Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-420

MQ-1C Gray Eagle Unmanned Aircraft System (MQ-1C Gray Eagle)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

MQ-1C Gray Eagle Unmanned Aircraft System (MQ-1C Gray Eagle)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned July 1, 2011

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 25, 2011

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated February 28, 2012

Mission and Description

Provides the Division Commander a dedicated, assured, multi-mission Unmanned Aircraft System (UAS) for the tactical fight assigned to the Combat Aviation Brigade (CAB) in each Division and supports the Division Fires, Battlefield Surveillance Brigades (BSB) and Brigade Combat Teams (BCTs), based upon the Division Commander's priorities. The Gray Eagle Company will also be assigned to Army Special Operations Forces and the Aerial Exploitation Battalions. Provides Reconnaissance, Surveillance, and Target Acquisition (RSTA), command and control, communications relay, Signals Intelligence (SIGINT), Electronic Warfare (EW), attack, detection of Weapons of Mass Destruction (WMD), and battle damage assessment capability.

The unit of measure for a MQ-1C UAS Gray Eagle is balanced Platoons, each with four aircraft and associated support equipment and payloads to include: Electro-Optical/Infrared/Laser Range Finder/Laser Designator (EO/IR/LRF/LD), communications relay, and up to four Hellfire Missiles. The Common Sensor Payload (CSP) and STARlite Synthetic Aperture Radar (SAR)/Ground Moving Target Indicator (GMTI) are one per aircraft. Ground equipment per Platoon includes: two Universal Ground Control Stations (UGCS-V3), three Universal Ground Data Terminals (UGDT), one Satellite Communication (SATCOM) Ground Data Terminal (SGDT), one Mobile Ground Control Station (MGCS) per Company, an Automated Take Off and Landing System (ATLS), which includes two Tactical Automatic Landing Systems (TALS) and ground support equipment.

Executive Summary

The MQ-1C Gray Eagle Unmanned Aircraft System (UAS) program continues with development, integration, testing, and training, while simultaneously supporting the Warfighter with two deployed Gray Eagle Quick Reaction Units and deployment of a full-up Gray Eagle Company (12 aircraft and 128 Soldiers) in support of combat operations in Afghanistan.

The program has undergone several changes since the 2011 SAR submission. The Army will field 15 Gray Eagle Companies to the 10 active Divisions, one for National Training Center, two for Army Special Operations Forces, and two for Aerial Exploitation Battalions that will replace the Hunter UAS. There has been a great amount of Gray Eagle developmental testing over the past year, to include; environmental, electromagnetic environmental effects (E3), transportability, mobility, radar cross section/infrared/acoustic, and production prove-out testing. Additionally, the MQ-1C UAS Gray Eagle program completed a successful Initial Operational Test and Evaluation (IOT&E) in August 2012. The IOT&E will support the Full Rate Production (FRP) decision. The FRP Defense Acquisition Board (DAB) is scheduled for May 2013. Follow-on Test and Evaluation (FOT&E) has an objective date of April 2015.

Contracting actions since the 2011 SAR include awarding of contracts for Performance Based Logistics (PBL) in May 2012 and Low Rate Initial Production (LRIP) III in July 2012. Additionally, System Design and Development (SDD) contract has been listed as complete in the SAR contracts section. Planned contract awards for FY 2013 include PBL FY 2013 in May 2013, a Firm Fixed Price (FFP) contract for Full Rate Production 1 in June 2013, Engineering Services FY 2013-FY 2017 in July 2013 and Pre-Planned Product Improvement (P3I) in August 2013.

The FY 2013 column of the FY 2014 President's Budget does not reflect enactment changes included in the the FY 2013 Appropriations Act. The FY 2013 Aircraft Procurement, Army (APA) funding line was reduced by $104M and four aircraft. This reduction will result in delay of one platoon set of equipment.

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	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

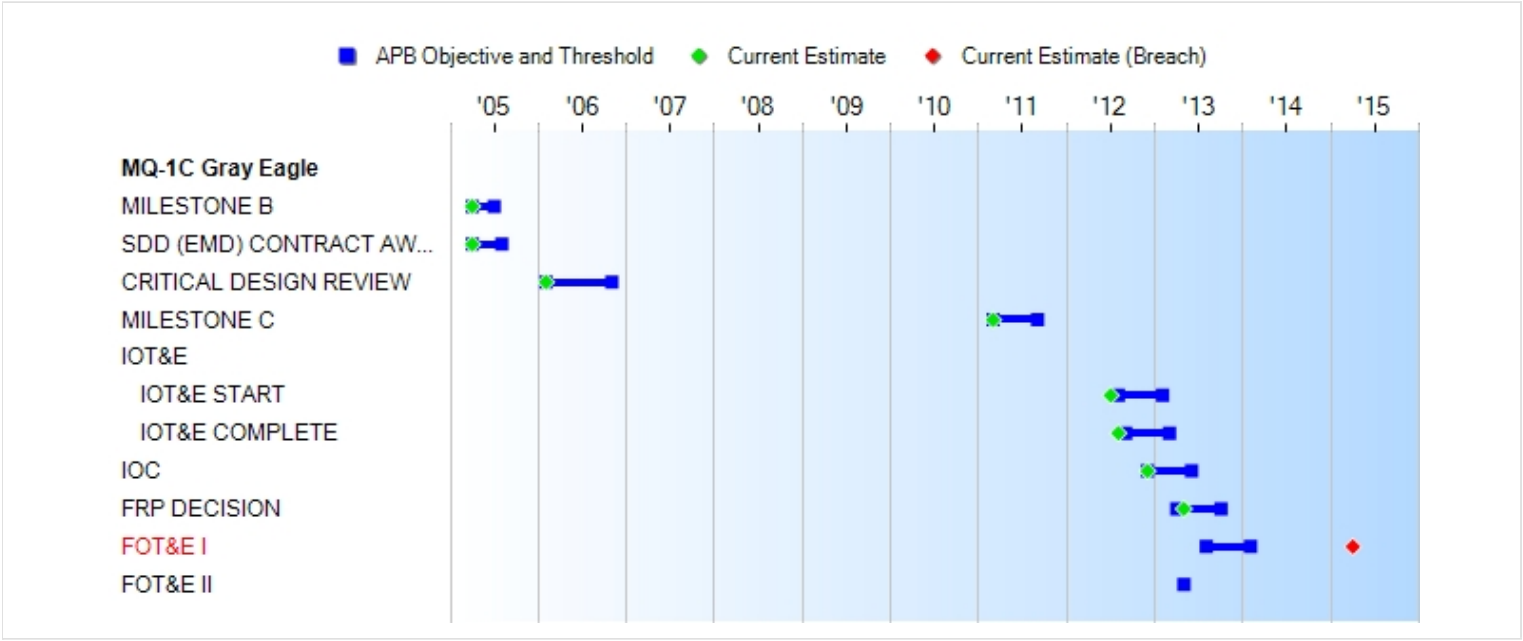
Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

IOT&E Actual test dates: from July 30, 2012 to August 17, 2012.
FOT&E schedule date moved from August 2013 to 3Q FY 2015 (Objective Date April 2015) to provide stability and time to complete required Universal Ground Control Station (UGCS) testing, training and documentation updates. Full Rate Production (FRP) Defense Acquisition Board (DAB) scheduled for May 2013.

The Aquisition Program Baseline is planned to be updated at the June 2013 FRP decision.

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	
MILESTONE B	APR 2005	APR 2005	JUL 2005	APR 2005	
SDD (EMD) CONTRACT AWARD	APR 2005	APR 2005	AUG 2005	APR 2005	
CRITICAL DESIGN REVIEW	FEB 2006	FEB 2006	NOV 2006	FEB 2006	
MILESTONE C	MAR 2011	MAR 2011	SEP 2011	MAR 2011	
IOT&E					
IOT&E START	SEP 2011	AUG 2012	FEB 2013	JUL 2012	(Ch-1)
IOT&E COMPLETE	OCT 2011	SEP 2012	MAR 2013	AUG 2012	(Ch-1)
IOC	JUN 2012	DEC 2012	JUN 2013	DEC 2012	
FRP DECISION	APR 2012	APR 2013	OCT 2013	MAY 2013	(Ch-2)
FOT&E I	AUG 2012	AUG 2013	FEB 2014	**APR 2015**[1]	(Ch-3)
FOT&E II	MAY 2013	N/A	N/A	N/A	

[1] *APB Breach*

Acronyms And Abbreviations

EMD - Engineering and Manufacturing Development
FOT&E - Follow-On Test and Evaluation
FRP - Full Rate Production
IOC - Initial Operational Capability
IOT&E - Initial Operational Test and Evaluation
SDD - System Development and Demonstration

Change Explanations

(Ch-1) IOT&E began July 30, 2012 and completed on August 17, 2012

(Ch-2) FRP current estimate changed from April 2013 to June 2013 to allow for completion of the Service Cost Position.

(Ch-3) FOT&E current estimate changed from August 2013 to April 2015 to provide stability and time to complete required Universal Ground Control Station (UGCS) testing, training and documentation updates.

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Net Ready	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including	The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include 1) DISR, mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements	Met threshold at IOT&E except Link 16 which will be demonstrated at FOT&E	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including

	availability, integrity, authenticat-ion, confidential-ity, and nonrepudiat-ion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. The system must be able to enter and be managed in the network, and exchange data in a secure manner.	availability, integrity, authenticat-ion, confidential-ity, and nonrepudiat-ion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. The system must be able to enter and be managed in the network, and exchange data in a secure manner.	including availability, integrity, authenticat-ion, confidential-ity, and nonrepudiat-ion, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. The system must be able to enter and be managed in the network, and exchange data in a secure manner.		availability, integrity, authenticat-ion, confidential-ity, and non-repudiation, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. The system must be able to enter and be managed in the network, and exchange data in a secure manner.
Multi Payload/Weight Capability	The aircraft is capable of simultan-	The aircraft is capable of simultan-	The aircraft is capable of simultan-	Met threshold at IOT&E	The aircraft is capable of simultan-

	eously carrying two payloads with a combined minimum weight of 300 lbs.	eously carrying two payloads with a combined minimum weight of 300 lbs.	eously carrying two payloads with a combined minimum weight of 200 lbs.		eously carrying two payloads with a combined minimum weight of 200 lbs.
Airframe Sensors Payload Capability	The aircraft will be capable of accepting payloads that are: EO/IR/LD capable of providing a 90% PD of a military target from the aircraft's operational altitude out to a minimum of 30km slant range. EO/IR/LD capable of providing a 90% PR of a military target, from the aircraft's operational altitude, out to a minimum of 10km slant range. SAR/GMTI Sensor capable of providing 85% PD of a military target, from the aircraft's operational altitude, out to a	The aircraft will be capable of accepting payloads that are: EO/IR/LD capable of providing a 90% PD of a military target from the aircraft's operational altitude out to a minimum of 30km slant range. EO/IR/LD capable of providing a 90% PR of a military target, from the aircraft's operational altitude, out to a minimum of 10km slant range. SAR/GMTI Sensor capable of providing 85% PD of a military target, from the aircraft's operational altitude, out to a	The aircraft will be capable of accepting payloads that are: EO/IR/LD capable of providing a 90% PD of a military target from the aircraft's operational altitude out to a minimum of 25km slant range. EO/IR/LD capable of providing a 90% PR of a military target, from the aircraft's operational altitude, out to a minimum of 9km slant range.	Met objective verified with CSP during Production Prove-Out Test	The aircraft will be capable of accepting payloads that are: EO/IR/LD capable of providing a 90% PD of a military target from the aircraft's operational altitude out to a minimum of 25km slant range. EO/IR/LD capable of providing a 90% PR of a military target, from the aircraft's operational altitude, out to a minimum of 9km slant range.

	minimum 10km slant range in clear weather	minimum 10km slant range in clear weather			
Sustainment	The aircraft system must maintain a combat Ao of 90%.	The aircraft system must maintain a combat Ao of 90%.	The aircraft system must maintain a combat Ao of 80%.	Met updated threshold KPP at IOT&E.	The aircraft system must maintain a combat Ao of 80%.
Aircraft Propulsion	The aircraft engine will be powered by DoD/NATO standard heavy fuel (JP8 Fuel).	The aircraft engine will be powered by DoD/NATO standard heavy fuel (JP8 Fuel).	The aircraft engine will be powered by DoD/NATO standard heavy fuel (JP8 Fuel).	Met objective	The aircraft engine will be powered by DoD/NATO standard heavy fuel (JP8 Fuel).
Weapons Capable	The aircraft shall be capable of engaging traditional and non-traditional ground moving, stationary, and water borne moving targets with the AGM-114P-4A and AGM-114N-4 and other AGM-114 variants or similar future AGMs and small light weight precision munitions.	The aircraft shall be capable of engaging traditional and non-traditional ground moving, stationary, and water borne moving targets with the AGM-114P-4A and AGM-114N-4 and other AGM-114 variants or similar future AGMs and small light weight precision munitions.	The aircraft shall be capable of engaging traditional and non-traditional ground moving, stationary targets with the Air to Ground Missile AGM-114P-4A and AGM-114N-4.	Met threshold; Fired (35) Hellfire shots in DT & OT and multiple engage-ments in OIF/OEF.	The aircraft shall be capable of engaging traditional and non-traditional ground moving, stationary targets with the Air to Ground Missile AGM-114P-4A and AGM-114N-4.
Survivability and Force Protection	The GCS-V3 will be mounted onto an Army standard tactical vehicle with	The GCS-V3 will be mounted onto an Army standard tactical vehicle with	The GCS-V3 will be mounted onto an Army standard tactical vehicle with	Met objective	The UGCS-V3 will be mounted onto an Army standard tactical vehicle with

	the ability to be up armored.	the ability to be up armored.	the ability to be up armored.		the ability to be up armored.

Requirements Source: Capability Production Document (CPD) dated March 24, 2009

Acronyms And Abbreviations

AGM's - Air-to-Ground Missile
Ao - Operational Availability
ATO - Approval to Operate
CSP - Common Sensor Payload
CT - Customer Test
DAA - Designated Approval Authority
DISR - Department of Defense Information Technology Standards Registry
DT - Development Testing
EO/IR/LD - Electro-Optical / Infrared / Laser Designator
GIG IT - Global Information Grid Information Technology
IA - Information Assurance
IATO - Interim Approval to Operate
IOT&E - Initial Operational Test & Evaluation
KIP - Key Interface Profile
km - Kilometer
KPP - Key Performance Parameter
lbs - Pounds
LUT - Limited User Test
NATO - North Atlantic Treaty Organization
NCOW RM - Net Centric Operations Warfare Reference Model
OEF - Operation Enduring Freedom
OIF - Operation Iraqi Freedom
OSGCS-V2 - One System Ground Control Station Version Two
OT - Operational Testing
PD - Probability of Detection
PR - Probability of Recognition
QRC - Quick Reaction Capability
SAR/GMTI - Synthetic Aperature Radar/Ground Moving Target Indicator
TBD - To Be Determined
TV - Technical View
UGCS-V3 - Universal Ground Control Station Version Three

Change Explanations

None

Track To Budget

RDT&E

APPN 2040	BA 07	PE 0305204A	(Army)	
	Project D09	Research, Development, Test and Evaluation, Army		(Sunk)
	FY 2005 - FY 2010			
APPN 2040	BA 07	PE 0305219A	(Army)	
	Project MQ1	Research, Development, Test and Evaluation, Army		
	Beginning FY 2011			

Procurement

APPN 2031	BA 02	PE 0002000A	(Army)	
	ICN A00020	MQ-1 Payload	(Shared)	
	Beginning FY 2010			
APPN 2031	BA 01	PE 0305219A	(Army)	
	ICN A0005	MQ-1 UAV		
	FY 2010 - FY 2036			
APPN 2035	BA 02	PE 0030500A	(Army)	
	ICN 00305000	Other Procurement, Army		(Sunk)
	FY 2007 - FY 2009			

The Gray Eagle program baseline includes the Common Sensor Payload procurement, which is part of the MQ-1 Payloads Aircraft Procurement, Army budget line. Funding line is shared with the Common Sensor Payload (CSP), Synthetic Aperture Radar (SAR), Ground Moving Target Indicator (GMTI) and the Tactical SIGINT Payload (TSP).

MILCON

APPN 2050	BA 02	PE 0022096A	(Army)	
	Project 069830	Military Construction, Army		

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2010 $M			BY2010 $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	895.3	895.3	984.8	958.3	896.3	896.3	977.2
Procurement	3364.7	3364.7	3701.2	3156.7	3572.0	3572.0	3402.1
Flyaway	2455.5	--	--	2291.6	2607.2	--	2469.3
Recurring	2291.4	--	--	1877.5	2432.7	--	2011.6
Non Recurring	164.1	--	--	414.1	174.5	--	457.7
Support	909.2	--	--	865.1	964.8	--	932.8
Other Support	547.6	--	--	540.3	580.5	--	585.4
Initial Spares	361.6	--	--	324.8	384.3	--	347.4
MILCON	992.0	992.0	1091.2	467.7	1080.7	1080.7	509.6
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	5252.0	5252.0	N/A	4582.7	5549.0	5549.0	4888.9

Confidence Level for Current APB Cost 50% - The Independent Cost Estimate (ICE) to support the MQ-1C Gray Eagle Program Milestone C decision, like all life cycle cost estimates previously performed by the Cost Assessment and Program Evaluation (CAPE) office, is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life cycle cost estimates prepared for Major Defense Acquisition Programs (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

Payloads for the Gray Eagle UAS program are managed by other Program Management Offices (PMO) not within Program Executive Office Aviation (PEO AVN). The Common Sensor Payload (CSP) is a Key Performance Parameter (KPP) for the Gray Eagle UAS Program and therefore the procurement cost for the CSP payloads required for the program are contained within the Gray Eagle UAS Acquisition Program Baseline (APB) cost. CSP is managed by Product Manager Robotics and Unmanned Sensors (PM RUS), Program Executive Office, Intelligence, Electronic Warfare and Sensors (PEO IEW&S). Payloads required for the program are contained within the Gray Eagle UAS APB. All other future cost for development, integration and procurement of additional payloads added to the Gray Eagle Program other than CSP will be captured

separately and will not be counted as a part of the Gray Eagle UAS APB.

Common Sensor Payload is included in SAR Procurement but is not included in MQ-1C Gray Eagle President's Budget 2014 P-Forms.

P-Forms reflect aircraft quantities and SAR and APB reflect Platoon sets.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	2	2	2
Procurement	29	29	29
Total	31	31	31

In total, the program consists of 31 Platoon sets with 4 aircraft each, equal to 124 aircraft, plus 21 attrition aircraft and 7 schoolhouse aircraft for a total of 152 aircraft. The Average Procurement Unit Cost (APUC) will be based on 29 Platoon sets of equipment and the Program Acquisition Unit Cost (PAUC) will be based on 31 Platoon sets of equipment.

Army guidance approved on November 5, 2010 by the Army Acquisition Executive has changed the unit of measure for an MQ-1C UAS Gray Eagle from a Company sized unit equipped with 12 aircraft and associated support equipment to balanced Platoons, each capable of operating independently with four aircraft with the following payloads: Electro-Optical/Infrared, Laser Range Finder/Laser Designator (EO/IR/LRF/LD), communications relay, and up to four HELLFIRE Missiles. Ground equipment per Platoon includes: two Universal Ground Control Stations (UGCS-V3), three Universal Ground Data Terminals (UGDTs), one Satellite Communication (SATCOM) Ground Data Terminal (SGDT), one Mobile Ground Control Station (MGCS), an Automated Take Off and Landing System (ATLS), two Tactical Automatic Landing Systems (TALS), and ground support equipment.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2014 President's Budget / December 2012 SAR (TY$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	810.0	74.6	10.9	17.6	25.2	25.6	13.3	0.0	977.2
Procurement	1878.6	592.5	553.5	248.6	9.8	18.2	100.3	0.6	3402.1
MILCON	350.6	71.0	88.0	0.0	0.0	0.0	0.0	0.0	509.6
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	3039.2	738.1	652.4	266.2	35.0	43.8	113.6	0.6	4888.9
PB 2013 Total	3039.1	744.3	658.1	248.1	29.4	26.3	0.0	0.0	4745.3
Delta	0.1	-6.2	-5.7	18.1	5.6	17.5	113.6	0.6	143.6

Common Sensor Payload is included in SAR Procurement but is not included in MQ-1C Gray Eagle President's Budget 2014 P-Forms.

P-Forms reflect aircraft quantities and SAR and APB reflect Platoon sets.

Full Rate Production Defense Acquisition Board (DAB) scheduled for June 2013 will result in an updated APB.

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	2	0	0	0	0	0	0	0	0	2
Production	0	19	6	3	1	0	0	0	0	29
PB 2014 Total	2	19	6	3	1	0	0	0	0	31
PB 2013 Total	2	19	6	4	0	0	0	0	0	31
Delta	0	0	0	-1	1	0	0	0	0	0

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
2005	--	--	--	--	--	--	54.3
2006	--	--	--	--	--	--	90.6
2007	--	--	--	--	--	--	123.7
2008	--	--	--	--	--	--	103.4
2009	--	--	--	--	--	--	61.8
2010	--	--	--	--	--	--	135.1
2011	--	--	--	--	--	--	119.2
2012	--	--	--	--	--	--	121.9
2013	--	--	--	--	--	--	74.6
2014	--	--	--	--	--	--	10.9
2015	--	--	--	--	--	--	17.6
2016	--	--	--	--	--	--	25.2
2017	--	--	--	--	--	--	25.6
2018	--	--	--	--	--	--	13.3
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**977.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2005	--	--	--	--	--	--	58.8
2006	--	--	--	--	--	--	95.5
2007	--	--	--	--	--	--	127.3
2008	--	--	--	--	--	--	104.4
2009	--	--	--	--	--	--	61.6
2010	--	--	--	--	--	--	132.6
2011	--	--	--	--	--	--	114.6
2012	--	--	--	--	--	--	114.9
2013	--	--	--	--	--	--	68.7
2014	--	--	--	--	--	--	9.8
2015	--	--	--	--	--	--	15.5
2016	--	--	--	--	--	--	21.8
2017	--	--	--	--	--	--	21.7
2018	--	--	--	--	--	--	11.1
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**958.3**

Annual Funding TY$
2031 | Procurement | Aircraft Procurement, 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
2010	6	249.9	71.3	73.0	394.2	100.1	494.3
2011	6	242.7	56.0	92.9	391.6	110.3	501.9
2012	6	301.3	84.3	25.5	411.1	196.0	607.1
2013	6	239.5	90.3	38.2	368.0	224.5	592.5
2014	3	291.6	39.4	91.5	422.5	131.0	553.5
2015	1	113.6	20.8	30.0	164.4	84.2	248.6
2016	--	--	8.8	--	8.8	1.0	9.8
2017	--	--	4.2	5.7	9.9	8.3	18.2
2018	--	--	--	100.3	100.3	--	100.3
2019	--	--	--	0.6	0.6	--	0.6
Subtotal	**28**	**1438.6**	**375.1**	**457.7**	**2271.4**	**855.4**	**3126.8**

Annual Funding BY$
2031 | Procurement | Aircraft Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2010	6	243.2	69.4	71.0	383.6	97.4	481.0
2011	6	231.4	53.4	88.5	373.3	105.2	478.5
2012	6	280.8	78.6	23.8	383.2	182.7	565.9
2013	6	217.9	82.2	34.8	334.9	204.1	539.0
2014	3	259.9	35.1	81.6	376.6	116.7	493.3
2015	1	99.4	18.2	26.2	143.8	73.6	217.4
2016	--	--	7.5	--	7.5	0.9	8.4
2017	--	--	3.5	4.8	8.3	7.0	15.3
2018	--	--	--	82.9	82.9	--	82.9
2019	--	--	--	0.5	0.5	--	0.5
Subtotal	**28**	**1332.6**	**347.9**	**414.1**	**2094.6**	**787.6**	**2882.2**

Annual Funding TY$
2035 | Procurement | Other Procurement, 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
2007	--	--	--	--	--	9.7	9.7
2008	--	--	31.4	--	31.4	24.3	55.7
2009	1	151.2	15.3	--	166.5	43.4	209.9
Subtotal	**1**	**151.2**	**46.7**	**--**	**197.9**	**77.4**	**275.3**

Annual Funding BY$
2035 | Procurement | Other Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2007	--	--	--	--	--	9.9	9.9
2008	--	--	31.6	--	31.6	24.5	56.1
2009	1	150.2	15.2	--	165.4	43.1	208.5
Subtotal	**1**	**150.2**	**46.8**	**--**	**197.0**	**77.5**	**274.5**

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

Fiscal Year	Total Program TY $M
2010	20.6
2011	102.0
2012	228.0
2013	71.0
2014	88.0
Subtotal	**509.6**

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

Fiscal Year	Total Program BY 2010 $M
2010	19.8
2011	96.0
2012	210.5
2013	64.3
2014	77.1
Subtotal	**467.7**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	3/29/2010	7/3/2012
Approved Quantity	2	6
Reference	Milestone C ADM	LRIP III ADM
Start Year	2010	2012
End Year	2011	2015

The Current Total LRIP Quantity is more than 10% of the total production quantity due to Milestone Decision Authority (MDA) directed the LRIP quantities to facilitate the Gray Eagle UAS capability entrance into theater as quickly as possible.

Initial LRIP Decision
The original Low Rate Initial Production (LRIP) quantity was two Gray Eagle UAS systems which equates to six Platoon sets (24 aircraft).

Current Total LRIP
The Current Total LRIP quantity is six Gray Eagle UAS systems which equates to eighteen Platoon sets and includes LRIP I (twenty four aircraft and two attrition aircraft), LRIP II (twenty four aircraft and five attrition aircraft) and LRIP III (twenty nine aircraft).

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Unit Cost	BY2010 $M Current UCR Baseline (FEB 2012 APB)	BY2010 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5252.0	4582.7	
Quantity	31	31	
Unit Cost	169.419	147.829	-12.74
Average Procurement Unit Cost (APUC)			
Cost	3364.7	3156.7	
Quantity	29	29	
Unit Cost	116.024	108.852	-6.18

Unit Cost	BY2010 $M Original UCR Baseline (MAR 2011 APB)	BY2010 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5252.0	4582.7	
Quantity	31	31	
Unit Cost	169.419	147.829	-12.74
Average Procurement Unit Cost (APUC)			
Cost	3364.7	3156.7	
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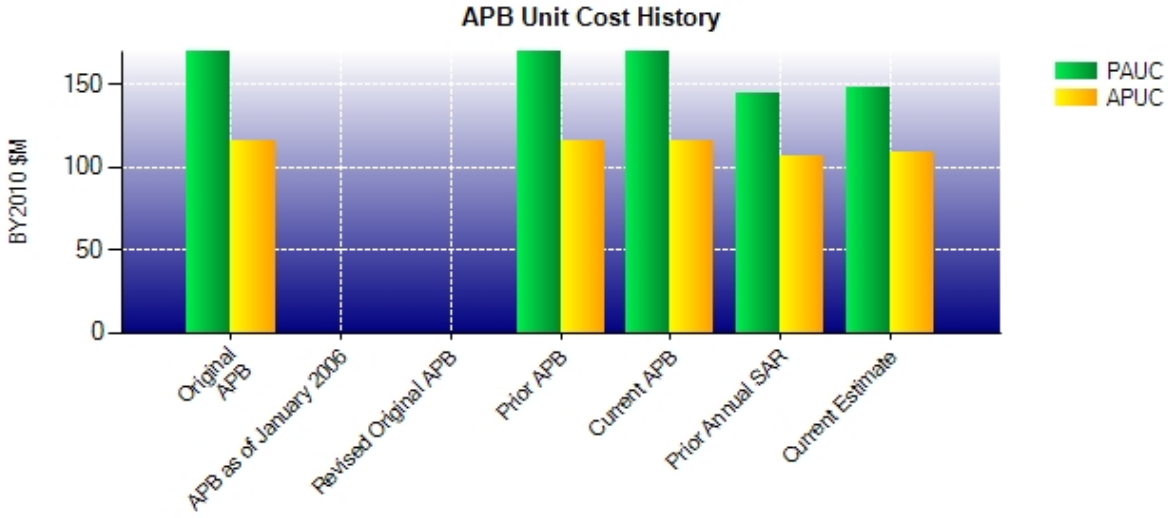
Unit Cost	116.024	108.852	-6.18

Unit Cost History



		BY2010 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	MAR 2011	169.419	116.024	179.000	123.172
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	MAR 2011	169.419	116.024	179.000	123.172
Current APB	FEB 2012	169.419	116.024	179.000	123.172
Prior Annual SAR	DEC 2011	144.810	106.490	153.074	113.586
Current Estimate	DEC 2012	147.829	108.852	157.706	117.314

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
401.600	0.094	-242.537	-7.813	13.968	13.152	0.000	0.536	-222.600	179.000

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
179.000	2.694	0.000	0.023	0.810	-23.602	0.000	-1.219	-21.294	157.706

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
285.100	0.141	-177.121	0.000	14.931	-0.452	0.000	0.573	-161.928	123.172

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
123.172	2.114	0.000	0.024	-0.472	-6.221	0.000	-1.303	-5.858	117.314

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	APR 2005	APR 2005	APR 2005
Milestone C	N/A	FEB 2010	MAR 2011	MAR 2011
IOC	N/A	FEB 2012	JUN 2012	DEC 2012
Total Cost (TY $M)	N/A	5322.6	5549.0	4888.9
Total Quantity	N/A	13	31	31
Prog. Acq. Unit Cost (PAUC)	N/A	409.431	179.000	157.706

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	896.3	3572.0	1080.7	5549.0
Previous Changes				
Economic	+5.7	+38.4	+10.7	+54.8
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+15.3	-129.6	--	-114.3
Estimating	+24.4	-75.7	-581.8	-633.1
Other	--	--	--	--
Support	--	-111.1	--	-111.1
Subtotal	+45.4	-278.0	-571.1	-803.7
Current Changes				
Economic	+1.6	+22.9	+4.2	+28.7
Quantity	--	--	--	--
Schedule	--	+0.7	--	+0.7
Engineering	+23.5	+115.9	--	+139.4
Estimating	+10.4	-104.7	-4.2	-98.5
Other	--	--	--	--
Support	--	+73.3	--	+73.3
Subtotal	+35.5	+108.1	--	+143.6
Total Changes	+80.9	-169.9	-571.1	-660.1
CE - Cost Variance	977.2	3402.1	509.6	4888.9
CE - Cost & Funding	977.2	3402.1	509.6	4888.9

Summary Base Year 2010 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	895.3	3364.7	992.0	5252.0
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+12.3	-113.7	--	-101.4
Estimating	+21.9	-54.3	-520.6	-553.0
Other	--	--	--	--
Support	--	-108.5	--	-108.5
Subtotal	+34.2	-276.5	-520.6	-762.9
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+19.8	+96.2	--	+116.0
Estimating	+9.0	-92.1	-3.7	-86.8
Other	--	--	--	--
Support	--	+64.4	--	+64.4
Subtotal	+28.8	+68.5	-3.7	+93.6
Total Changes	+63.0	-208.0	-524.3	-669.3
CE - Cost Variance	958.3	3156.7	467.7	4582.7
CE - Cost & Funding	958.3	3156.7	467.7	4582.7

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+1.6
Post production Pre-Planned Product Improvements (P3I) and reliability upgrades. (Engineering)	+19.8	+23.5
Increase for Ground Base Sense and Avoid (GBSAA) development. (Estimating)	+5.2	+5.8
Adjustment for current and prior escalation. (Estimating)	-0.7	-0.7
Adjustment for development and testing with version 4.3x supporting Follow On Test and Evaluation (FOT&E) activities. (Estimating)	+4.5	+5.3
RDT&E Subtotal	+28.8	+35.5

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+22.9
Stretch-out of procurement buy profile. (Schedule) (QR)	0.0	+0.7
Post-production P3I and reliability upgrades. (Engineering)	+96.2	+115.9
Change in estimating for attrition aircraft. (Estimating)	-76.7	-87.8
Reduction in FY 2013 thru FY 2017 for Common Sensor Payload (CSP); depot facilitization and revised retrofit estimates. (Estimating)	-8.8	-9.6
Adjustment for current and prior escalation. (Estimating)	-6.6	-7.3
Increase in Other Support for Low Rate Initial Production III (LRIP III) and FOT&E Testing, Integration, and Program Management. (Support)	+93.8	+104.8
Decrease in cost for Initial Spares based on actuals through FY 2012. Reduction in estimate for initial spares based on negotiated contract. (Support)	-26.4	-28.4
Adjustment for current and prior escalation. (Support)	-3.0	-3.1
Procurement Subtotal	+68.5	+108.1

(QR) Quantity Related

MILCON	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+4.2
Adjustment for current and prior escalation. (Estimating)	-1.9	-2.1
Revised estimate to reflect application of new escalation indices. (Estimating)	-1.8	-2.1
MILCON Subtotal	-3.7	0.0

Contracts

Appropriation: RDT&E	
Contract Name	**LRIP 3**
Contractor	General Atomics - Aeronautical Systems, Inc.
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-12-C-0057, FPIF
Award Date	July 06, 2012
Definitization Date	July 06, 2012

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
411.0	424.6	29	436.9	449.9	29	439.9	439.9

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	-0.9	+1.0
Previous Cumulative Variances	--	--
Net Change	-0.9	+1.0

Cost And Schedule Variance Explanations

The unfavorable cumulative cost variance is due to more effort than planned in Program Management to initiate sales / purchase orders and program setup.

The favorable cumulative schedule variance is due to earlier than planned receipt of Universal Ground Control Station (UGCS) low dollar material.

Contract Comments

This is the first time this contract is being reported.

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract modifications P00001 thru P00005 adding a platoon set of ground equipment and updated spares list.

Appropriation: RDT&E

Contract Name	**LRIP II**
Contractor	General Atomics - Aeronautical Systems, Inc.
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-11-C-0099, FPIF
Award Date	April 08, 2011
Definitization Date	December 06, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
354.0	N/A	26	302.5	313.7	29	305.1	307.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	-1.8	-6.8
Previous Cumulative Variances	+2.9	+2.7
Net Change	-4.7	-9.5

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to Communications/Identification and LRIP-2 Aircraft Spares work elements requiring more hours than budgeted.

The unfavorable net change in the schedule variance is due to delays in Auxiliary Equipment, Universal Ground Data Terminal (UGDT), and Aircraft Spares.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the Initial Contract Price Target being based on a Not To Exceed (NTE) price.

The Initial Contract Quantity listed in the SAR was 26 but it has been corrected to 29. The initial Contract Price Ceiling was N/A because of the NTE price.

Appropriation: Procurement

Contract Name	**Low Rate Initial Production (LRIP-1)**
Contractor	General Atomics - Aeronautical Systems, Inc.
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-10-C-0068, FPIF
Award Date	May 14, 2010
Definitization Date	February 28, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
242.5	287.9	26	236.1	283.3	26	282.5	280.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	+1.4	-1.3
Previous Cumulative Variances	+0.7	-12.1
Net Change	+0.7	+10.8

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to overestimated support on Program Management and System Engineering. Work elements required fewer hours than budgeted.

The favorable net change in the schedule variance is due to early completion of Initial Spares & Repair Parts and Integration, Assembly, Test & Checkout.

General Contract Variance Explanation

For Contract W58RGZ-10-C-0068, LRIP 1, Authorized UnpricedWork (AUW) is $45.82M for earned value data month ending March 31, 2013.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to Acquisition Decision Memorandum (ADM) October 20, 2011 delaying Initial Operational Test & Evaluation.

This contract is 82.4% complete as of March 2013.
Quantity 25 of 26 on contract has been delivered.

Appropriation: Acq O&M

Contract Name	**PBL**
Contractor	General Atomics - Aeronautical Systems, Inc.
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-12-C-0075, CPIF/CPFF
Award Date	May 08, 2012
Definitization Date	September 27, 2012

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
244.4	N/A	N/A	244.4	N/A	N/A	223.7	222.6

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	+6.3	-7.6
Previous Cumulative Variances	--	--
Net Change	+6.3	-7.6

Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to over estimated support on several control accounts (Air Vehicle Repair, El Mirage Flight Test Facility Engineering Support, Depot Maintenance Transition Planning, and Ground Segment Repairs).

The unfavorable cumulative schedule variance is due to uncompleted Air Vehicle Spares end-item deliverables.

Contract Comments

This is the first time this contract is being reported.

Appropriation: RDT&E

Contract Name	**Engineering Services**
Contractor	General Atomics - Aeronautical Systems, Inc.
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-09-C-0136, CPFF
Award Date	September 30, 2009
Definitization Date	September 30, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
77.2	N/A	N/A	140.2	N/A	N/A	134.5	128.8

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	+10.6	-0.9
Previous Cumulative Variances	+6.5	-1.7
Net Change	+4.1	+0.8

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to overestimated efforts on the Networked Electronic Warfare (EW) Remotely Operated (NERO) Integration Phase I and a reduction in planned support as a result of delayed completion of 4.4.0 software development.

The favorable net change in the schedule variance is due to early completion of Common Sensor Payload Integration and Takeoff and Landing System (TALS) engineering efforts.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to Contract Modifications thru Mod P00080.

Appropriation: RDT&E

Contract Name	**Production Readiness Test Asset (PRTA)**
Contractor	General Atomics - Aeronautical Systems, Inc.
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-09-C-0151, CPIF
Award Date	April 28, 2009
Definitization Date	April 20, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
48.0	N/A	4	83.6	N/A	4	75.0	75.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	+8.0	-2.2
Previous Cumulative Variances	+6.7	-0.8
Net Change	+1.3	-1.4

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to overestimated support in Systems Engineering/ Program Management and overestimated material cost in Datalink Spares/Aircraft Spares.

The unfavorable net change in the schedule variance is due to late receipts of build material from subcontractor on Datalink Spares – CERDEC Kits.

General Contract Variance Explanation

Contract is 85.6% complete as of Marchearned value report dated 03/31/2013.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract definitization at $40.6M with options exercised during Calendar Year 2010, 2011 and 2012.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	2	2	2	100.00%
Production	1	1	29	3.45%
Total Program Quantities Delivered	3	3	31	9.68%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	4888.9	Years Appropriated	9
Expenditures To Date	1835.8	Percent Years Appropriated	60.00%
Percent Expended	37.55%	Appropriated to Date	3777.3
Total Funding Years	15	Percent Appropriated	77.26%

The above data is current as of 3/31/2013.

Operating and Support Cost

MQ-1C Gray Eagle

Assumptions and Ground Rules

Cost Estimate Reference:

The 2012 SAR estimate was based on 2010 CAPE Independent Cost Estimate updated January 2011. Operating and Support (O&S) cost is based on a service life of 20 years, a unit of measure of seventeen companies and one training base company (eighteen total) and a unitized average annual cost per system of $31.84M.

The estimate used historical data based on Contractor Logistics Support (CLS) cost from the Predator Program. The cost is applied as steady state across the Gray Eagle UAS Program in accordance with the program schedule. The costs are expressed in terms of average annual cost per system with Satellite Communications (SATCOM) cost included.

Sustainment Strategy:

2011 Sustainment Strategy was performance based and relied on a mixture of Soldier and Field Service Representative (FSR) Support to provide maintenance and supply support, and technical assistance.

A FY 2012 Performance Based Logistics (PBL) contract was awarded on May 8, 2012. The contract was based on a one plus two, one-year contract option. The PBL contract includes:

• Soldiers will operate systems and perform 85% of the basic field maintenance. The FSR will support remaining 15% of the basic field maintenance.

• Depot Level Maintenance migration to Public Private Partnership (PPP) transistions sustainment to organic depots.

Accomplishments since 2011 SAR include.

Sustainment BCA was completed and signed April 20, 2012.

Completed Gray Eagle Logistics and Prognosis Demonstration May 6, 2012.

Completed Gray Eagle IOT&E, August 17, 2012.

Antecedent Information:

N/A, No Antecedent.

Unitized O&S Costs BY2010 $M		
Cost Element	**MQ-1C Gray Eagle Average annual cost per company**	**No Antecedent (Antecedent) N/A**
Unit-Level Manpower	10.44	0.00
Unit Operations	3.04	0.00
Maintenance	10.96	0.00
Sustaining Support	3.76	0.00
Continuing System Improvements	0.41	0.00
Indirect Support	3.19	0.00
Other	0.04	0.00
Total	31.84	--

Unitized Cost Comments:
DASA-CE is developing Army Cost Position and CAPE is developing the Independent Cost Estimate for Defense Acquisition Board Full Rate Production decision in May 2013. Updated Operating and Support costs will be available after the DAB.

Operating and Support (O&S) cost is based on a service life of 20 years, a unit of measure of seventeen companies and one training base company (eighteen total) and a unitized average annual cost per system of $31.84M. Unitized average annual cost per platoon of $10.61M.

Other ($0.04M) are unitized average annual cost for attrition aircraft storage.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	MQ-1C Gray Eagle		MQ-1C Gray Eagle	No Antecedent (Antecedent)
Base Year	11904.0	13094.4	11463.0	N/A
Then Year	15754.6	N/A	15203.8	N/A

Total O&S Costs Comments:
None

Disposal Costs

Lifecycle demilitarization/disposal costs of $13.0M BY 2010 are not included in the above estimate.