AIM-9X BLOCK II SIDEWINDER (AIM-9X BLK II)

December 2021 Selected Acquisition Report (SAR)

DECEMBER 31, 2021
DEPARTMENT OF THE NAVY

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Common Acronyms and Abbreviations
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(A&S) - Under Secretary of Defense (Acquisition and Sustainment)
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Manager

Name: CAPT Errol Campbell, Jr.

Date Assigned: October 5, 2018

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Mission and Description

The AIM-9X Block II Sidewinder (AIM-9X Blk II) short-range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The missile 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. 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.

Executive Summary

The AIM-9X Block II program awarded the sixth full rate production contract option (Lot 20) in March 2020. Additionally, the program awarded a follow-on production contract for the seventh full rate production contract (Lot 21), with two production lot options (Lot 22 & Lot 23) in June 2021 for the procurement of USN, USAF and FMS missiles.

The program completed the Operational Flight Software (OFS) 9.4 Operational Test (OT) in October 2020 and received the end-of-test notification in January 2021. The Department of Navy and Air Force released OFS 9.4 for operational use in September 2021. OFS 9.4 includes improved Infra-Red Counter Countermeasure, surface attack, and missile-to-missile self-sorting.

Follow-on development of the AIM-9X Block II missile continued with the System Improvement Program III (SIP III). This development includes hardware to address obsolescence and sustainability, and OFS 10.4, which re-hosts OFS 9.4 on improved hardware and increases performance. Additionally, the program began defining and prioritizing software improvements for the next missile OFS and began SIP IV hardware risk reduction.

In late 2019, AIM-9X Block II Captive Air Training Missile (CATM) Operational Availability (Ao) had failed to meet the Capability Production Document Key Performance Parameter threshold requirement. CATM Ao Recovery has been slow due to higher than projected CATM failures and COVID-19 safety precautions at the factory that limited repair throughput. However, CATM Ao recovered in December 2021, and is holding steady.

Significant Accomplishments:

September 2020 - Captured new AIM-9X Block II missile International Partner (Canada) for inclusion into the United States Government Lot 21 AIM-9X Production Contract. Lot 21 will produce 230 FMS missiles for six AIM-9X Block II/II+ International Partners, exceeding the Program Manager's yearly goal of at least 200 x FMS missiles sold. The Lot 21 contribution from the 230 FMS missiles is valued at $125.8M, while the USG savings from this FMS missile procurement quantity (32% of total missiles procured) is valued at $11.6M.

October 2020 - Recipient of the 2020 Assistant Secretary of the Navy (Research, Development & Acquisition) Acquisition Excellence Award for International Acquisition Partnership.
December 2020 - During CY 2020 facilitated the delivery of 178 All-Up Rounds (AURs) (AIM-9X Block I/II/II+ Tactical, CATM, Special Air Training Missiles (NATM)) to eight AIM-9X International Partner countries.

June 2021 – the AIM-9X Lot 21-23 Production Contract was the first to award under the FY 2020 National Defense Authorization Action Section 890 Pilot Program. The program reduced the contracting schedule by seven months and save an estimate $84.5M when compared to prior production contract efforts.
September 2021 - the Navy released Aviation Software Change 23 (ASC-23), the Navy Technical Directive (TD) implementing AIM-9X SIDEWINDER software v. 9.4 which allows for operational fielding of OFS 9.4.

November 2021 - Captured new AIM-9X Block II/II+ missile International Partner (Italy) for inclusion into the USG Lot 22 AIM-9X Production Contract. Lot 22, once awarded, will produce 394 FMS missiles for five AIM-9X Block II/II+ International Partners. The Lot 22 contribution from the 394 FMS missiles will exceed $250M, while the USG savings from this FMS missile procurement quantity (48% of total missiles procured) is expected to be quite significant. Italy became the 28th AIM-9X International Partner.
December 2021 - Completed all Development Testing and Evaluation requirements for FMS OFS 9.15x. OFS 9.15x will introduce the "true" fifth-generation AIM-9X Block II/II+ missile capabilities of Lock-On-

After Launch, Data Link, and Surface Attack, which will enhance and/or improve the Air-to-Air and Air-to-Surface employment potential for all AIM-9X Block II/II+ International Partner countries.
December 2021 - During CY 2021 facilitated the delivery of 239 AURs (AIM-9X Block I/II/II+ Tactical, CATM, NATM) to 13 AIM-9X International Partner countries.

December 2021 – the AIM-9X Sidewinder successfully improved the CATM availability. Over the course of the year, Raytheon Missiles & Defense (RMD) competed a record number of depot repairs (663), 24% over the previous annual record. The Operational Availability (Ao) increased from 79% to 89% for USN and from 77% to 87% for USAF, and remains above requirement, to date.

Significant Issues:
July 2021 – AUR Blk II Contract Award Delay - $6.7M
July 2021 –CATM Blk II Contract Award Delay - $1.1M

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

History of Significant Developments Since Program Initiation

History of Significant Developments Since Program Initiation	
Date	**Significant Development Description**
June 2011	AIM-9X Block II was designated a separate ACAT IC program entering the acquisition process at Milestone C.
June 2011	AIM-9X Block II received approval for Milestone C LRIP I & II.
August 2012	AIM-9X Block II received LRIP III approval
June 2014	AIM-9X Block II received approval for LRIP IV.
March 2015	The U.S. Navy declared IOC for AIM-9X Block II.
August 2015	AIM-9X Block II received approval to enter FRP.
September 2016	The U.S. Air Force declared IOC for AIM-9X Block II.
October 2016	The Program declared FOC for AIM-9X Block II.

Schedule

Schedule Events

Schedule Events					
Events	**Baseline Production APB Objective**	**Current APB Production Objective/Threshold**		**Current Estimate/Actual**	**Deviation**
MS C	Jun 2011	Jun 2011	Dec 2011	Jun 2011	
OT Start	Apr 2012	May 2012	May 2012	May 2012	
OT Complete	Apr 2013	Apr 2013	Jan 2015	Jan 2015	
IOC	Sep 2014	Mar 2015	Mar 2015	Mar 2015	
FRP Decision	Dec 2014	Aug 2015	Aug 2015	Aug 2015	
FOC	Oct 2015	Oct 2016	Oct 2016	Oct 2016	

Acronyms and Abbreviations:
FOC – Full Operational Capability
FRP – Full Rate Production
MS – Milestone
OT – Operational Test

Significant Schedule Risks

Significant Schedule Risks	
Milestone C (June 2011)	
1.	Block II limited reliability data of Active Optical Target Detector may impact readiness of All-Up-Round Operational Test Readiness Review.
2.	Block II Cost Reduction Initiatives may not yield anticipated cost reductions.
Current Estimate (December 2021)	
1.	System Improvement Program Application Specific Integrated Circuit Processor delivery for Production may not meet Lot 21 cut-in.
2.	Long Term Sustainment of Mechanical Inertial Measurement Unit.

Performance

Performance Characteristics					
Production APB Objective	**Current APB Production Objective/Threshold**		**Demonstrated Performance (include Date of Demonstration)**	**Current Estimate/Actual**	**Deviation**
AIM-9X Day/Night Capability					
Yes	Yes	Yes	Yes	Yes	
AIM-9X Aircraft Interface/Interoperability Missile Weight (lbs.)					
≤ 192	≤ 192	≤ 210	186.2	≤ 192	
AIM-9X Aircraft Interface/Interoperability Missile Length (in.)					
≤ 115	≤ 115	≤ 123	119.2	≤ 123	
AIM-9X Aircraft Interface/Interoperability Missile Box Size (in.)					
≤12.5X12.5	≤12.5X12.5	≤12.5X12.5	12.5X12.5	≤12.5X12.5	
AIM-9X Aircraft Interface/Interoperability Missile Diameter (in.)					
≤ 5	≤ 5	≤ 7	≤ 5	≤ 5	
AIM-9X Aircraft Interface/Interoperability Interface					
Mid body umbilical only	Mid body umbilical only	Digital	Digital	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	Yes	Interface with current/ planned aircraft radar systems and planned HMCS	
AIM-9X Captive Carry Reliability (MTBCCF) (hr.)					
>.or.=900	>.or.=900	>.or.=500	1668	>.or.=900	
AIM-9X Detect Non-Operational Missile (BIT) All Components (%)					
>.or.=0.80	>.or.=0.80	>.or.=0.60	0.81	>.or.=0.60	
AIM-9X Detect Non-Operational Missile (BIT-able Components) (%)					
>.or.=0.95	>.or.=0.95	>.or.=0.90	0.92	>.or.=0.90	
AIM-9X Mean Time Between False Alarms (hr.)					
>.or.=25	>.or.=25	>.or.=16	>.or.=18	>.or.=16	
AIM-9X BIT Time (sec.)					
≤ 20	≤ 20	≤ 20	≤ 15	≤ 20	
EMI Compatibility					

Performance Characteristics					
Production APB Objective	**Current APB Production Objective/Threshold**		**Demonstrated Performance (include Date of Demonstration)**	**Current Estimate/Actual**	**Deviation**
Threshold= Objective	Threshold= Objective	Not incur damage to electrical components while in the electromagnetic environment of an aircraft carried. The AIM-9X Block II missile shall be compatible with representative 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.	Yes	Threshold= Objective	
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	0.94	0.94 (Ch-1)	
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	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	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	Meets Threshold	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	

Performance Characteristics					
Production APB Objective	Current APB Production Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
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 communications. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GIG GESPs necessary	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 communications. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GIG	DoDAF content, and must satisfy the technical requirements 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 communications. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs,		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 communications. 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and	

Performance Characteristics					
Production APB Objective	**Current APB Production Objective/Threshold**		**Demonstrated Performance (include Date of Demonstration)**	**Current Estimate/Actual**	**Deviation**
to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportability requirements to include SAASM Spectrum and JTRS requirements	GESPs necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportability requirements to include SAASM Spectrum and JTRS requirements	necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views. 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportability requirements to include SAASM, Spectrum and JTRS necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views		implementation 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, authentication, confidentiality and non-repudiation, and issuance of an IATO or ATO by the DAA and 5) Supportability 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	0.87	0.87 (Ch-2)	

Performance Characteristics					
Production APB Objective	Current APB Production Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
Material Availability (Am)					
Threshold= Objective	Threshold= Objective	No less than (.82)	0.88	0.88 (Ch-3)	

Performance Notes:
(Ch-1) The Ao-AUR Current Estimate changed from >=0.99 to 0.94 due to updated data.

(Ch-2) The Ao-CATM Current Estimate changed from No less than (.86) after 100,000 flight hours to 0.87 due to exceeding 100,000 flight hours.

(Ch-3) The Material Availability (Am) Current Estimated changed from 0.93 to 0.88 due to updated date.

Material Availability - Per the CPD, this requirement only pertains to AUR requirements.

Source: CPD dated May 20, 2011.

Acronyms and Abbreviations:
Ao – Operational Availability
ATO – Authorization To Operate
AUR – All Up Round
BIT – Built in Test
CATM – Captive Air Training Missile
DAA – Designated Accrediting Authority
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
Mid – Middle
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

Acquisition Budget Estimate

Total Acquisition Cost

Category	Base Year	Development APB Objective (BY$)	Current Production APB Feb 2019 Objective (BY$)	Current Production APB Feb 2019 Threshold (BY$)	Budget Estimate PB 2023 BY$	Budget Estimate PB 2023 TY$	Deviation
RDT&E	2011	168.80	777.73	855.50	750.28	860.16	
Procurement	2011	3798.50	4811.52	5292.67	4613.87	5969.54	
MILCON	2011	0	0	0	0	0	
Acq. O&M	2011	0	0	0	0	0	
Total							
PAUC	2011	.66	.48	.53	.46	N/A	
APUC	2011	.63	.41	.46	.40	N/A	

Total End Item Quantity

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development	0	0
Procurement	11,635	11,635

Risk and Sensitivity Analysis

Risks and Sensitivity Analysis	
Current Procurement Cost (December 2021)	
1.	Processor development and schedule delays may effect Engineering Change Proposal procurement cost.
Original Baseline Estimate (December 2011)	
1.	The original Total Acquisition Cost was $3967.30M (BY 2011).
Revised Original Estimate (N/A)	
None	
Admin Baseline Estimate (Month YYYY)	
1.	None

Unit Cost

Current Baseline Compared with Current Estimate

Category ($M)	Current APB	Current Estimate	% Change	NMC Breach
PAUC				
Cost	5589.25	5364.46	-	-
Quantity	11635	11635	-	-
Unit Cost	.48	.46	-4.03	
APUC				
Cost	4811.52	4613.87	-	-
Quantity	11635	11635	-	-
Unit Cost	.41	.40	-4.11	

Original Baseline Compared with Current Estimate

Category ($M)	Current APB	Current Estimate	% Change	NMC Breach
PAUC				
Cost	3967.30	5364.46	-	-
Quantity	6000	11635	-	-
Unit Cost	.66	.46	-30.25	
APUC				
Cost	3798.50	4613.87	-	-
Quantity	6000	11635	-	-
Unit Cost	.63	.40	-37.35	

Contracts

Contract Data ($TYM)		
Contract Number	N00019-15-C-0092	
Effort Number	01	
Modification Number	P00070	
Award Date	03/26/2015	
Definitization Date	03/26/2015	
Order Number		
CAGE Code/CAGE Legal Name	15090	
Contract Title	AIM-9X Block II Lots 15-17 Production	
Contract Address	1151 E Hermans Rd, Tucson AZ 85756-9367	
Contracts/Effort Price, Quantity, and Performance ($M)		
Initial Target Price	Current Target Price	
26.00	883.89	
Initial Ceiling Price	Current Ceiling Price	
26.00	901.91	
Contract's EAC	PM's EAC	
881.2	881.2	
Initial Quantity	Current Quantity	Delivered Quantity
0	2266	2266
BAC	BCWP	ACWP
BCWS	Cost Variance	Schedule Variance

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

Cost Variance:
Cost variance is not reported for this contract, because an EVM waiver was granted by Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) Deputy Assistant of the Navy (Acquisition and Procurement) on May 26, 2015 due to the utilization of other methods to monitor contract performance (i.e., a Cost and Software Data Reporting requirement).

Schedule Variance:
Schedule variance is not reported for this contract, because an EVM waiver was granted by Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) Deputy Assistant of the Navy (Acquisition and Procurement) on May 26, 2015 due to the utilization of other methods to monitor contract performance (i.e., a Cost and Software Data Reporting requirement).

Contract Data ($TYM)		
Contract Number	N00019-15-C-0121	
Effort Number	01	
Modification Number	P00094	
Award Date	09/29/2015	
Definitization Date	09/29/2015	
Order Number		
CAGE Code/CAGE Legal Name	15090	
Contract Title	AIM-9X Block II System Improvement Plan III	
Contract Address	1151 E Hermans Rd, Tucson AZ 85756-9367	
Contracts/Effort Price, Quantity, and Performance ($M)		
Initial Target Price	Current Target Price	
264.81	354.22	
Initial Ceiling Price	Current Ceiling Price	
264.81	354.22	
Contract's EAC	PM's EAC	
305.21	305.07	
Initial Quantity	Current Quantity	Delivered Quantity
0	0	0
BAC	BCWP	ACWP
293.18	268.18	286.93
BCWS	Cost Variance	Schedule Variance
270.60	(18.74)	(2.42)

Cost Variance:
The unfavorable net change in the cost variance is due to overall Application Specific Integrated Circuit (ASIC) supplier delays of hardware, software, and tools.

Schedule Variance:
The unfavorable net change in the schedule variance is due to overall ASIC supplier delays of hardware, software, and tools.

Contract Data ($TYM)		
Contract Number	N00019-18-C-1068	
Effort Number	01	
Modification Number	P00029	
Award Date	9/13/2018	
Definitization Date	4/15/2019	
Order Number		
CAGE Code/CAGE Legal Name	15090	
Contract Title	AIM-9X Block II Lots 18-20 Production	
Contract Address	1151 E Hermans Rd, Tucson AZ 85756-9367	
Contracts/Effort Price, Quantity, and Performance ($M)		
Initial Target Price	Current Target Price	
20.34	1338.24	
Initial Ceiling Price	Current Ceiling Price	
N/A	N/A	
Contract's EAC	PM's EAC	
1338.24	1338.24	
Initial Quantity	Current Quantity	Delivered Quantity
0	3388	1276
BAC	BCWP	ACWP
BCWS	Cost Variance	Schedule Variance

Cost Variance:
Cost variance is not reported for this contract, because an EVM waiver was granted by Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) Deputy Assistant of the Navy (Acquisition and Procurement) on June 07, 2018 due to the utilization of other methods to monitor contract performance (i.e., a Cost and Software Data Reporting requirement).

Schedule Variance:
Schedule variance is not reported for this contract, because an EVM waiver was granted by Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) Deputy Assistant of the Navy (Acquisition and Procurement) on June 07, 2018 due to the utilization of other methods to monitor contract performance (i.e., a Cost and Software Data Reporting requirement).

Contract Data ($TYM)		
Contract Number	N00019-20-C-0071	
Effort Number	01	
Modification Number	P000010	
Award Date	9/10/2020	
Definitization Date	9/10/2020	
Order Number		
CAGE Code/CAGE Legal Name	15090	
Contract Title	AIM-9X Block II System Improvement Plan III Follow On	
Contract Address	1151 E Hermans Rd, Tucson AZ 85756-9367	
Contracts/Effort Price, Quantity, and Performance ($M)		
Initial Target Price	Current Target Price	
53.20	93.95	
Initial Ceiling Price	Current Ceiling Price	
53.20	93.95	
Contract's EAC	PM's EAC	
74.32	84.34	
Initial Quantity	Current Quantity	Delivered Quantity
0	0	0
BAC	BCWP	ACWP
76.36	18.03	16.22
BCWS	Cost Variance	Schedule Variance
18.51	1.53	(0.37)

Cost Variance:
The favorable net change in the cost variance is due to less than expected labor usage for Supply Chain Management, Supervision, Quality Management Support, Chief Engineer, Finance, and Program Management Support.

Schedule Variance:
The unfavorable net change in the schedule variance is mainly due to slower than expected progress on the Ada to C++ conversion due to staffing issues.

Contract Data ($TYM)		
Contract Number	N00019-21-C-0723	
Effort Number	01	
Modification Number	P00002	
Award Date	6/30/2021	
Definitization Date	6/30/2021	
Order Number		
CAGE Code/CAGE Legal Name	15090	
Contract Title	AIM-9X Block II Lots 21-23	
Contract Address	1151 E Hermans Rd, Tucson AZ 85756-9367	
Contracts/Effort Price, Quantity, and Performance ($M)		
Initial Target Price	Current Target Price	
328.16	328.16	
Initial Ceiling Price	Current Ceiling Price	
328.16	328.16	
Contract's EAC	PM's EAC	
328.16	328.16	
Initial Quantity	Current Quantity	Delivered Quantity
729	729	172
BAC	BCWP	ACWP
BCWS	Cost Variance	Schedule Variance

Cost Variance:
Cost variance is not reported for this contract, because an EVM waiver was granted via Deviation No. 20-N-904 signed by Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) Deputy Assistant of the Navy (Acquisition and Procurement) due to the utilization of other methods to monitor contract performance (i.e., a Cost and Software Data Reporting requirement).

Schedule Variance:
Schedule variance is not reported for this contract, because an EVM waiver was granted via Deviation No. 20-N-904 signed by Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) Deputy Assistant of the Navy (Acquisition and Procurement) due to the utilization of other methods to monitor contract performance (i.e., a Cost and Software Data Reporting requirement).

Technologies and Systems Engineering

Significant Technical Risks

Significant Technical Risks	
Current Estimate (December 2021)	
1.	None

Deliveries and Expenditures

Deliveries				
Delivered to Date	**Planned to Date**	**Actual to Date**	**Total Quantity**	**Percent Delivered**
Development	0	0	0	0.00%
Production	3218	3695	11635	31.758%
Total Program Quantity Delivered	3218	3695	11635	31.758%

Expended and Appropriated (TY $M)

Total Acquisition Cost: $6829.68M
Expended to Date: $2,596.01M
Percent Expended: 38.01%
Total Funding Years: 33
Years Appropriated: 17
Percent Years Appropriated: 53.13%
Appropriated to Date: $3,051.3M
Percent Appropriated: 44.49%

The above data is current as of April 18, 2022.

Deliveries and Expenditures Notes:
Data reflects PB23 Budget.

Planned deliveries reflects contractual obligation for U.S. Navy and U.S. Air Force Tactical and Captive Air Training Missiles through March 2021. The delta between planned to date and actual to date is that Raytheon is delivering Lot 18, 19, 20 and 21 missiles ahead of contract requirement.

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	06/30/2011	6/5/2014
Approved Quantity	361	1140
Reference	Milestone C ADM	LRIP IV ADM
Start Year	2011	2011
End Year	2012	2014

Operating and Support Costs

Total Program O&S Cost Compared with Baseline

	Current APB Objective (BY$)	Current APB Threshold (BY$)	Current Estimate (BY$)	Current Estimate (TY$)	Deviation
Total O&S ($Millions)	1338.47	1472.34	1326.54	2374.22	

O&S Cost Breakdown:
Allocate O&S estimate by each weapon system (or system variants) acquired by the program) into the CAPE Cost Categories. Add a fresh column for each variant/system.

Category (BY$ Million)	AIM-9X Block II
Unit-Level Manpower	0.00
Unit Operations	0.00
Maintenance	12.00
Sustaining Support	7.47
Continued System Improvements	5.09
Other	0.00
Total O&S	24.56

Cost Estimate Source: POE

O&S Cost Notes:

a. Disposal/Demilitarization Cost Estimate and Source of Estimate:
Total Cost BY 2011$ $5.20M

b. Sustainment Strategy:
The sustainment strategy for the AIM-9X Block II is essentially the same as the previous AIM-9X missile configurations. Raytheon Missile and Defense Systems is the sole source of Depot repairs of the AIM-9X-2 missile. The average turnaround time for Raytheon Depot repairs is over 270 days. In order to reduce turnaround times and decrease the Raytheon Depot backlog, and proved through a follow-on Product Support Business Case Analysis (BCA), Program Manager funded the stand up and training of AIM-9X Intermediate Plus (I+) Sectionalization repair capability forward in the 7th Fleet Area of Responsibility (AOR) (NAWMU-1) and Organic Intermediate Repair Capability at Letterkenny Munitions Center (LEMC). NAWMU-1 and LEMC have the ability to perform sectionalization maintenance to remove and replace AIM-9X-2 Guidance Units and return AIM-9X-2 missiles back to a Ready For Issue status. The predicted organic site turnaround times are 9 times faster than the commercial site (270+ days commercial versus less than 30 organic); however, consistent throughput of missiles back to the Fleet is dependent on an adequate spares pool for major 8E Cognizant Code (COG) assemblies - of which the Guidance Unit accounts for 95% of all failures.
For Each Acquired System or System Variant:
   i. Quantity to Sustain: 11635
   ii. First Operational Fiscal Year: 2014
   iii. Final Operational Fiscal Year: 2067
   iv. Unit Expected Service Life: 20 years

c. Antecedent System(s) O&S Costs:
The antecedent system is AIM-9X Block I. AIM-9X Block I costs were derived based on historical

data collected via the Naval Visibility and Management of Operating and Support Costs database and estimated through the remainder of the life (FY 2032). A total of 3,097 AIM-9X Block I missiles were procured. The last year of procurement was FY 2010. There is a 20-year service life assumption for the AIM-9X Block I and a 13-year service life assumption for the Captive Air Training Missiles. The AIM-9X Block I system included a warranty period that accounted for missile repair costs.