Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-372

JLENS

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned June 26, 2008

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated August 5, 2005

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated August 5, 2005

Mission and Description

JLENS is a supporting program of the Army and Joint Integrated Air and Missile Defense, providing a persistent surveillance and tracking capability for Unmanned Aerial Vehicle and Cruise Missile defense to the current and projected defense forces. JLENS will provide fire control quality data to Surface to Air missile systems such as Army Patriot and Navy Aegis, increasing the weapons' capabilities by allowing these systems to engage targets normally below, outside, or beyond surface based weapons' field of view. Additionally, JLENS provides this fire control quality data to fighter aircraft allowing them to engage hostile threats from extended ranges.

JLENS also detects and tracks Surface Moving Targets, and provides this data on multiple networks.
JLENS provides Launch Point Estimate for Tactical Ballistic Missiles and Large Caliber Rockets. JLENS supports military operations across the full spectrum of conflict.

A JLENS Orbit consists of two systems: a Fire Control Radar system and a wide-area Surveillance Radar system. Each radar system employs a separate 74-meter tethered aerostat, mobile mooring station, radar and communications payload, processing station, and associated ground support equipment. JLENS uses advanced sensor and networking technologies to provide 360-degree, wide-area surveillance and precision target tracking. This JLENS information is distributed via joint service networks and contributes to the development of a single integrated air picture.

JLENS does not replace an antecedent system.

Executive Summary

The JLENS systems located at the Utah Test and Training Range (UTTR) and at the White Sands Missile Range (WSMR) made significant technical progress during 2011. The Surveillance System (SuS) completed a successful Functional Verification Test (FVT)-2, and both seven-day and 14-day endurance tests. Both the Surveillance Radar (SuR) and the Fire Control Radar (FCR) successfully conducted Link-16 and Cooperative Engagement Capability operations. Key components of JLENS Engineering and Manufacturing Development (EMD) Orbit #1 were integrated in preparation for the start of Developmental Testing (DT). The JLENS program completed the first phase of DT and demonstrated an Integrated Fire Control (IFC) capability between the FCR and Patriot during December 2011. Current planning has a live fire event with Patriot scheduled for April 2012.

JLENS successfully conducted two IFC Ground Integration and Checkout (GIACO) Campaigns at UTTR during the weeks of August 29, 2011 and September 26, 2011. Targets were successfully flown and IFC missions with Patriot were conducted. During testing, the SuS successfully provided target cuing information to the Fire Control System and Identification Friend or Foe (IFF) modes 1, 2, and 3 were successfully executed. These GIACOs were used in preparation for the DT-1 flight testing in December 2011 as well as the Patriot Advanced Capability - 3 (PAC-3) IFC Mission scheduled for FY 2012.

JLENS established the EMD Orbit #2 test site at WSMR, NM, completed integration of the SuR, and began Electromagnetic Environmental Effects testing of the SuR.

The FCR matured significantly during Integration and Testing activities at UTTR. FCR Software (SW) Build updates were provided to the test asset at UTTR on a regular basis from March to August 2011 with improved performance demonstrated with each subsequent build. SW drops included many enhancements, such as target tracking and antenna azimuth beam pointing, as well as improved performance in a high clutter environment. FCR hardware as well as SW maturity and performance were demonstrated by completion of FVT-2 at UTTR. FVT-2 was held to verify FCR performance related requirements required to proceed into further system level testing. Additionally, the FCR completed IFC testing with Patriot resulting in successful intercepts using simulated missiles. Patriot confirmed that JLENS FCR data provided during IFC testing was of sufficient accuracy.

JLENS successfully completed 22 of 23 (96%) DT-1 missions from November 7, 2011 to December 16, 2011. The JLENS radars successfully tracked fighter aircraft, towed targets, and cruise missile targets, meeting accuracy requirements within margin. The formal testing demonstrated successful IFF using modes 1-3. JLENS tracks were successfully integrated into the Hill Air Force Base Link-16 network, and a local network that included Counter Rocket, Artillery, and Mortar Forward Area Air Defense Command and Control, and Sentinel radars. Target hand-over was executed to a tactical Patriot radar system via Link-16. In between periods of formal testing, testing was conducted to progress Non-Cooperative Target Recognition, IFF Mode 4, Unmanned Air Vehicles, and Surface Moving Target tracking capabilities. This accomplishment provides data for the conduct of an IFC mission with a Patriot PAC-3 missile in April 2012.

On June 16, 2011, the Secretary of Defense directed the JLENS program to participate in and conduct an extended test program as part of the Combatant Command (COCOM) Exercise, as a result of the COCOM request for enhanced capabilities. On October 12, 2011, FY 2011 Omnibus Reprogramming funding of $40.4 million was provided to resource planning and contracting activities to support participation in the exercise. A total of $147.2 million over FY 2013-FY 2017 was also funded in the FY 2013 President's Budget (PB) to resource this exercise. The program has been coordinating with the COCOM staff for host nation support and requirements.

The JLENS program incurred a critical Nunn-McCurdy breach for Program Acquisition Unit Cost with the submission of the FY 2013 PB due to a 100 percent reduction in planned procurement quantities. The total program quantity was reduced from 16 to two Orbits. The two EMD Orbits will be completed and delivered. A Program Deviation Report was submitted to Program Executive Office Missiles and Space on February 14, 2012. The Department will be conducting a Nunn-McCurdy review in accordance with section 2433a of title 10, United States Code. The decision on whether to certify the program will be made no later than May 25, 2012.

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

Threshold Breaches

APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☑
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☑
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	Critical
	APUC	None
Original UCR Baseline		
	PAUC	Critical
	APUC	None

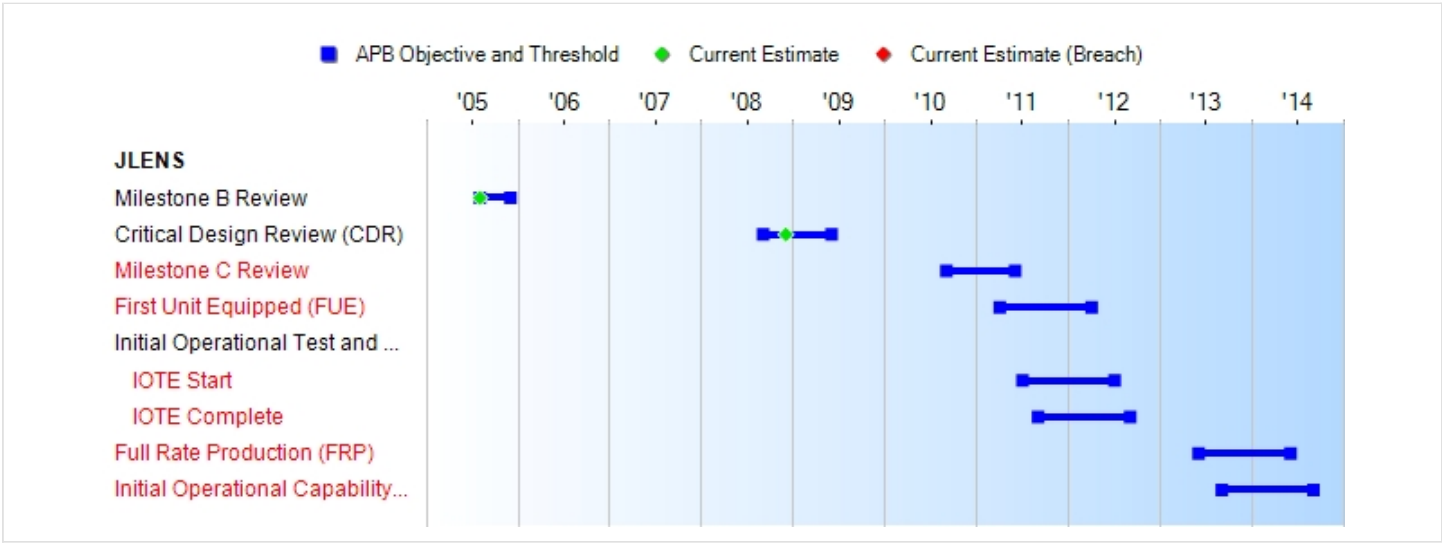
Explanation of Breach

The December 2010 SAR reported a significant Nunn-McCurdy breach to the Program Acquisition Unit Cost (PAUC), as well as Acquisition Program Baseline breaches for Schedule, Research, Development, Test, and Evaluation (RDT&E), Procurement, Military Construction, PAUC, and Average Procurement Unit Cost.

The JLENS program incurred a critical Nunn-McCurdy breach for PAUC with the submission of the FY 2013 President's Budget (PB) due to a 100 percent reduction in planned procurement quantities. The total program quantity was reduced from 16 to two Orbits. The two Engineering and Manufacturing Development Orbits will be completed and delivered. A Program Deviation Report was submitted to Program Executive Office Missiles and Space on February 14, 2012. The Department will be conducting a Nunn-McCurdy review in accordance with section 2433a of title 10, United States Code. The decision on whether to certify the program will be made no later than May 25, 2012.

On June 16, 2011, the Secretary of Defense directed the JLENS program to participate in and conduct an extended test program as part of a Combatant Command Exercise beginning in FY 2012. On October 12, 2011, FY 2011 Omnibus Reprogramming funding of $40.4 million was provided to resource planning and contracting activities to support participation in the exercise. A total of $147.2 million over FY 2013-FY 2017 was also funded in the FY 2013 PB to resource this exercise. This exercise also contributed to an increased APB breach for RDT&E funding.

Schedule



Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	
Milestone B Review	AUG 2005	AUG 2005	DEC 2005	AUG 2005	
Critical Design Review (CDR)	SEP 2008	SEP 2008	JUN 2009	DEC 2008	
Milestone C Review	SEP 2010	SEP 2010	JUN 2011	TBD [1]	(Ch-1)
First Unit Equipped (FUE)	APR 2011	APR 2011	APR 2012	TBD [1]	(Ch-1)
Initial Operational Test and Evaluation (IOTE)					
IOTE Start	JUL 2011	JUL 2011	JUL 2012	TBD [1]	(Ch-1)
IOTE Complete	SEP 2011	SEP 2011	SEP 2012	TBD [1]	(Ch-1)
Full Rate Production (FRP)	JUN 2013	JUN 2013	JUN 2014	TBD [1]	(Ch-1)
Initial Operational Capability (IOC)	SEP 2013	SEP 2013	SEP 2014	TBD [1]	(Ch-1)

[1] *APB Breach*

Acronyms And Abbreviations

TBD - To Be Determined

Change Explanations

(Ch-1) The following milestones have changed from the December 2010 SAR due to the suspension of JLENS production: Milestone C changed from September 2012 to TBD, FUE changed from August 2013 to TBD, IOT&E Start changed from November 2013 to TBD, IOT&E Complete changed from March 2014 to TBD, FRP changed from November 2014 to TBD, and IOC changed from March 2014 to TBD.

Memo

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
SIAP KPP					
Surveillance coverage (deg)	360	360	360	360	360
Integrated Fire Control (IFC) KPP	Forward Pass (FP)	Forward Pass (FP)	Engage-on-Remote (EOR)	Engage on Remote (EOR)-(Hardware In the Loop only)	Engage on Remote (EOR)
Combat ID KPP					
Identification Friend or Foe (IFF)	All DoD Validated IFF and Warsaw Pact/ Coalition modes	All DoD Validated IFF and Warsaw Pact/ Coalition modes	All DoD validated IFF modes	Modes 1, 2, and 3	All DoD Validated IFF and Warsaw Pact/Co-alition modes
Precise Participant Location Identification (PPLI)	Correlated PPLI messages w/JLENS organic tracks	Correlated PPLI messages w/JLENS organic tracks	Correlated PPLI messages w/JLENS organic tracks	Correlated PPLI messages with JLENS organic tracks	Correlated PPLI messages w/ JLENS organic tracks
C4I Interoperability KPP					
Information Exchange Requirements (IERs)	100% of all top level IERs	100% of all top level IERs	100% of all top level critical IERs	100% of all top level IERs	100% of all top level IERs
Theater Air and Missile Defense Integrated Architecture	Available behavior models	Available behavior models	Data complete-ness, data availability, and common processing	Data complete-ness, data availability, and common processing	Available behavior models
Net Ready KPP	Develop Migration Plan to show how we plan to meet NR-KPP	Develop Migration Plan to show how we plan to meet NR-KPP	Develop Migration Plan to show how we plan to meet NR-KPP	Link-16	Develop Migration Plan to show how we plan to meet NR-KPP

Requirements Source: Operational Requirements Document (ORD), dated February 24, 2004

Acronyms And Abbreviations

C4I - Command, Control, Communications, Computers, and Intelligence
deg - degrees
ID - Indentification
KPP - Key Performance Parameter
NR - Net Ready
SIAP - Single Integrated Air Picture
w/ - with

Change Explanations

None

Memo

JLENS KPPs were demonstrated during Developmental Testing-1 missions from November 7, 2011 to December 16, 2011.

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

Track To Budget

RDT&E

APPN 2040	BA 07	PE 0102419A	(Army)
	Project E55	Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)	

Procurement

APPN 2035	BA 02	PE 0214400A	(Army)
	ICN BZ0525	Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)	

JLENS BZ0525 belongs to the BZ0000 Family.

MILCON

APPN 2050	BA 01	PE 0805796A	(Army)
	Project 071948	Vehicle Maintenance Shop	(Sunk)
	Project 073686	Barracks Complex	
	Project 073688	Vehicle Maintenance Facility	
	Project 073690	Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) Tactical Training Facility	
	Project 077489	Applied Instruction Building	

JLENS Military Construction Program Element 0805796A Project 073689 was deleted due to the cancellation of Military Construction funding and requirements after FY 2012, resulting from the suspension of JLENS procurement in the FY 2013 President's Budget.

Military Construction funding shown in the SAR excludes cost budgeted for non-system specific facilities (barracks, roads, utilities, and infrastructure) in JLENS Military Construction Program Elements.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2005 $M			BY2005 $M	TY $M		
Appropriation	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	1760.0	1760.0	1936.0	2256.3[1]	1948.0	1948.0	2558.5
Procurement	4027.0	4027.0	4429.7	0.0	5126.0	5126.0	0.0
Flyaway	3435.0	--	--	0.0	4371.4	--	0.0
Recurring	2723.0	--	--	0.0	3465.3	--	0.0
Non Recurring	712.0	--	--	0.0	906.1	--	0.0
Support	592.0	--	--	0.0	754.6	--	0.0
Other Support	515.0	--	--	0.0	656.5	--	0.0
Initial Spares	77.0	--	--	0.0	98.1	--	0.0
MILCON	63.0	63.0	69.3	52.4	77.0	77.0	62.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	5850.0	5850.0	N/A	2308.7	7151.0	7151.0	2620.5

[1] ***APB Breach***

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	2	2	2
Procurement	14	14	0
Total	16	16	2

The two Research, Development, Test, and Evaluation funded Engineering and Manufacturing Development (EMD) orbits are considered fully configured and production representative. Based on asset utilization required to complete EMD, Organizational Support Equipment was acquired for EMD Orbit # 1, which will support the Secretary of Defense directed extended test program as part of a Combatant Command Exercise. EMD Orbit #2 will be used to complete the EMD test program.

The unit of measure is a JLENS orbit, which is comprised of two systems: a Fire Control Radar System and a wide-area Surveillance Radar System. A total of 14 JLENS production orbits is required by the Operational Requirements Document.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2013 President's Budget / December 2011 SAR (TY$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	1864.1	327.3	190.4	95.5	32.5	24.1	24.6	0.0	2558.5
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MILCON	20.0	42.0	0.0	0.0	0.0	0.0	0.0	0.0	62.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2013 Total	1884.1	369.3	190.4	95.5	32.5	24.1	24.6	0.0	2620.5
PB 2012 Total	1857.1	386.7	616.6	559.5	474.7	436.6	501.9	3704.8	8537.9
Delta	27.0	-17.4	-426.2	-464.0	-442.2	-412.5	-477.3	-3704.8	-5917.4

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	2	0	0	0	0	0	0	0	0	2
Production	0	0	0	0	0	0	0	0	0	0
PB 2013 Total	2	0	0	0	0	0	0	0	0	2
PB 2012 Total	2	0	0	1	1	1	1	1	9	16
Delta	0	0	0	-1	-1	-1	-1	-1	-9	-14

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2006	--	--	--	--	--	--	99.9
2007	--	--	--	--	--	--	237.8
2008	--	--	--	--	--	--	464.9
2009	--	--	--	--	--	--	344.9
2010	--	--	--	--	--	--	317.1
2011	--	--	--	--	--	--	399.5
2012	--	--	--	--	--	--	327.3
2013	--	--	--	--	--	--	190.4
2014	--	--	--	--	--	--	95.5
2015	--	--	--	--	--	--	32.5
2016	--	--	--	--	--	--	24.1
2017	--	--	--	--	--	--	24.6
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**2558.5**

Annual Funding BY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
2006	--	--	--	--	--	--	94.9
2007	--	--	--	--	--	--	220.6
2008	--	--	--	--	--	--	423.1
2009	--	--	--	--	--	--	309.9
2010	--	--	--	--	--	--	280.6
2011	--	--	--	--	--	--	346.4
2012	--	--	--	--	--	--	278.9
2013	--	--	--	--	--	--	159.1
2014	--	--	--	--	--	--	78.4
2015	--	--	--	--	--	--	26.2
2016	--	--	--	--	--	--	19.1
2017	--	--	--	--	--	--	19.1
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**2256.3**

Annual Funding TY$
2050 | MILCON | Military Construction, Army

Fiscal Year	Total Program TY $M
2010	20.0
2011	--
2012	42.0
Subtotal	**62.0**

Annual Funding BY$
2050 | MILCON | Military Construction, Army

Fiscal Year	Total Program BY 2005 $M
2010	17.3
2011	--
2012	35.1
Subtotal	**52.4**

Funding shown excludes cost budgeted for non-system specific facilities (barracks, roads, utilities, and infrastructure) in JLENS Military Construction Program Elements.

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	8/5/2005	8/5/2005
Approved Quantity	2	2
Reference	ADM	ADM
Start Year	2011	2011
End Year	2012	2012

The August 5, 2005 Acquisition Decision Memorandum authorized JLENS to procure two orbits in Low Rate Initial Production (LRIP). The current total LRIP quantity is more than 10% of the total production quantity because it is not possible to procure a fraction of an orbit.

The FY 2013 President's Budget suspended all JLENS procurement, including the two LRIP orbits.

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Unit Cost	BY2005 $M Current UCR Baseline (AUG 2005 APB)	BY2005 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5850.0	2308.7	
Quantity	16	2	
Unit Cost	365.625	1154.350	+215.72 [1]
Average Procurement Unit Cost (APUC)			
Cost	4027.0	0.0	
Quantity	14	0	
Unit Cost	287.643	--	--

Unit Cost	BY2005 $M Original UCR Baseline (AUG 2005 APB)	BY2005 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5850.0	2308.7	
Quantity	16	2	
Unit Cost	365.625	1154.350	+215.72 [1]
Average Procurement Unit Cost (APUC)			
Cost	4027.0	0.0	
Quantity	14	0	
Unit Cost	287.643	--	--

Unit Cost	TY $M Current UCR Baseline (AUG 2005 APB)	TY $M Current Estimate (DEC 2011 SAR)	TY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	7151.0	2620.5	
Unit Cost	446.938	1310.250	+193.16
Average Procurement Unit Cost (APUC)			
Cost	5126.0	0.0	
Unit Cost	366.143	--	0.00

Unit Cost	TY $M		
	Original UCR Baseline (AUG 2005 APB)	Current Estimate (DEC 2011 SAR)	TY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	7151.0	2620.5	
Unit Cost	446.938	1310.250	+193.16
Average Procurement Unit Cost (APUC)			
Cost	5126.0	0.0	
Unit Cost	366.143	--	0.00

[1] **Nunn-McCurdy Breach**

Unit Cost Breach Data

Changes from Previous SAR	$M/Qty.	Percent
PAUC (BY $M)	1154.350	+167.83
APUC (BY $M)		0.00
PAUC Quantity	2	0.00
PAUC (TY $M)	1310.250	+145.54
APUC (TY $M)		0.00

Initial SAR Information SEP 2005	BY2005 $M	TY $M
Program Acquisition Cost	365.6	446.9

Unit Cost PAUC Changes

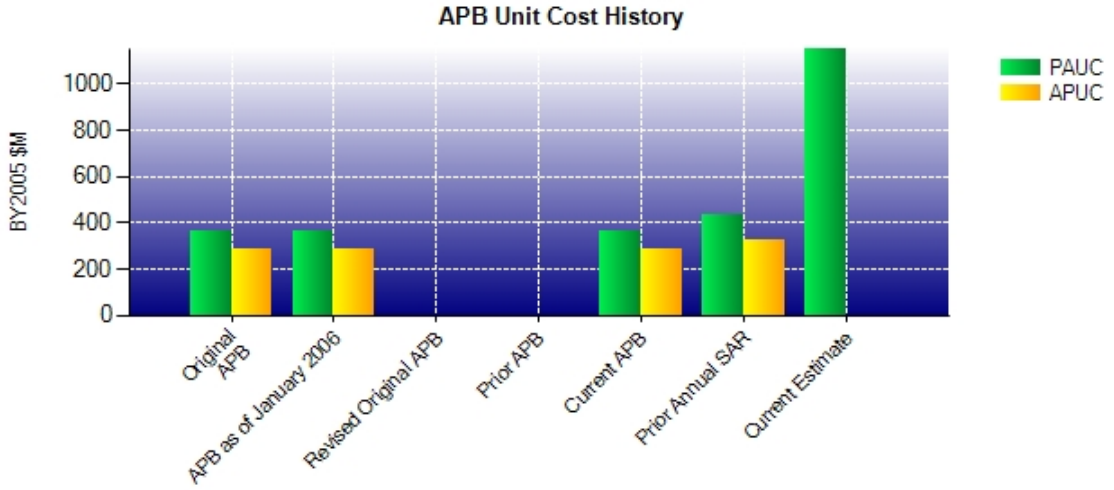
The JLENS program incurred a critical Nunn-McCurdy breach for Program Acquisition Unit Cost with the submission of the FY 2013 President's Budget (PB) due to a 100 percent reduction in planned procurement quantities. The total program quantity was reduced from 16 to two Orbits. The two Engineering and Manufacturing Development Orbits will be completed and delivered. A Program Deviation Report was submitted to Program Executive Office Missiles and Space on February 14, 2012. The Department will be conducting a Nunn-McCurdy review in accordance with section 2433a of title 10, United States Code. The decision on whether to certify the program will be made no later than May 25, 2012.

On June 16, 2011, the Secretary of Defense directed the JLENS program to participate in and conduct an extended test program as part of a Combatant Command Exercise beginning in FY 2012. On October 12, 2011, FY 2011 Omnibus Reprogramming funding of $40.4 million was provided to resource planning and contracting activities to support participation in the exercise. A total of $147.2 million over FY 2013-FY 2017 was also funded in the FY 2013 PB to resource this exercise. This exercise also contributed to an increased Acquisition Program Baseline breach for Research, Development, Test, and Evaluation funding.

Unit Cost APUC Changes

The JLENS Average Procurement Unit Cost changed to $0 with the submission of the FY 2013 PB, due to the suspension of JLENS procurement (100 percent of funding and quantities).

Unit Cost History



		BY2005 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	AUG 2005	365.625	287.643	446.938	366.143
APB as of January 2006	AUG 2005	365.625	287.643	446.938	366.143
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	N/A	N/A	N/A	N/A	N/A
Current APB	AUG 2005	365.625	287.643	446.938	366.143
Prior Annual SAR	DEC 2010	431.000	325.929	533.619	421.186
Current Estimate	DEC 2011	1154.350	N/A	1310.250	N/A

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
446.938	-2.750	1239.112	31.600	-1.050	-29.100	0.000	-374.500	863.312	1310.250

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
366.143	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	AUG 2005	N/A	AUG 2005
Milestone C	N/A	SEP 2010	N/A	TBD
IOC	N/A	SEP 2013	N/A	TBD
Total Cost (TY $M)	N/A	7151.0	N/A	2620.5
Total Quantity	N/A	16	N/A	2
Prog. Acq. Unit Cost (PAUC)	N/A	446.938	N/A	1310.250

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1948.0	5126.0	77.0	7151.0
Previous Changes				
Economic	+6.7	-144.8	-0.8	-138.9
Quantity	--	--	--	--
Schedule	+325.0	+182.0	--	+507.0
Engineering	+99.7	--	--	+99.7
Estimating	+116.6	+212.7	+69.1	+398.4
Other	--	--	--	--
Support	--	+520.7	--	+520.7
Subtotal	+548.0	+770.6	+68.3	+1386.9
Current Changes				
Economic	+16.7	+114.5	+2.2	+133.4
Quantity	--	-3778.9	--	-3778.9
Schedule	--	-443.8	--	-443.8
Engineering	-101.8	--	--	-101.8
Estimating	+147.6	-518.7	-85.5	-456.6
Other	--	--	--	--
Support	--	-1269.7	--	-1269.7
Subtotal	+62.5	-5896.6	-83.3	-5917.4
Total Changes	+610.5	-5126.0	-15.0	-4530.5
CE - Cost Variance	2558.5	--	62.0	2620.5
CE - Cost & Funding	2558.5	--	62.0	2620.5

Summary Base Year 2005 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1760.0	4027.0	63.0	5850.0
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	+278.2	--	--	+278.2
Engineering	+77.9	--	--	+77.9
Estimating	+98.3	+162.2	+55.6	+316.1
Other	--	--	--	--
Support	--	+373.8	--	+373.8
Subtotal	+454.4	+536.0	+55.6	+1046.0
Current Changes				
Economic	--	--	--	--
Quantity	--	-2881.6	--	-2881.6
Schedule	--	-329.9	--	-329.9
Engineering	-77.9	--	--	-77.9
Estimating	+119.8	-385.7	-66.2	-332.1
Other	--	--	--	--
Support	--	-965.8	--	-965.8
Subtotal	+41.9	-4563.0	-66.2	-4587.3
Total Changes	+496.3	-4027.0	-10.6	-3541.3
CE - Cost Variance	2256.3	--	52.4	2308.7
CE - Cost & Funding	2256.3	--	52.4	2308.7

Previous Estimate: December 2010

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+16.7
Budget increase in FY 2011 and FY 2013-FY 2017 to participate in and conduct a Secretary of Defense directed extended test program as part of a Combatant Command Exercise. (Estimating)	+154.2	+187.5
Adjustment for current and prior escalation. (Estimating)	-9.7	-11.2
Elimination of the Preplanned Product Improvement Modification Program resulting from the cancellation of JLENS production in FY 2015- FY 2022. (Engineering)	-77.9	-101.8
Budget reduction for Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) in FY 2011. (Estimating)	-9.5	-11.0
Congressional budget reduction in FY 2012, for program growth adjustment. (Estimating)	-14.3	-16.8
Congressional budget reduction for Economic Assumptions and Federally Funded Research and Development Centers in FY 2011 and FY 2012. (Estimating)	-2.6	-3.0
Revised estimate in FY 2013 and FY 2014 for refinement of the Engineering and Manufacturing Development program. (Estimating)	+1.7	+2.1
RDT&E Subtotal	+41.9	+62.5

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+114.5
Quantity variance resulting from a decrease of JLENS orbits from 14 to 0, resulting from the suspension of JLENS procurement in the FY 2013 President's Budget (PB). (Subtotal)	-3447.7	-4545.3
Quantity variance resulting from a decrease of JLENS orbits from 14 to 0, resulting from the suspension of JLENS procurement in the FY 2013 PB. (Quantity)	(-2732.1)	(-3582.8)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-329.9)	(-443.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-385.7)	(-518.7)
Additional Quantity variance from decrease of JLENS orbits from 14 to 0, resulting from the suspension of JLENS procurement in the FY 2013 President's Budget (PB). (Quantity)	-149.5	-196.1
Decrease in Other Support due to a reduction of JLENS orbits from 14 to 0, resulting from the suspension of JLENS procurement in the FY 2013 PB. (Support) (QR)	-781.9	-1026.7
Decrease in Initial Spares due to a reduction of JLENS orbits from 14 to 0, resulting from the suspension of JLENS procurement in the FY 2013 PB. (Support) (QR)	-183.9	-243.0
Procurement Subtotal	-4563.0	-5896.6

(QR) Quantity Related

MILCON	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+2.2
Adjustment for current and prior escalation. (Estimating)	-0.7	-0.8

Revised estimate of JLENS Military Construction due to suspension of JLENS production. (Estimating)	-65.5	-84.7
MILCON Subtotal	-66.2	-83.3

Contracts

Appropriation: RDT&E	
Contract Name	**JLENS SDD (CLINS 0017AA/AE/AH)**
Contractor	Raytheon Company
Contractor Location	Andover, MA 01810
Contract Number, Type	DASG60-98-C-0001, CPIF
Award Date	October 27, 2005
Definitization Date	December 14, 2006

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1428.8	N/A	2	1594.6	N/A	2	1570.5	1589.9

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/29/2012)	-101.0	-5.7
Previous Cumulative Variances	-71.8	-23.0
Net Change	-29.2	+17.3
Percent Variance	-7.70%	-0.43%
Percent Complete	+89.27%	

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to resolution of integration issues associated with the Surveillance Radar and the Fire Control Radar. Issues resulting in significant cost variances have been resolved and the Estimate at Completion has stabilized.

The favorable net change in the schedule variance is due to completion of prime items, performance of delinquent tasks, and focus on efficiencies.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to 25 contract modifications to incorporate changes to the Engineering and Manufacturing Development (EMD) contract from August 2007 to March 2011. The largest single component is the FY 2009 EMD contract restructure ($134.7M) to synchronize the JLENS and Army Integrated Air and Missile Defense programs. Other components of the contract price increase include: acquisition of IBM Signal Data Processors (SDP), performance specification changes, customer funds for analytical studies, and Cooperative Engagement Capability SDP modifications.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	2	0	2	0.00%
Production	0	0	0	--
Total Program Quantities Delivered	2	0	2	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	2620.5	Years Appropriated	7
Expenditures To Date	2201.4	Percent Years Appropriated	58.33%
Percent Expended	84.01%	Appropriated to Date	2253.4
Total Funding Years	12	Percent Appropriated	85.99%

This data is current as of March 12, 2012.

Operating and Support Cost

Assumptions And Ground Rules
Due to the suspension of JLENS production, no Operating and Support will be required.

Costs BY2005 $M		
Cost Element	**JLENS Average Annual Cost Per Orbit**	**No Antecedent System**
Unit-Level Manpower	--	--
Unit Operations	--	--
Maintenance	--	--
Sustaining Support	--	--
Continuing System Improvements	--	--
Indirect Support	--	--
Other	--	--
Total Unitized Cost (Base Year 2005 $)	--	--

Total O&S Costs $M	JLENS	No Antecedent System
Base Year	--	--
Then Year	--	--