Production**

#### **BASELINE/BLU-108**

ltem	Initial LRIP Decision	Current Total LRIP
Approval Date	6/23/1992	6/23/1992
<b>Approved Quantity</b>	291	291
Reference	Milestone II ADM	Milestone II ADM
Start Year	1997	1997
End Year	1999	1999

LRIP quantity of 291 (includes 280 for JSOW-A and 11 for JSOW-B) was approved at Milestone II in June 1992.

#### **UNITARY**

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	4/26/1995	4/26/1995
<b>Approved Quantity</b>	139	139
Reference	Milestone II ADM	Milestone II ADM
Start Year	2003	2003
End Year	2006	2006

LRIP quantities of 139 approved at Milestone II in April 1995.

# **Foreign Military Sales**

### **BASELINE/BLU-108**

Country	Date of Sale	Quantity	Total Cost \$M	Description
Turkey	11/15/2005	50	26.4	U.S. Navy Case - Turkey; 50 AGM-154A-1; 54 AGM- 154C Total Case Value: \$26,422,774.00
Turkey	11/15/2005	0	4.9	U.S. Navy Case - Turkey; JSOW integration on the Turkish Air Force General Avionics Computer based Block-40 F-16 aircraft; Total Case Value: \$4,955,940.00

### **Notes**

#### **UNITARY**

Country	Date of Sale	Quantity	Total Cost \$M	Description
Australia	6/25/2009	•	29.9	U.S. Navy Case - Australia; Total Case Value: \$29,853,224.00
Finland	6/5/2009	11	8.9	U.S. Navy Case - Finland; 11 AGM-154C; Total Case Value \$8,897,122.95
Australia	3/31/2008		15.7	U.S. Navy Case - Australia; Total Case Value: \$15,687,401.00
Greece	1/31/2007	40	13.3	U.S. Navy Case - Greece; 40 AGM-154C; Total Case Value \$13,294,755.14
Greece	12/13/2005	0	3.2	U.S. Air Force Case - Greece; Greece integration case; Total Case Value \$1,932,022,845.00; JSOW Case Value portion \$3,178,646.59
Turkey	11/15/2005	54	26.4	U.S. Navy Case - Turkey; 50 AGM-154A-1; 54 AGM- 154C Total Case Value: \$26,442,774.00
Poland	4/18/2003	80	27.4	U.S. Air Force Case - Poland; 80 AGM-154C; Total Case Value \$27,428,861.80

### Notes

Total cost dollars may increase or decrease based on scope changes in follow-on support work.

## **Nuclear Costs**

**BASELINE/BLU-108** 

None

**UNITARY** 

None

## **Unit Cost**

### **BASELINE/BLU-108**

## **Unit Cost Report**

	BY 1990 \$M	BY 1990 \$M	
ltem	Current UCR Baseline (Dec 2004 APB)	Current Estimate (Dec 2014 SAR)	% Change
Program Acquisition Unit Cost			
Cost	1505.8	1362.9	
Quantity	3334	2517	
Item	0.452	0.541	+19.69 <sup>1</sup>
Average Procurement Unit Cost			
Cost	941.7	799.3	
Quantity	3334	2517	
Unit Cost	0.282	0.318	+12.77
	BY 1990 \$M	BY 1990 \$M	

	BY 1990 \$M	BY 1990 \$M	
Item	Revised Original UCR Baseline (Dec 2004 APB)	Current Estimate (Dec 2014 SAR)	% Change
Program Acquisition Unit Cost			
Cost	1505.8	1362.9	
Quantity	3334	2517	
Unit Cost	0.452	0.541	+19.69
Average Procurement Unit Cost			
Cost	941.7	799.3	
Quantity	3334	2517	
Unit Cost	0.282	0.318	+12.77

	TY	/ \$M	
Unit Cost	Current UCR Baseline (Dec 2004 APB)	Current Estimate (Dec 2014 SAR)	TY % Change
Program Acquisition	Unit Cost (PAUC)		
Cost	1878.8	1659.9	
Unit Cost	0.564	0.659	+16.84
Average Procurement	nt Unit Cost (APUC)		
Cost	1235.2	1016.3	
Unit Cost	0.370	0.404	+9.19

	TY	/ \$M	
Unit Cost	Revised Original UCR Baseline (Dec 2004 APB)	Current Estimate (Dec 2014 SAR)	TY % Change
Program Acquisition	Unit Cost (PAUC)		
Cost	1878.8	1659.9	
Unit Cost	0.564	0.659	+16.84
Average Procuremer	nt Unit Cost (APUC)		
Cost	1235.2	1016.3	
Unit Cost	0.370	0.404	+9.19

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

JSOW Baseline/BLU-108 unit cost breaches are the result of the termination of JSOW procurement, which reduces the overall quantity by 817 weapons in comparison to the APB.

Unit Cost Breach Data											
Changes From Previous SAR	\$M/Qty.	Percent									
PAUC (BY \$M)	0.100	+22.68									
APUC (BY \$M)	0.046	+16.91									
PAUC Quantity	-817	0.00									
PAUC (TY \$M)	0.097	+17.26									
APUC (TY \$M)	0.035	+9.49									
Initial SAR Information - Dec 1997	BY1990 \$M	TY \$M									

Initial SAR Information - Dec 1997	BY1990 \$M	TY \$M
Program Acquisition Cost	0.5	0.7

#### **Unit Cost PAUC Changes**

JSOW Baseline/BLU-108 unit cost breaches are the result of the termination of JSOW procurement, which reduces the overall quantity by 817 weapons in comparison to the APB.

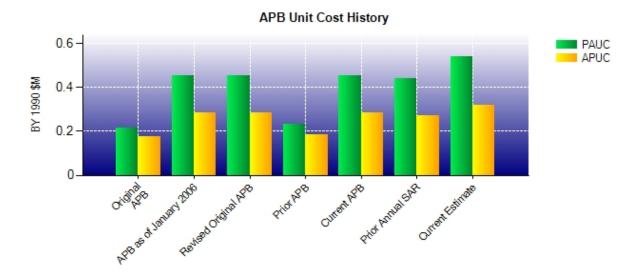
#### **Unit Cost APUC Changes**

JSOW Baseline/BLU-108 unit cost breaches are the result of the termination of JSOW procurement, which reduces the overall quantity by 817 weapons in comparison to the APB.

JSOW December 2014 SAR

#### **BASELINE/BLU-108**

## **Unit Cost History**



Item	Date	BY 199	0 \$M	TY \$M		
item	Date	PAUC	APUC	PAUC	APUC	
Original APB	Jun 1992	0.214	0.175	0.337	0.292	
APB as of January 2006	Aug 2009	0.452	0.282	0.564	0.370	
Revised Original APB	Dec 2004	0.452	0.282	0.564	0.370	
Prior APB	May 2004	0.231	0.184	0.316	0.261	
Current APB	Aug 2009	0.452	0.282	0.564	0.370	
Prior Annual SAR	Dec 2013	0.441	0.272	0.562	0.369	
Current Estimate	Dec 2014	0.541	0.318	0.659	0.404	

## **SAR Unit Cost History**

Initial SAR Baseline to Current SAR Baseline (TY \$M)											
Initial PAUC Changes								PAUC			
Estimate	Development Estimate Econ Qty Sch Eng Est Oth Spt Total								Production Estimate		
0.340	-0.030	-0.060	0.000	0.000	0.064	0.000	-0.010	-0.036	0.304		

	Current SAR Baseline to Current Estimate (TY \$M)											
PAUC Changes Production									PAUC Current			
	Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Estimate		
Ī	0.304	-0.013	0.255	0.166	0.041	-0.085	0.000	-0.009	0.355	0.659		

Initial SAR Baseline to Current SAR Baseline (TY \$M)										
Initial APUC	Ondriges							APUC		
Estimate	Development Estimate Econ Qty Sch Eng Est Oth Spt Total								Production Estimate	
0.290	-0.030	-0.040	0.000	0.000	0.052	0.000	-0.010	-0.028	0.262	

Current SAR Baseline to Current Estimate (TY \$M)										
APUC Changes								APUC		
Production Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate	
0.262	-0.014	0.030	0.166	0.024	-0.055	0.000	-0.009	0.142	0.404	

SAR Baseline History												
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate								
Milestone I	Jun 1989	Jun 1989	Jun 1989	Jun 1989								
Milestone II	Mar 1991	Apr 1992	Apr 1995	Jun 1992								
Milestone III	Jun 1994	Jul 1998	Oct 2001	Oct 1998								
IOC	Sep 1995	Jul 1998	Sep 2002	Jan 1999								
Total Cost (TY \$M)	260.0	2969.2	4898.7	1659.9								
Total Quantity	N/A	8800	16124	2517								
PAUC	N/A	0.337	0.304	0.659								

### **UNITARY**

## **Unit Cost Report**

	BY 1990 \$M	BY 1990 \$M	
Item	Current UCR Baseline (Aug 2009 APB)	Current Estimate (Dec 2014 SAR)	% Change
Program Acquisition Unit Cost			
Cost	2018.7	1337.6	
Quantity	7000	3185	
Item	0.288	0.420	+45.83 <sup>1</sup>
Average Procurement Unit Cost			
Cost	1695.0	985.5	
Quantity	7000	3185	
Unit Cost	0.242	0.309	+27.69 <sup>1</sup>

	BY 1990 \$M	BY 1990 \$M	
Item	Original UCR Baseline (Apr 1995 APB)	Current Estimate (Dec 2014 SAR)	% Change
Program Acquisition Unit Cost			
Cost	3360.9	1337.6	
Quantity	7800	3185	
Unit Cost	0.431	0.420	-2.55
Average Procurement Unit Cost			
Cost	3103.7	985.5	
Quantity	7800	3185	
Unit Cost	0.398	0.309	-22.36

	T	Y \$M		
Unit Cost	Current UCR Baseline (Aug 2009 APB)	Current Estimate (Dec 2014 SAR)	TY % Change	
Program Acquisition	Unit Cost (PAUC)			
Cost	3036.6	1939.8		
Unit Cost	0.434	0.609	+40.32	
Average Procuremen				
Cost	2627.3	1485.8		
Unit Cost	0.375	0.466	+24.27	

	Т	Y \$M							
Unit Cost	Original UCR Baseline (Apr 1995 APB)	Current Estimate (Dec 2014 SAR)	TY % Change						
Program Acquisition	Unit Cost (PAUC)								
Cost	6307.2	1939.8							
Unit Cost	0.809	0.609	-24.72						
Average Procurement Unit Cost (APUC)									
Cost	5970.9	1485.8							
Unit Cost	0.766	0.466	-39.16						

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

JSOW Unitary unit cost breaches are the result of the termination of JSOW procurement, which reduces the overall quantity by 3,815 weapons in comparison to the APB.

Unit Cost Breach Data										
Changes From Previous SAR	\$M/Qty.	Percent								
PAUC (BY \$M)	0.107	+34.19								
APUC (BY \$M)	0.047	+17.94								
PAUC Quantity	-3815	0.00								
PAUC (TY \$M)	0.098	+19.18								
APUC (TY \$M)	0.020	+4.48								

Initial SAR Information - Dec 1997	BY1990 \$M	TY \$M
Program Acquisition Cost	0.4	0.6

### **Unit Cost PAUC Changes**

JSOW Unitary unit cost breaches are the result of the termination of JSOW procurement, which reduces the overall quantity by 3,815 weapons in comparison to the APB.

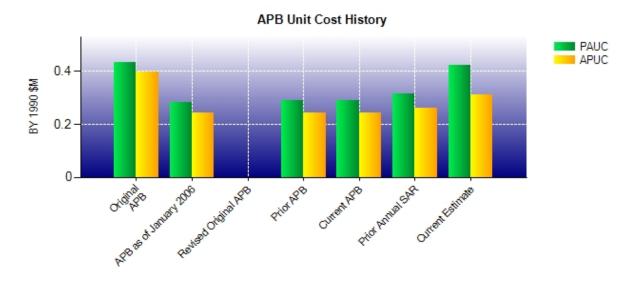
### **Unit Cost APUC Changes**

JSOW Unitary unit cost breaches are the result of the termination of JSOW procurement, which reduces the overall quantity by 3,815 weapons in comparison to the APB.

JSOW December 2014 SAR

#### **UNITARY**

## **Unit Cost History**



Item	Date	BY 199	0 \$M	TY \$M		
item	Date	PAUC	APUC	PAUC	APUC	
Original APB	Apr 1995	0.431	0.398	0.809	0.766	
APB as of January 2006	Dec 2004	0.283	0.242	0.425	0.375	
Revised Original APB	N/A	N/A	N/A	N/A	N/A	
Prior APB	Feb 2008	0.288	0.242	0.434	0.375	
Current APB	Aug 2009	0.288	0.242	0.434	0.375	
Prior Annual SAR	Dec 2013	0.313	0.262	0.511	0.446	
Current Estimate	Dec 2014	0.420	0.309	0.609	0.466	

## **SAR Unit Cost History**

Initial SAR Baseline to Current SAR Baseline (TY \$M)										
Initial PAUC	Onlinges								PAUC	
Development Estimate	Econ Qty Sch Eng Est Oth Spt Total								Production Estimate	
0.809	-0.054	0.041	-0.014	0.098	-0.414	0.000	-0.041	-0.384	0.425	

	Current SAR Baseline to Current Estimate (TY \$M)											
	PAUC Changes								PAUC Current			
	Estimate	Production Estimate Econ Qty Sch Eng Est Oth Spt Total										
_	0.425	0.034	0.054	0.069	0.154	-0.125	0.000	-0.002	0.184	0.609		

Initial SAR Baseline to Current SAR Baseline (TY \$M)										
Initial APUC	Changes							APUC		
Development Estimate	Econ Qty Sch Eng Est Oth Spt Total								Production Estimate	
0.766	-0.051	0.035	-0.014	0.092	-0.412	0.000	-0.041	-0.391	0.375	

Current SAR Baseline to Current Estimate (TY \$M)										
APUC	Changes							APUC		
Estimate	Production Estimate Econ Qty Sch Eng Est Oth Spt Total								Current Estimate	
0.375	0.034	-0.008	0.067	0.140	-0.140	0.000	-0.002	0.091	0.466	

SAR Baseline History												
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate								
Milestone I	N/A	N/A	N/A	N/A								
Milestone II	N/A	Apr 1995	Apr 1995	Apr 1995								
Milestone III	N/A	Sep 2002	Dec 2004	Dec 2004								
IOC	N/A	Sep 2002	Aug 2004	Feb 2005								
Total Cost (TY \$M)	N/A	6307.2	2974.8	1939.8								
Total Quantity	N/A	7800	7000	3185								
PAUC	N/A	0.809	0.425	0.609								

## **Cost Variance**

## **BASELINE/BLU-108**

Summary TY \$M						
Item	RDT&E	Procurement	MILCON	Total		
SAR Baseline (Production Estimate)	645.0	4225.1	28.6	4898.7		
Previous Changes						
Economic	+1.5	-33.4		-31.9		
Quantity		-3204.5		-3204.5		
Schedule		+417.2	+0.4	+417.6		
Engineering	+44.1	+59.9		+104.0		
Estimating	-47.0	-213.0	-29.0	-289.0		
Other						
Support		-21.3		-21.3		
Subtotal	-1.4	-2995.1	-28.6	-3025.1		
Current Changes						
Economic		-1.8		-1.8		
Quantity		-285.7		-285.7		
Schedule						
Engineering						
Estimating		+74.6		+74.6		
Other						
Support		-0.8		-0.8		
Subtotal		-213.7		-213.7		
Total Changes	-1.4	-3208.8	-28.6	-3238.8		
CE - Cost Variance	643.6	1016.3	<del></del>	1659.9		
CE - Cost & Funding	643.6	1016.3		1659.9		

Summary BY 1990 \$M						
Item	RDT&E	Procurement	MILCON	Total		
SAR Baseline (Production	554.0	2990.5	21.8	3566.3		
Estimate)						
Previous Changes						
Economic						
Quantity		-2059.3		-2059.3		
Schedule		+8.4		+8.4		
Engineering	+33.1	+43.5		+76.6		
Estimating	-23.5	-61.4	-21.8	-106.7		
Other						
Support		-13.6		-13.6		
Subtotal	+9.6	-2082.4	-21.8	-2094.6		
Current Changes						
Economic						
Quantity		-146.7		-146.7		
Schedule						
Engineering						
Estimating		+38.3		+38.3		
Other						
Support		-0.4		-0.4		
Subtotal		-108.8		-108.8		
Total Changes	+9.6	-2191.2	-21.8	-2203.4		
CE - Cost Variance	563.6	799.3		1362.9		
CE - Cost & Funding	563.6	799.3		1362.9		

Previous Estimate: December 2013

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-1.8
Quantity variance resulting from a decrease of 817 JSOW Baseline units from 2,800 to 1,983 (Navy). (Quantity)	-146.7	-285.7
Adjustment to zero out remaining JSOW Baseline units and cost as the result of JSOW production termination. (Estimating) (QR)	+38.3	+74.6
Adjustment to zero out remaining JSOW Integrated Logistic Support as the result of JSOW production termination. (Support) (QR)	-0.4	-0.8
Procurement Subtotal	-108.8	-213.7

(QR) Quantity Related

## **Cost Variance**

## **UNITARY**

	Summary TY \$M							
Item	RDT&E	Procurement	MILCON	Total				
SAR Baseline (Production	347.5	2627.3		2974.8				
Estimate)								
Previous Changes								
Economic	+3.5	+122.4		+125.9				
Quantity								
Schedule	+7.5	+294.5		+302.0				
Engineering	+46.7	+616.0		+662.7				
Estimating	+48.9	-564.9		-516.0				
Other								
Support		+26.7		+26.7				
Subtotal	+106.6	+494.7		+601.3				
Current Changes								
Economic	-0.4	-15.7		-16.1				
Quantity		-1453.2		-1453.2				
Schedule		-81.6		-81.6				
Engineering		-170.8		-170.8				
Estimating	+0.3	+117.5		+117.8				
Other								
Support		-32.4		-32.4				
Subtotal	-0.1	-1636.2		-1636.3				
Total Changes	+106.5	-1141.5		-1035.0				
CE - Cost Variance	454.0	1485.8		1939.8				
CE - Cost & Funding	454.0	1485.8		1939.8				

Summary BY 1990 \$M						
Item	RDT&E	Procurement	MILCON	Total		
SAR Baseline (Production Estimate)	282.8	1695.0		1977.8		
Previous Changes						
Economic						
Quantity						
Schedule	+4.9	+61.0		+65.9		
Engineering	+31.1	+378.0		+409.1		
Estimating	+33.3	-311.6		-278.3		
Other						
Support		+14.4		+14.4		
Subtotal	+69.3	+141.8		+211.1		
Current Changes						
Economic						
Quantity		-759.1		-759.1		
Schedule		-42.5		-42.5		
Engineering		-89.1		-89.1		
Estimating		+58.1		+58.1		
Other						
Support		-18.7		-18.7		
Subtotal		-851.3		-851.3		
Total Changes	+69.3	-709.5		-640.2		
CE - Cost Variance	352.1	985.5		1337.6		
CE - Cost & Funding	352.1	985.5		1337.6		

Previous Estimate: December 2013

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)	+0.1	+0.2	
Revised estimate due to reprogramming of funds in FY 2013 to support other Department of the Navy activities. (Estimating)	-0.6	-1.1	
Revised estimate to allow JSOW Unitary to increase future capabilities while entering program sustainment. (Estimating)	+0.5	+1.2	
RDT&E Subtotal	0.0	-0.1	

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-15.7
Adjustment for current and prior escalation. (Estimating)	+1.1	+1.8
Quantity variance resulting from a decrease of 3,815 JSOW Unitary weapons from 7,000 to 3,185. (Subtotal)	-846.7	-1621.1
Quantity variance resulting from a decrease of 3,815 JSOW Untiary weapons from 7,000 to 3,185. (Quantity)	(-759.1)	(-1453.2)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-42.5)	(-81.6)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-89.1)	(-170.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+44.0)	(+84.5)
Adjustment to account for zeroing out JSOW Unitary weapons after FY 2015 as a result of JSOW production termination. (Estimating) (QR)	+20.6	+43.1
Revised estimate due to identifying an organic solution for telemetry instrumentation kits. (Estimating)	-8.5	-13.8
Revised estimate to account for production shutdown costs as the result of JSOW production deferral. (Estimating)	+9.5	+16.0
Revised estimate to remove additional Operational Flight Program software work from Command & Launch. (Estimating)	-3.8	-6.2
Revised estimate to account for anticipated FMS synergies in FY 2015. (Estimating)	-4.6	-7.6
Revised estimate to account for prior year actuals. (Estimating)	-0.2	-0.3
Revised Captive AIR Training Missile estimate due to reduced quantity and supplying of Government Furnished Equipment. (Support)	-18.2	-31.1
Decrease in Initial Spares. (Support)	-0.5	-1.3
Procurement Subtotal	-851.3	-1636.2

(QR) Quantity Related

JSOW December 2014 SAR

#### **Contracts**

#### **Contract Identification**

**Appropriation:** Procurement

Contract Name: AGM-154C-1 FY 2011/2012 Production

Contractor: Raytheon Company
Contractor Location: 1151 E Hermans Road
Tucson, AZ 85706

**Contract Number:** N00019-11-C-0032

Contract Type: Firm Fixed Price (FFP)

Award Date: July 28, 2011 **Definitization Date:** July 28, 2011

Contract Price							
Initial Contract Price (\$M) Current Contract Price (\$M) Estimated Price At Completion (\$M)					ice At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
85.6	N/A	225	180.5	N/A	473	180.5	180.5

### **Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the exercise of the FY 2012 production option.

#### **Cost and Schedule Variance Explanations**

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

#### **Notes**

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

#### **Contract Identification**

**Appropriation:** Procurement

Contract Name: AGM-154C-1 FY 2013/2014 Production

**Contractor:** Raytheon Company **Contractor Location:** 1151 E Hermans Road

Tucson, AZ 85706

Contract Number: N00019-13-C-0011

**Contract Type:** Firm Fixed Price (FFP)

Award Date: June 05, 2013 **Definitization Date:** June 05, 2013

Contract Price							
Initial Contract Price (\$M) Current Contract Price (\$M) E				Estimated Pr	ice At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
80.5	N/A	200	164.3	N/A	412	164.3	164.3

### **Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the exercise of the FY 2014 production option.

### **Cost and Schedule Variance Explanations**

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

# **Deliveries and Expenditures**

### BASELINE/BLU-108

Deliveries							
Delivered to Date Planned to Date Actual to Date Total Quantity Percen							
Development	0	0	0				
Production	2517	2517	2517	100.00%			
Total Program Quantity Delivered	2517	2517	2517	100.00%			

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	1659.9	Years Appropriated	19
Expended to Date	1659.9	Percent Years Appropriated	100.00%
Percent Expended	100.00%	Appropriated to Date	1659.9
Total Funding Years	19	Percent Appropriated	100.00%

The above data is current as of February 28, 2015.

#### **UNITARY**

Deliveries							
Delivered to Date Planned to Date Actual to Date Total Quantity Pe							
Development	0	0	0				
Production	2615	2615	3185	82.10%			
Total Program Quantity Delivered	2615	2615	3185	82.10%			

<b>Expended and Appropriated (TY \$M</b>	)		
Total Acquisition Cost	1939.8	Years Appropriated	24
Expended to Date	1584.5	Percent Years Appropriated	64.86%
Percent Expended	81.68%	Appropriated to Date	1902.0
Total Funding Years	37	Percent Appropriated	98.05%

The above data is current as of February 28, 2015.

# **Operating and Support Cost**

#### **BASELINE/BLU-108**

#### **Cost Estimate Details**

Date of Estimate: January 29, 2015

Source of Estimate: POE Quantity to Sustain: 2517

Unit of Measure: Total Quantity
Service Life per Unit: 20.00 Years

Fiscal Years in Service: FY 1998 - FY 2018

- Estimate is based on JSOW production termination after FY 2015.
- No additional Unit Operations, Unit-Level Manpower, or Indirect Support were required with the release of the JSOW Baseline variant.

### **Sustainment Strategy**

- Single-tier maintenance approach (Depot Level) at contractor facility.
- · No warranty.

#### **Antecedent Information**

No Antecedent

Annual O&S Costs BY1990 \$M				
Cost Element	BASELINE/BLU-108 Average Annual Cost Per Total Quantity	No Antecedent (Antecedent)		
Unit-Level Manpower	0.000			
Unit Operations	0.000	<del></del>		
Maintenance	0.470	<del></del>		
Sustaining Support	0.492	<del></del>		
Continuing System Improvements	0.000	<del></del>		
Indirect Support	0.000			
Other	0.000	<del></del>		
Total	0.962	<del></del>		

	Total O&S Cost \$M			
Item	BASELINE/BLU-108		No Antonodont	
item	Current Production APB Objective/Threshold		Current Estimate	No Antecedent (Antecedent)
Base Year	N/A	N/A	20.2	N/A
Then Year	N/A	N/A	31.1	N/A

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

21 Years \* .962M Average Annual Cost = \$20.2M

O&S Cost Variance			
Category	BY 1990 \$M	Change Explanations	
Prior SAR Total O&S Estimates - Dec 2013 SAR	146.9		
Programmatic/Planning Factors	-126.7	Revised estimate to account for termination of the JSOW Baseline/BLU-108 production program.	
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	-126.7		
Current Estimate	20.2		

### **Disposal Estimate Details**

Date of Estimate: January 29, 2015

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 1990 \$M): Total costs for disposal of all Total Quantity are 2.4

Demilitarization will occur for remaining JSOW Baseline/BLU-108 units in FY 2018.

#### **UNITARY**

#### **Cost Estimate Details**

Date of Estimate: January 29, 2015

Source of Estimate: POE Quantity to Sustain: 3185

Unit of Measure: Total Quantity
Service Life per Unit: 20.00 Years

Fiscal Years in Service: FY 2006 - FY 2037

- Estimate based on JSOW production termination after FY 2015.
- No additional Unit Operations, Unit-Level Manpower, or Indirect Support were required with the release of the JSOW Unitary variant.

### **Sustainment Strategy**

- Single-tier maintenance approach (Depot Level) at contractor facility.
- · No warranty.

#### **Antecedent Information**

No Antecedent

Annual O&S Costs BY1990 \$M				
Cost Element	UNITARY Average Annual Cost Per Total Quantity	No Antecedent (Antecedent) No Antecedent		
Unit-Level Manpower	0.000			
Unit Operations	0.000			
Maintenance	0.267			
Sustaining Support	1.691			
Continuing System Improvements	1.013			
Indirect Support	0.000			
Other	0.000	<u></u>		
Total	2.971			

	Total O&S Cost \$M			
Item	UNITARY	UNITARY		No Antecedent
Current Production APB Objective/Threshold			Current Estimate	(Antecedent)
Base Year	N/A	N/A	95.0	N/A
Then Year	N/A	N/A	195.6	N/A

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

32 Years \* \$2.971M Average Annual Cost = \$95.0M

O&S Cost Variance			
Category	BY 1990 \$M	Change Explanations	
Prior SAR Total O&S Estimates - Dec 2013 SAR	152.7		
Programmatic/Planning Factors	-57.7	Revised estimate due to reduced quantity and sustainment life of the JSOW Unitary variant as the result of production termination after FY 2015.	
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	-57.7		
Current Estimate	95.0		

## **Disposal Estimate Details**

Date of Estimate: January 29, 2015

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 1990 \$M): Total costs for disposal of all Total Quantity are 3.5

Disposal assumed after 20 year shelf life is complete.