Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-442

AIM-9X BLOCK II

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

AIM-9X BLOCK II Air-to-Air Missile (AIM-9X BLOCK II)

DoD Component

Navy

Joint Participants

Air Force

Responsible Office

Responsible Office

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References

SAR Baseline (Production Estimate)

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated December 23, 2011

Approved APB

Assistant Secretary of the Navy (Research, Development & Acquisition) (ASN(RDA)) Approved Acquisition Program Baseline (APB) dated December 23, 2011

Mission and Description

The AIM-9X Block II Sidewinder short-range air-to-air missile is a long term evolution of the AIM-9 series of fielded missiles. The missile program provides a launch and leave, air combat munitions that uses passive Infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile (AMRAAM). Air superiority in the short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against enemy employing IR countermeasures. Anti-Tamper features have been incorporated to protect improvements inherent in this design. AIM-9X Block II is a Post Milestone C, Acquisition Category IC (ACAT-IC) joint service program with Navy lead.

Executive Summary

This is the initial SAR submission for the AIM-9X Block II program.

On June 24, 2011, the Assistant Secretary of the Navy for Research Development and Acquisition (ASN (RD&A)) conducted a successful Milestone C (MS C) review of the AIM-9X Block II program. As a result, ASN (RDA) signed an Acquisition Decision Memorandum (ADM), dated June 30, 2011, which approved MS C and authorized the Program Executive Officer for Unmanned Aviation and Strike Weapons, (PEO(U&W)) AIM-9X Block II program to enter the Production and Deployment Phase, to include, two Low Rate Initial Production (LRIP) procurements: (LRIP I/FY 2011 and LRIP II/ FY 2012). A previous ADM, dated June 16, 2011, had been signed by the Under Secretary of Defense designating the AIM-9X Block II as an Acquisition Category (ACAT) IC program with ASN (RDA), under the Secretary of the Navy, as the Milestone Decision Authority. The Acquisition Program Baseline (APB) was signed on December 23, 2011.

During the two LRIP lots, the program will procure AIM-9X Block II All-Up-Round (AUR) missiles and Captive Air Training Missiles (CATMs). A Full Rate Production (FRP) decision will be sought after successful completion of Initial Operational Test and Evaluation (IOT&E) and following the Beyond-LRIP assessment of system operational effectiveness and suitability.

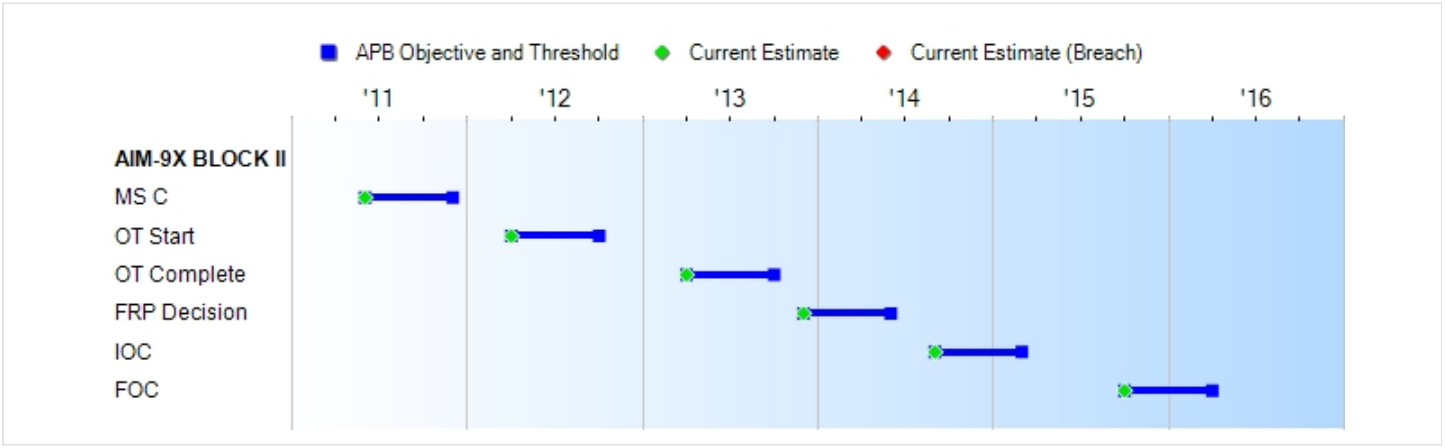
There are no significant software-related issues with this program at this time.

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	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
MS C	JUN 2011	JUN 2011	DEC 2011	JUN 2011
OT Start	APR 2012	APR 2012	OCT 2012	APR 2012
OT Complete	APR 2013	APR 2013	OCT 2013	APR 2013
FRP Decision	DEC 2013	DEC 2013	JUN 2014	DEC 2013
IOC	SEP 2014	SEP 2014	MAR 2015	SEP 2014
FOC	OCT 2015	OCT 2015	APR 2016	OCT 2015

Acronyms And Abbreviations

FOC - Follow-On Capability
FRP - Full Rate Production
IOC - Initial Operational Capability
MS - Milestone
OT - Operational Test

Change Explanations

None

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
AIM-9X Day/Night Capability	Yes	Yes	Yes	TBD	Yes
AIM-9X Aircraft Interface/Interoperability Missile Weight (lbs.)	≤ 192	≤ 192	≤ 210	TBD	≤ 192
AIM-9X Aircraft Interface/Interoperability Missile Length (in.)	≤ 115	≤ 115	≤ 123	TBD	≤ 115
AIM-9X Aircraft Interface/Interoperability Missile Box Size (in.)	≤ 12.5 X 12.5	≤ 12.5 X 12.5	≤ 12.5 X 12.5	TBD	≤ 12.5 X 12.5
AIM-9X Aircraft Interface/Interoperability Missile Diameter (in.)	≤ 5	≤ 5	≤ 7	TBD	≤ 5
AIM-9X Aircraft Interface/Interoperability Interface	Mid body umbilical only.	Mid body umbilical only.	Digital.	TBD	Mid body umbilical only
AIM-9X High Off Boresight Capability Cueing/Verification	Interface with current/planned aircraft radar systems and planned HMCS.	Interface with current/planned aircraft radar systems and planned HMCS.	Interface with current/planned aircraft radar systems and planned HMCS.	TBD	Interface with current/ planned aircraft radar systems and planned-HMCS
AIM-9X Captive Carry Reliability (MTBCCF) (hr.)	>.or.=900	>.or.=900	>.or.=500	TBD	>.or.=900
AIM-9X Detect Non-Operational Missile (BIT) All Components (%)	>.or.=0.80	>.or.=0.80	>.or.=0.60	TBD	>.or.=0.80
AIM-9X Detect Non-Operational Missile (BIT-able Components) (%)	>.or.=0.95	>.or.=0.95	>.or.=0.90	TBD	>.or.=0.95
AIM-9X Mean Time Between False Alarms (hr.)	>.or.=25	>.or.=25	<.or.=16	TBD	>.or.=25
AIM-9X BIT Time (sec.)	≤ 20	≤ 20	≤ 20	TBD	≤ 20
EMI Compatibility	Threshold=Objective	Threshold=Objective	Not incur damage to electrical components while in the electromagnetic environment	TBD	Threshold=Objective

			of an aircraft carried. The AIM-9X BLOCK II missile shall be compatible with representativ e threshold hose aircraft weapon and sensor load-outs with regard to RFI, EMI, and MIL-STD-1533 or MIL-STD-1760 data bus message throughput constraints.		
Ao- AUR	No less than (.98) after 35,000 flight hours. .	No less than (.98) after 35,000 flight hours. .	No less than (.93) after 35,000 flight hours.	TBD	No less than (.98) after 35,000 flight hours
Net Readiness	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DOD Enterprise Architecture and solution architectures based on integrated DODAF content, and must satisfy the technical requirements	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DOD Enterprise Architecture and solution architectures based on integrated DODAF content, and must satisfy the technical requirements	The capability, system, and/or service must fully support execution of all operational activities and information exchanges identified in DOD Enterprise Architecture and solution architectures based on integrated DODAF content, and must satisfy the technical requirements	TBD	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements

	for transition to Net-Centric military operations to include: 1) Solution architecture products complaint with DOD Enterprise Architecture based on integrated DODAF content, including specified operationally effective information exchanges. 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DOD IEA, excepting tactical and non-IP communicati ons. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementati on guidance of GIG GESPs necessary to	for transition to Net-Centric military operations to include: 1) Solution architecture products complaint with DOD Enterprise Architecture based on integrated DODAF content, including specified operationally effective information exchanges. 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DOD IEA, excepting tactical and non-IP communicati ons. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementati on guidance of GIG GESPs necessary to	for transition to Net-Centric military operations to include: 1) Solution architecture products compliant with DOD Enterprise Architecture based on integrated DODAF content, including specified operationally effective information exchanges. 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DOD IEA , excepting tactical and non-IP communicati ons. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementati on guidance of GESPs, necessary to meet all		for transition to Net-Centric military operations to include: 1) Solution architecture products complaint with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges. 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communica-tions. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementa-tion guidance of GIG GESPs necessary to

	meet all operational requirements specified in the DOD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authenticatio n, confidentiality , and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportabilit y requirements to include SAASM Spectrum and JTRS requirements .	meet all operational requirements specified in the DOD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authenticatio n, confidentiality , and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportabilit y requirements to include SAASM Spectrum and JTRS requirements .	operational requirements specified in the DOD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authenticatio n, confidentiality , and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportabilit y requirements to include SAASM, Spectrum and JTRS necessary to meet all operational requirements specified in the DOD Enterprise Architecture and solution architecture views.		meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authentica-tion, confidentiality and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Support-ability requirements to include SAASM Spectrum and JTRS requirements
Ao- CATM	No less than (.95) after 100,000 flight hours.	No less than (.95) after 100,000 flight hours.	No less than (.86) after 100,000 flight hours.	TBD	No less than (.95) after 100,000 flight hours
Material Availability (Am)	Threshold=O bjective	Threshold=O bjective	No less than (.82)	TBD	Threshold= Objective

Requirements Source:
Capabilities Production Document (CPD), dated May 20, 2011

Acronyms And Abbreviations

Am - Material Availability
Ao - Operational Availability
ATO - Authorization To Operate
AUR - All Up Round
BIT - Built In Test
CATM - Captive Air Training Missile
DAA - Designated Accrediting Authority
DoD - Department of Defense
DoDAF - Department of Defense Architecture Framework
EMI - Electromagnetic Interference
GESP - GIG Enterprise Service Profile
GIG - Global Information Grid
HMCS - Helmet Mounted Cueing System
hr - hour
IATO - Interim Authorization to Operate
IEA - Information Enterprise Architecture
in - Inches
IP - Internet Protocol
IT - Information Technology
JTRS - Joint Test Requirement System
lbs - Pounds
MIL - Military
MTBCCF - Mean Time Between Captive Carry Failure
RFI - Radio Frequency Interference
SAASM - Selective Availability Anti-Spoofing Module
sec - seconds
STD - Standard
TV - Technical View

Change Explanations

None

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

Track To Budget

RDT&E			
APPN 1319	BA 07	PE 0207161N	(Navy)
	Project 0457	Tactical Air Intercept/AIM-9X	(Shared)
APPN 3600	BA 07	PE 0207161F	(Air Force)
	Project 4132	Tactical Air Intercept/AIM-9X	(Shared)
Procurement			
APPN 1507	BA 02	PE 0206138M	(Navy)
	ICN 2209	AIM-9X Block II Sidewinder	(Shared)
	USMC funding received as WPN		
APPN 1507	BA 02	PE 0204162N	(Navy)
	ICN 2209	AIM-9X Block II Sidewinder	(Shared)
APPN 3020	BA 02	PE 0207161F	(Air Force)
	ICN 20221M	AIM-9X Block II Sidewinder	

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2011 $M			BY2011 $M	TY $M		
Appropriation	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	168.8	168.8	185.7	172.5	175.7	175.7	179.1
Procurement	3798.5	3798.5	4178.4	3677.4	4680.4	4680.4	4559.2
Flyaway	3633.8	--	--	3523.9	4475.4	--	4366.4
Recurring	3460.0	--	--	3374.1	4279.0	--	4192.7
Non Recurring	173.8	--	--	149.8	196.4	--	173.7
Support	164.7	--	--	153.5	205.0	--	192.8
Other Support	37.9	--	--	34.5	45.2	--	42.1
Initial Spares	126.8	--	--	119.0	159.8	--	150.7
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	3967.3	3967.3	N/A	3849.9	4856.1	4856.1	4738.3

Confidence Level For the Current APB Cost 50% - The current APB cost estimate provided sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule and programmatic risk and external interference. It was consistent with average resource expenditures on historical efforts of similar size, scope, and complexity and represents a notional 50% confidence level.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	6000	6000	6000
Total	6000	6000	6000

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	66.2	16.8	19.4	16.5	17.5	13.7	13.9	15.1	179.1
Procurement	144.2	133.4	171.0	173.9	223.0	178.2	186.3	3349.2	4559.2
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 2013 Total	210.4	150.2	190.4	190.4	240.5	191.9	200.2	3364.3	4738.3
	--	--	--	--	--	--	--	--	--

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	172	193	314	300	398	303	303	4017	6000
PB 2013 Total	0	172	193	314	300	398	303	303	4017	6000
	--	--	--	--	--	--	--	--	--	--

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

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
2004	--	--	--	--	--	--	1.3
2005	--	--	--	--	--	--	3.9
2006	--	--	--	--	--	--	7.7
2007	--	--	--	--	--	--	6.7
2008	--	--	--	--	--	--	0.5
2009	--	--	--	--	--	--	5.4
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	0.9
2012	--	--	--	--	--	--	8.8
2013	--	--	--	--	--	--	11.2
2014	--	--	--	--	--	--	6.8
2015	--	--	--	--	--	--	6.7
2016	--	--	--	--	--	--	0.7
2017	--	--	--	--	--	--	0.8
2018	--	--	--	--	--	--	0.5
2019	--	--	--	--	--	--	0.5
2020	--	--	--	--	--	--	0.5
2021	--	--	--	--	--	--	0.5
2022	--	--	--	--	--	--	0.5
2023	--	--	--	--	--	--	0.6
2024	--	--	--	--	--	--	0.6
2025	--	--	--	--	--	--	0.6
2026	--	--	--	--	--	--	0.6
2027	--	--	--	--	--	--	0.6
2028	--	--	--	--	--	--	0.6
2029	--	--	--	--	--	--	0.6
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**68.1**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2011 $M	Non End Item Recurring Flyaway BY 2011 $M	Non Recurring Flyaway BY 2011 $M	Total Flyaway BY 2011 $M	Total Support BY 2011 $M	Total Program BY 2011 $M
2004	--	--	--	--	--	--	1.5
2005	--	--	--	--	--	--	4.3
2006	--	--	--	--	--	--	8.3
2007	--	--	--	--	--	--	7.0
2008	--	--	--	--	--	--	0.5
2009	--	--	--	--	--	--	5.5
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	0.9
2012	--	--	--	--	--	--	8.5
2013	--	--	--	--	--	--	10.7
2014	--	--	--	--	--	--	6.4
2015	--	--	--	--	--	--	6.2
2016	--	--	--	--	--	--	0.6
2017	--	--	--	--	--	--	0.7
2018	--	--	--	--	--	--	0.4
2019	--	--	--	--	--	--	0.4
2020	--	--	--	--	--	--	0.4
2021	--	--	--	--	--	--	0.4
2022	--	--	--	--	--	--	0.4
2023	--	--	--	--	--	--	0.5
2024	--	--	--	--	--	--	0.5
2025	--	--	--	--	--	--	0.5
2026	--	--	--	--	--	--	0.5
2027	--	--	--	--	--	--	0.4
2028	--	--	--	--	--	--	0.4
2029	--	--	--	--	--	--	0.4
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**66.3**

Annual Funding TY$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

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
2005	--	--	--	--	--	--	5.1
2006	--	--	--	--	--	--	10.9
2007	--	--	--	--	--	--	3.3
2008	--	--	--	--	--	--	5.5
2009	--	--	--	--	--	--	5.5
2010	--	--	--	--	--	--	3.7
2011	--	--	--	--	--	--	5.8
2012	--	--	--	--	--	--	8.0
2013	--	--	--	--	--	--	8.2
2014	--	--	--	--	--	--	9.7
2015	--	--	--	--	--	--	10.8
2016	--	--	--	--	--	--	13.0
2017	--	--	--	--	--	--	13.1
2018	--	--	--	--	--	--	0.5
2019	--	--	--	--	--	--	0.5
2020	--	--	--	--	--	--	0.5
2021	--	--	--	--	--	--	0.5
2022	--	--	--	--	--	--	0.5
2023	--	--	--	--	--	--	0.5
2024	--	--	--	--	--	--	0.6
2025	--	--	--	--	--	--	0.6
2026	--	--	--	--	--	--	0.6
2027	--	--	--	--	--	--	0.6
2028	--	--	--	--	--	--	0.6
2029	--	--	--	--	--	--	0.6
2030	--	--	--	--	--	--	0.6
2031	--	--	--	--	--	--	0.6
2032	--	--	--	--	--	--	0.6
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**111.0**

Annual Funding BY$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2011 $M	Non End Item Recurring Flyaway BY 2011 $M	Non Recurring Flyaway BY 2011 $M	Total Flyaway BY 2011 $M	Total Support BY 2011 $M	Total Program BY 2011 $M
2005	--	--	--	--	--	--	5.7
2006	--	--	--	--	--	--	11.8
2007	--	--	--	--	--	--	3.5
2008	--	--	--	--	--	--	5.7
2009	--	--	--	--	--	--	5.6
2010	--	--	--	--	--	--	3.7
2011	--	--	--	--	--	--	5.7
2012	--	--	--	--	--	--	7.8
2013	--	--	--	--	--	--	7.8
2014	--	--	--	--	--	--	9.1
2015	--	--	--	--	--	--	10.0
2016	--	--	--	--	--	--	11.8
2017	--	--	--	--	--	--	11.7
2018	--	--	--	--	--	--	0.4
2019	--	--	--	--	--	--	0.4
2020	--	--	--	--	--	--	0.4
2021	--	--	--	--	--	--	0.4
2022	--	--	--	--	--	--	0.4
2023	--	--	--	--	--	--	0.4
2024	--	--	--	--	--	--	0.5
2025	--	--	--	--	--	--	0.5
2026	--	--	--	--	--	--	0.5
2027	--	--	--	--	--	--	0.4
2028	--	--	--	--	--	--	0.4
2029	--	--	--	--	--	--	0.4
2030	--	--	--	--	--	--	0.4
2031	--	--	--	--	--	--	0.4
2032	--	--	--	--	--	--	0.4
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**106.2**

Annual Funding TY$
3020 | Procurement | Missile Procurement, Air Force

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
2009	--	--	--	1.9	1.9	--	1.9
2010	--	--	--	14.2	14.2	--	14.2
2011	108	56.2	--	7.9	64.1	1.4	65.5
2012	125	69.2	--	19.3	88.5	1.9	90.4
2013	164	86.5	--	1.4	87.9	1.8	89.7
2014	150	82.3	--	0.3	82.6	1.8	84.4
2015	248	131.3	--	0.3	131.6	1.9	133.5
2016	153	85.0	--	0.3	85.3	1.9	87.2
2017	153	82.3	--	4.3	86.6	1.9	88.5
2018	150	91.0	--	6.2	97.2	5.5	102.7
2019	150	93.0	--	5.8	98.8	5.7	104.5
2020	150	98.8	--	2.4	101.2	5.7	106.9
2021	150	109.0	--	2.2	111.2	5.9	117.1
2022	150	111.7	--	0.3	112.0	5.9	117.9
2023	150	114.4	--	0.3	114.7	6.1	120.8
2024	150	112.8	--	0.3	113.1	6.4	119.5
2025	150	119.5	--	0.3	119.8	6.6	126.4
2026	150	122.5	--	0.3	122.8	6.7	129.5
2027	150	124.8	--	5.9	130.7	6.7	137.4
2028	150	127.8	--	7.3	135.1	6.8	141.9
2029	150	131.9	--	6.9	138.8	6.9	145.7
2030	150	156.6	--	2.8	159.4	7.4	166.8
2031	150	160.8	--	2.5	163.3	7.4	170.7
2032	151	166.2	--	0.4	166.6	7.7	174.3
Subtotal	**3352**	**2433.6**	**--**	**93.8**	**2527.4**	**110.0**	**2637.4**

Annual Funding BY$
3020 | Procurement | Missile Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2011 $M	Non End Item Recurring Flyaway BY 2011 $M	Non Recurring Flyaway BY 2011 $M	Total Flyaway BY 2011 $M	Total Support BY 2011 $M	Total Program BY 2011 $M
2009	--	--	--	1.9	1.9	--	1.9
2010	--	--	--	14.1	14.1	--	14.1
2011	108	54.9	--	7.7	62.6	1.4	64.0
2012	125	66.5	--	18.5	85.0	1.8	86.8
2013	164	81.7	--	1.3	83.0	1.7	84.7
2014	150	76.4	--	0.3	76.7	1.7	78.4
2015	248	119.7	--	0.3	120.0	1.7	121.7
2016	153	76.1	--	0.3	76.4	1.7	78.1
2017	153	72.4	--	3.8	76.2	1.7	77.9
2018	150	78.7	--	5.3	84.0	4.8	88.8
2019	150	79.0	--	4.8	83.8	4.9	88.7
2020	150	82.4	--	2.0	84.4	4.8	89.2
2021	150	89.3	--	1.8	91.1	4.8	95.9
2022	150	89.9	--	0.2	90.1	4.8	94.9
2023	150	90.4	--	0.2	90.6	4.9	95.5
2024	150	87.6	--	0.2	87.8	5.0	92.8
2025	150	91.2	--	0.2	91.4	5.0	96.4
2026	150	91.8	--	0.2	92.0	5.1	97.1
2027	150	91.9	--	4.3	96.2	5.0	101.2
2028	150	92.4	--	5.3	97.7	4.9	102.6
2029	150	93.7	--	4.9	98.6	4.9	103.5
2030	150	109.3	--	2.0	111.3	5.1	116.4
2031	150	110.2	--	1.7	111.9	5.1	117.0
2032	151	111.9	--	0.3	112.2	5.2	117.4
Subtotal	**3352**	**1937.4**	**--**	**81.6**	**2019.0**	**86.0**	**2105.0**

Annual Funding TY$
1507 | Procurement | Weapons Procurement, Navy

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
2009	--	--	--	0.9	0.9	--	0.9
2010	--	--	--	11.4	11.4	--	11.4
2011	64	40.9	--	8.1	49.0	1.3	50.3
2012	68	35.9	--	5.4	41.3	1.7	43.0
2013	150	77.5	--	0.8	78.3	3.0	81.3
2014	150	85.9	--	0.3	86.2	3.3	89.5
2015	150	86.0	--	0.3	86.3	3.2	89.5
2016	150	87.1	--	0.3	87.4	3.6	91.0
2017	150	89.0	--	5.0	94.0	3.8	97.8
2018	150	91.1	--	6.2	97.3	4.9	102.2
2019	150	93.1	--	6.0	99.1	5.0	104.1
2020	150	95.3	--	7.9	103.2	5.1	108.3
2021	150	97.6	--	5.6	103.2	5.0	108.2
2022	150	99.9	--	0.3	100.2	5.3	105.5
2023	150	102.4	--	0.3	102.7	5.4	108.1
2024	150	104.6	--	0.3	104.9	5.4	110.3
2025	150	107.1	--	0.3	107.4	5.5	112.9
2026	150	110.5	--	0.3	110.8	5.5	116.3
2027	150	124.8	--	5.9	130.7	5.9	136.6
2028	150	127.6	--	7.3	134.9	6.1	141.0
2029	116	102.8	--	7.0	109.8	3.8	113.6
Subtotal	**2648**	**1759.1**	**--**	**79.9**	**1839.0**	**82.8**	**1921.8**

Annual Funding BY$
1507 | Procurement | Weapons Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2011 $M	Non End Item Recurring Flyaway BY 2011 $M	Non Recurring Flyaway BY 2011 $M	Total Flyaway BY 2011 $M	Total Support BY 2011 $M	Total Program BY 2011 $M
2009	--	--	--	0.9	0.9	--	0.9
2010	--	--	--	11.3	11.3	--	11.3
2011	64	39.8	--	7.8	47.6	1.3	48.9
2012	68	34.3	--	5.1	39.4	1.7	41.1
2013	150	72.9	--	0.8	73.7	2.7	76.4
2014	150	79.4	--	0.3	79.7	3.0	82.7
2015	150	78.0	--	0.3	78.3	2.9	81.2
2016	150	77.6	--	0.3	77.9	3.2	81.1
2017	150	77.9	--	4.4	82.3	3.3	85.6
2018	150	78.4	--	5.3	83.7	4.2	87.9
2019	150	78.7	--	5.0	83.7	4.3	88.0
2020	150	79.1	--	6.6	85.7	4.2	89.9
2021	150	79.6	--	4.5	84.1	4.1	88.2
2022	150	80.0	--	0.2	80.2	4.3	84.5
2023	150	80.6	--	0.2	80.8	4.3	85.1
2024	150	80.8	--	0.2	81.0	4.3	85.3
2025	150	81.3	--	0.2	81.5	4.2	85.7
2026	150	82.4	--	0.2	82.6	4.1	86.7
2027	150	91.4	--	4.4	95.8	4.3	100.1
2028	150	91.8	--	5.3	97.1	4.4	101.5
2029	116	72.7	--	4.9	77.6	2.7	80.3
Subtotal	**2648**	**1436.7**	**--**	**68.2**	**1504.9**	**67.5**	**1572.4**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	6/30/2011	6/30/2011
Approved Quantity	306	306
Reference	ADM	ADM
Start Year	2011	2011
End Year	2012	2012

Foreign Military Sales

None

Nuclear Cost

There are no Nuclear Cost data to display.

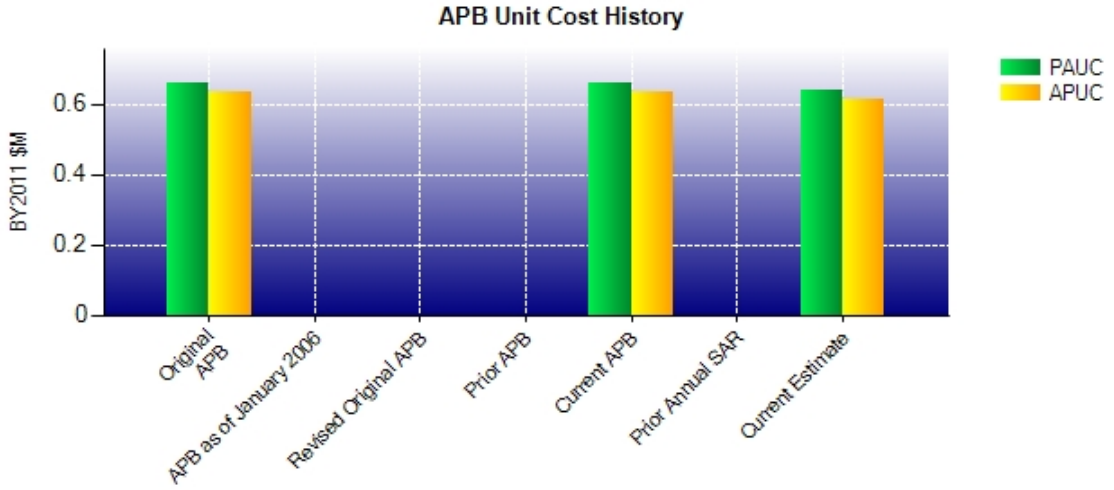
Unit Cost

Unit Cost Report

Unit Cost	BY2011 $M Current UCR Baseline (DEC 2011 APB)	BY2011 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	3967.3	3849.9	
Quantity	6000	6000	
Unit Cost	0.661	0.642	-2.91
Average Procurement Unit Cost (APUC)			
Cost	3798.5	3677.4	
Quantity	6000	6000	
Unit Cost	0.633	0.613	-3.17

Unit Cost	BY2011 $M Original UCR Baseline (DEC 2011 APB)	BY2011 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	3967.3	3849.9	
Quantity	6000	6000	
Unit Cost	0.661	0.642	-2.91
Average Procurement Unit Cost (APUC)			
Cost	3798.5	3677.4	
Quantity	6000	6000	
Unit Cost	0.633	0.613	-3.17

Unit Cost History



		BY2011 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	DEC 2011	0.661	0.633	0.809	0.780
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	N/A	N/A	N/A	N/A	N/A
Current APB	DEC 2011	0.661	0.633	0.809	0.780
Prior Annual SAR	N/A	N/A	N/A	N/A	N/A
Current Estimate	DEC 2011	0.642	0.613	0.790	0.760

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.809	0.012	0.000	-0.017	-0.001	-0.011	0.000	-0.002	-0.019	0.790

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.780	0.011	0.000	-0.017	-0.001	-0.011	0.000	-0.002	-0.020	0.760

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	N/A	N/A	N/A
Milestone C	N/A	N/A	JUN 2011	JUN 2011
IOC	N/A	N/A	N/A	N/A
Total Cost (TY $M)	N/A	N/A	4856.1	4738.3
Total Quantity	N/A	N/A	6000	6000
Prog. Acq. Unit Cost (PAUC)	N/A	N/A	0.809	0.790

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	175.7	4680.4	--	4856.1
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Current Changes				
Economic	+0.7	+68.8	--	+69.5
Quantity	--	--	--	--
Schedule	--	-99.2	--	-99.2
Engineering	--	-7.8	--	-7.8
Estimating	+2.7	-68.2	--	-65.5
Other	--	--	--	--
Support	--	-14.8	--	-14.8
Subtotal	+3.4	-121.2	--	-117.8
Total Changes	+3.4	-121.2	--	-117.8
CE - Cost Variance	179.1	4559.2	--	4738.3
CE - Cost & Funding	179.1	4559.2	--	4738.3

Summary Base Year 2011 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	168.8	3798.5	--	3967.3
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	-48.7	--	-48.7
Engineering	--	-7.4	--	-7.4
Estimating	+3.7	-53.8	--	-50.1
Other	--	--	--	--
Support	--	-11.2	--	-11.2
Subtotal	+3.7	-121.1	--	-117.4
Total Changes	+3.7	-121.1	--	-117.4
CE - Cost Variance	172.5	3677.4	--	3849.9
CE - Cost & Funding	172.5	3677.4	--	3849.9

Previous Estimate:

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+0.7
Adjustment for current and prior escalation. (Estimating)	+0.1	+0.1
Revised estimate of program being completed earlier than initially planned (Navy). (Estimating)	-3.9	-5.4
Increase in funding for Insensitive Munitions (IM) and software improvements (Air Force). (Estimating)	+7.5	+8.0
RDT&E Subtotal	+3.7	+3.4

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+68.8
Acceleration of procurement buy profile of 24 missiles within Future Years Defense Program (FYDP) (Navy). (Schedule)	-5.1	-10.0
Acceleration of procurement buy profile of 139 missiles within FYDP (Air Force). (Schedule)	-43.6	-89.2
Decrease due to Congressional Rescission of FY 2011 Weapons Procurement, Navy (WP,N) for Engineering Production Support (Navy). (Engineering)	-2.8	-2.9
Decrease due to Congressional Reduction of FY 2012 WP,N for Engineering Production Support (Navy). (Engineering)	-4.6	-4.9
Adjustment for current and prior escalation. (Estimating)	-1.3	-1.2
Revised estimate of government systems engineering and program management to reflect actuals (Navy). (Estimating)	+4.5	+4.7
Revised estimate of changes in government systems engineering and program management to reflect actuals (Air Force). (Estimating)	+6.1	+6.3
Revised estimate due to decrease in obsolescence requirements (Navy). (Estimating)	-10.1	-10.4
Revised estimate due to decrease in obsolescence requirements (Air Force). (Estimating)	-6.4	-6.5
Revised estimate due to economies of scale associated with future planned procurements and associated quantities being accelerated within the FYDP (Navy). (Estimating)	-19.6	-25.4
Revised estimate due to economies of scale associated with future planned procurements and associated quantities being accelerated within the FYDP (Air Force). (Estimating)	-27.0	-35.7
Adjustment for current and prior escalation. (Support)	0.0	-0.1
Decrease in quantity of Telemetry Units To reflect actuals (Navy). (Support)	-3.4	-2.9
Decrease in training requirements to reflect actuals (Air Force). (Support)	0.0	-0.2
Decrease in Initial Spares due to change in procurement profile (Navy). (Support) (QR)	-1.3	-1.7
Decrease in Initial Spares due to change in procurement profile (Air Force). (Support) (QR)	-6.5	-9.9
Procurement Subtotal	-121.1	-121.2

(QR) Quantity Related

Contracts

Appropriation: RDT&E

Contract Name	**AIM-9X System Improvement Program**
Contractor	Raytheon Missiles Systems
Contractor Location	1151 E. Hermans Rd. Tucson, AZ 85743
Contract Number, Type	N00019-11-C-0026, CPFF
Award Date	March 31, 2011
Definitization Date	March 31, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
15.0	N/A	0	69.7	N/A	0	76.6	76.6

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost And Schedule Variance Explanations

None

Contract Comments

The difference between the initial contract price target and the current contract price target is due to additional effort for Active Optical Target Detector (AOTD) obsolescence, system development and integration, algorithm development and F-22 integration. This contract includes Foreign Military Sales (FMS); however, funding and quantities are not reflected.

The program is not currently receiving formal Contract Performance Report (CPR) deliverables from Raytheon due to delay in submitting a Contract Work Breakdown Structure (CWBS) to Defense Cost and Resource Center (DCARC), getting approval from DCARC, and putting CWBS on contract. The formal CPR deliverables will begin February 2012. The program did hold an Integrated Baseline Review (IBR) in November 2011.

This is the first time this contract is being reported.

Appropriation: Procurement

Contract Name	**AIM-9X Block II Lot 11, Lot 12**
Contractor	Raytheon Missile Systems
Contractor Location	1151 E. Hermans Rd. Tucson, AZ 85743
Contract Number, Type	N00019-11-C-0001, FFP/FPIF
Award Date	September 29, 2011
Definitization Date	September 29, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
61.9	N/A	120	130.7	N/A	148	322.3	322.3

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost And Schedule Variance Explanations

None

Contract Comments

The difference between the initial contract price target and the current contract price target is due to the award of the Lot 12 contract. This contract includes Foreign Military Sales (FMS); however, funding and quantities are not reflected in this section.

The requirement for Earned Value Management (EVM) on this Fixed Price Incentive Firm (FPIF) contract was waived by the Department of Navy, Office of the Assistant Secretary, Research, Development and Acquisition (ASN (RDA)) on January 23, 2012. This requirement was waived because the contract will contain other cost and program reporting requirements such as Federal Acquisition Regulation Clause 52.216-16, Incentive Price Revision-Firm target, Integrated Master Program Schedule, and Government access to the Contractor's Internal Material Requirements Plan, an on-line tool that assesses schedule and technical performance.

This is the first time this contract is being reported.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	0	0	6000	0.00%
Total Program Quantities Delivered	0	0	6000	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	4738.3	Years Appropriated	9
Expenditures To Date	117.0	Percent Years Appropriated	31.03%
Percent Expended	2.47%	Appropriated to Date	360.6
Total Funding Years	29	Percent Appropriated	7.61%

Operating and Support Cost

Assumptions And Ground Rules

The estimate for the Operating and Support costs (O&S) are from the Service Cost Position (SCP) dated June 2011.

The estimate assumes 12 carriers (worst case) deployed per year (beginning in the third year of operations). Unit level consumption primarily relates to the annual training firings (Non Combat Expenditures Allowances (NCEA)) for the Navy and Weapon System Evaluation Program (WSEP) for the Air Force) and transportation cycle time of failed assets to and from the Depot. The cost estimate considers a 20-year service life for All-Up-Round (AUR) and a 13-year service life for the Captive Air Training Missile (CATM). The estimate assumes operational utilization AUR's and CATMs as indicated in the following table:

Type	Service	Yearly Qty In-Use	Yearly Flight Hours
CATM	USN	549	300
	USAF	ALL	300
AUR	USN	250	100
	USAF	299	30

The estimate spans a period of 39 years, beginning with FY 2013 and ending with FY 2052. Contractor support is required to repair AUR/CATM/container failures as a result of normal use, combat damage, catastrophic events, government misuse, abuse, or failure to exercise due diligence in testing, storing, or maintaining the item in accordance with approved procedures and specifications. This cost includes the required repair for out of AUR/CATM containers, software support, and technical publication revisions. The sustaining support consists of systems engineering, failure analysis, and program management support and surveillance/quality/ obsolescence evaluation program. Intermediate maintenance and indirect costs are as noted.

Military Personnel (MP) and disposal costs are not included.

Costs BY2011 $M		
Cost Element	**AIM-9X BLOCK II Average Annual Cost**	**AIM-9X Average Annual Cost**
Unit-Level Manpower	0.0	0.0
Unit Operations	10.7	5.7
Maintenance	0.2	1.1
Sustaining Support	11.6	11.5
Continuing System Improvements	0.0	0.0
Indirect Support	0.2	0.1
Other	0.0	0.0
Total Unitized Cost (Base Year 2011 $)	22.7	18.4

Total O&S Costs $M	AIM-9X BLOCK II	AIM-9X
Base Year	883.3	531.9
Then Year	1389.0	620.0

The AIM-9X Average Cost for all Missiles is this SAR is different than in the Block I SAR because the dollars are shown in different base year dollars.

The increase in sustainment cost for the AIM-9X Block II missile from the AIM-9X Block I missile is that the sustainment period went from 29 years for Block I to 47 years for Block II based on the quantity of 3,097 missiles being sustained for the Block I program versus the remaining 6,000 missiles that will be sustained for the Block II program. The other reason for the increase is using a different Mean-Time-Between-Failure (MTBF) to calculate repair costs. The specification MTBF was used for Block II and the actual MTBF was used to calculate the Block I.