Selected Acquisition Report (SAR)

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

MQ-1C UAS GRAY EAGLE

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

MQ-1C Unmanned Aircraft System Gray Eagle (MQ-1C UAS 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 Authority (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. 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) is one per aircraft. Ground equipment per Platoon includes: two Ground Control Stations (GCS-V3), two Ground Data Terminals (GDT), one Satellite Communication (SATCOM) Ground Data Terminal (SGDT), one Portable Ground Control Station (PGCS), one Portable Ground Data Terminal (PGDT), an Automated Take Off and Landing System (ATLS), which includes two Tactical Automatic Landing Systems (TALS) and ground support equipment. Seven Companies with three Platoons each equipped as described above will be in a deployed status. Ten other Continental United States (CONUS) based, or dwell companies, will have only one Platoon set of equipment as described above but will still be staffed with a full complement of 128 Soldiers.

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 the first full-up Gray Eagle Company (12 aircraft and 128 Soldiers) in March 2012 in support of combat operations in Afghanistan.

The program has undergone several changes since the 2010 SAR submission. 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/Infra-red/acoustic, and production prove-out testing. On March 16, 2011, the program had a Gray Eagle test aircraft accident that resulted in delays to Soldier training and system testing. These delays resulted in postponement of the Initial Operational Test and Evaluation (IOT&E) until the fourth quarter FY 2012. The IOT&E delay requires a Low Rate Initial Production III (LRIP III) decision, scheduled for May 2012, to prevent a production break prior to the Full Rate Production (FRP) decision. The FRP decision moved to third quarter FY 2013. On October 20, 2011, the Program Manager received an Acquisition Decision Memorandum approving these program changes. An updated Acquisition Program Baseline was approved February 28, 2012.

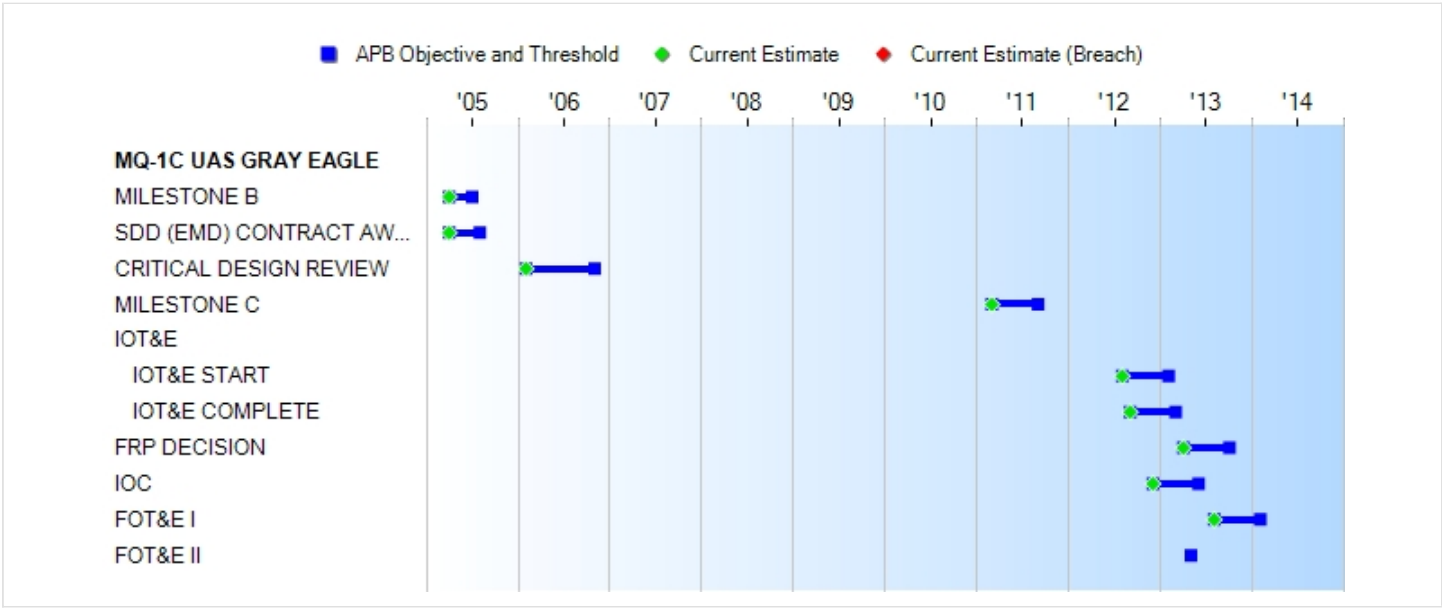
There are no significant software-related issues with this program at this time.

Threshold Breaches

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

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

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	AUG 2012	(Ch-1)
IOT&E COMPLETE	OCT 2011	SEP 2012	MAR 2013	SEP 2012	(Ch-1)
FRP DECISION	APR 2012	APR 2013	OCT 2013	APR 2013	(Ch-1)
IOC	JUN 2012	DEC 2012	JUN 2013	DEC 2012	(Ch-1)
FOT&E I	AUG 2012	AUG 2013	FEB 2014	AUG 2013	(Ch-1)
FOT&E II	MAY 2013	N/A	N/A	N/A	(Ch-1)

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) In accordance with October 20, 2011 Acquisition Decision Memorandum directing rebaseline, the program schedule current estimates changed as indicated:
-IOT&E Start changed from SEP 2011 to AUG 2012
-IOT&E Complete changed from OCT 2011 to SEP 2012
-FRP Decision changed from APR 2012 to APR 2013
-IOC changed from JUN 2012 to DEC 2012
-FOT&E I changed from AUG 2012 to AUG 2013, FOT&E II combined with FOT&E I testing.

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 availability, integrity, authenticat-	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-	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 including availability, integrity,	TBD	Fully Support all operational activities identified in the applicable joint and system integrated architectures and 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. Information assurance requirements including availability, integrity, authenticatio n, confidentiality , and nonrepudiati

	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.	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.	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.		on, and issuance of an Interim Approval to Operate (IATO) by the Designated Approval Authority (DAA). 5. Operationally effective information exchanges and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint system integrated architecture views.
Multi Payload/Weight Capability	The aircraft is capable of simultaneousl y carrying two payloads with a combined minimum	The aircraft is capable of simultaneousl y carrying two payloads with a combined minimum	The aircraft is capable of simultaneousl y carrying two payloads with a combined minimum	TBD	The aircraft is capable of simultaneousl y carrying two payloads with min weight of 200 lbs

	weight of 300 lbs.	weight of 300 lbs.	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 minimum 10km slant range in clear weather	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 minimum 10km slant range in clear weather	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.	TBD	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 operational altitude, out to a minimum of 9km slant range.
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%.	TBD	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).	TBD	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.	TBD	The aircraft shall be weapons capable of supporting 2 hard points at 200 lbs each. 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 ability to be up armored.	The GCS-V3 will be mounted onto an Army standard tactical vehicle with the ability to be up armored.	The GCS-V3 will be mounted onto an Army standard tactical vehicle with the ability to be up armored.	TBD	GCS-V3 will be mounted onto an Army standard tactical vehicle with the ability to be up armored.

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

Acronyms And Abbreviations

AGM - Air-to-Ground Missile

Ao - Operational Availability
ATO - Approval to Operate
DAA - Designated Approval Authority
DISR - Department of Defense Information Technology Standards Registry
DoD - Department of Defense
EO/IR/LD - Electro-Optical / Infrared / Laser Designator
GCS-V3 - Ground Control Station Version Three
GIG IT - Global Information Grid Information Technology
IA - Information Assurance
IATO - Interim Approval to Operate
KIP - Key Interface Profile
km - Kilometer
lbs - Pounds
NATO - North Atlantic Treaty Organization
NCOW RM - Net Centric Operations Warfare Reference Model
OSGCS-V2 - One System Ground Control Station Version Two
PD - Probability of Detection
PR - Probability of Recognition
SAR/GMTI Sensor - Synthetic Aperature Radar/Ground Moving Target Indicator
TV - Technical View

Change Explanations

None

Memo

Gray Eagle UAS payloads are managed by other Program Management Offices (PMO) within other Program Executive Offices (PEO). The Common Sensor Payload (CSP) cost is included in the Gray Eagle UAS Acquisition Program Baseline (APB), as the CSP capability is a Key Performance Parameter (KPP). CSP is managed by Project Manager Robotics and Unmanned Sensors (PM RUS), Program Executive Office, Intelligence, Electronic Warfare and Sensors (PEO IEW&S).

The Gray Eagle UAS program is budgeted for and will contract to meet threshold level KPPs which are reflected in the Current Estimate.

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 A0005000	Aircraft Procurement, Army		
	FY10-FY36			
APPN 2035	BA 02	PE 0030500A	(Army)	
	ICN 00305000	Other Procurement, Army		(Sunk)
	FY 2007-FY 2009			

The MQ-1 Payload 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	929.5	896.3	896.3	941.7
Procurement	3364.7	3364.7	3701.2	3088.2	3572.0	3572.0	3294.0
Flyaway	2455.5	--	--	2287.5	2607.2	--	2440.3
Recurring	2291.4	--	--	1679.5	2432.7	--	1779.4
Non Recurring	164.1	--	--	608.0	174.5	--	660.9
Support	909.2	--	--	800.7	964.8	--	853.7
Other Support	547.6	--	--	448.4	580.5	--	478.8
Initial Spares	361.6	--	--	352.3	384.3	--	374.9
MILCON	992.0	992.0	1091.2	471.4	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	4489.1	5549.0	5549.0	4745.3

The Confidence Level for the Current APB Cost is 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). CSP is the only payload cost 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.

The Average Procurement Unit Cost (APUC) is based on 29 Platoon sets of equipment and the Program Acquisition Unit Cost (PAUC) is based on 31 Platoon sets of equipment.

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 Ground Control Stations (GCS-V3), two Ground Data Terminals (GDTs), one Satellite Communication (SATCOM) Ground Data Terminal (SGDT), one Portable Ground Control Station (PGCS), one Portable Ground Data Terminal, 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
FY2013 President's Budget / December 2011 SAR (TY$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	688.1	121.9	74.6	14.7	2.5	19.8	20.1	0.0	941.7
Procurement	1271.4	607.1	598.7	555.4	245.6	9.6	6.2	0.0	3294.0
MILCON	122.6	228.0	71.0	88.0	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 2013 Total	2082.1	957.0	744.3	658.1	248.1	29.4	26.3	0.0	4745.3
PB 2012 Total	2119.4	1160.0	1174.6	608.1	121.2	79.2	0.0	0.0	5262.5
Delta	-37.3	-203.0	-430.3	50.0	126.9	-49.8	26.3	0.0	-517.2

Common Sensor Payload is included in SAR Procurement but is not included in MQ-1C Gray Eagle President's Budget 2013 P-Forms.

P-Forms reflect air vehicle quantities and SAR and APB reflect Platoon sets.

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	2	0	0	0	0	0	0	0	0	2
Production	0	13	6	6	4	0	0	0	0	29
PB 2013 Total	2	13	6	6	4	0	0	0	0	31
PB 2012 Total	2	13	6	6	4	0	0	0	0	31
Delta	0	0	0	0	0	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	--	--	--	--	--	--	14.7
2015	--	--	--	--	--	--	2.5
2016	--	--	--	--	--	--	19.8
2017	--	--	--	--	--	--	20.1
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**941.7**

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	--	--	--	--	--	--	115.2
2013	--	--	--	--	--	--	69.1
2014	--	--	--	--	--	--	13.4
2015	--	--	--	--	--	--	2.2
2016	--	--	--	--	--	--	17.4
2017	--	--	--	--	--	--	17.4
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**929.5**

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	110.2	501.8
2012	6	285.2	64.9	58.9	409.0	198.1	607.1
2013	6	228.9	92.8	97.4	419.1	179.6	598.7
2014	4	193.9	50.2	162.5	406.6	148.8	555.4
2015	--	--	29.9	176.2	206.1	39.5	245.6
2016	--	--	9.6	--	9.6	--	9.6
2017	--	--	6.2	--	6.2	--	6.2
Subtotal	**28**	**1200.6**	**380.9**	**660.9**	**2242.4**	**776.3**	**3018.7**

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	231.6	53.4	88.7	373.7	105.2	478.9
2012	6	267.0	60.7	55.1	382.8	185.5	568.3
2013	6	210.7	85.4	89.7	385.8	165.4	551.2
2014	4	175.4	45.4	147.0	367.8	134.6	502.4
2015	--	--	26.6	156.5	183.1	35.1	218.2
2016	--	--	8.4	--	8.4	--	8.4
2017	--	--	5.3	--	5.3	--	5.3
Subtotal	**28**	**1127.9**	**354.6**	**608.0**	**2090.5**	**723.2**	**2813.7**

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	96.3
2012	211.6
2013	64.8
2014	78.9
Subtotal	**471.4**

MILCON funding was aligned to be consistent with Gray Eagle consolidated basing strategy from thirteen to five sites.

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	3/29/2010	3/25/2011
Approved Quantity	2	4
Reference	ADM, March 29, 2010	ADM, March 25, 2011
Start Year	2010	2011
End Year	2011	2013

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 four Gray Eagle UAS systems which equates to twelve Platoon sets and includes LRIP I (twenty four aircraft and two attrition aircraft) and LRIP II (twenty four aircraft and five attrition aircraft).

The total LRIP buy is greater than ten percent of the total program quantity. The Milestone Decision Authority (MDA) directed the LRIP quantity to facilitate the Gray Eagle UAS capability entrance into theater as quickly as possible.

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 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5252.0	4489.1	
Quantity	31	31	
Unit Cost	169.419	144.810	-14.53
Average Procurement Unit Cost (APUC)			
Cost	3364.7	3088.2	
Quantity	29	29	
Unit Cost	116.024	106.490	-8.22

Unit Cost	BY2010 $M Original UCR Baseline (MAR 2011 APB)	BY2010 $M Current Estimate (DEC 2011 SAR)	BY % Change
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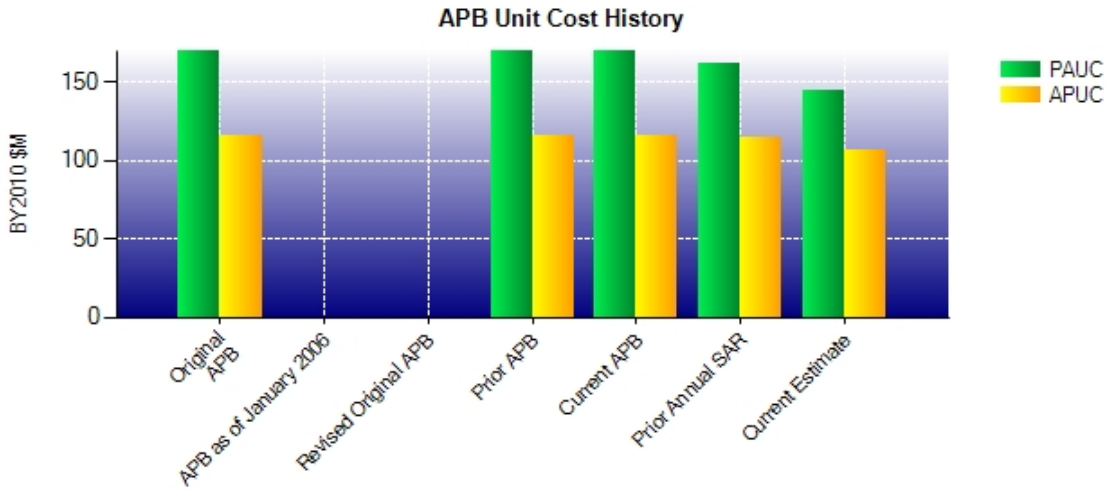
Unit Cost History



		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 2010	162.006	114.141	169.758	120.348
Current Estimate	DEC 2011	144.810	106.490	153.074	113.586

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	1.768	0.000	0.000	-3.687	-20.423	0.000	-3.584	-25.926	153.074

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	1.324	0.000	0.000	-4.469	-2.610	0.000	-3.831	-9.586	113.586

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	4745.3
Total Quantity	N/A	13	31	31
Prog. Acq. Unit Cost (PAUC)	N/A	409.431	179.000	153.074

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	896.3	3572.0	1080.7	5549.0
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+28.5	+12.4	-233.1	-192.2
Other	--	--	--	--
Support	--	-94.3	--	-94.3
Subtotal	+28.5	-81.9	-233.1	-286.5
Current Changes				
Economic	+5.7	+38.4	+10.7	+54.8
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+15.3	-129.6	--	-114.3
Estimating	-4.1	-88.1	-348.7	-440.9
Other	--	--	--	--
Support	--	-16.8	--	-16.8
Subtotal	+16.9	-196.1	-338.0	-517.2
Total Changes	+45.4	-278.0	-571.1	-803.7
CE - Cost Variance	941.7	3294.0	509.6	4745.3
CE - Cost & Funding	941.7	3294.0	509.6	4745.3

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	--	--	--	--
Estimating	+25.8	+38.4	-201.0	-136.8
Other	--	--	--	--
Support	--	-93.0	--	-93.0
Subtotal	+25.8	-54.6	-201.0	-229.8
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+12.3	-113.7	--	-101.4
Estimating	-3.9	-92.7	-319.6	-416.2
Other	--	--	--	--
Support	--	-15.5	--	-15.5
Subtotal	+8.4	-221.9	-319.6	-533.1
Total Changes	+34.2	-276.5	-520.6	-762.9
CE - Cost Variance	929.5	3088.2	471.4	4489.1
CE - Cost & Funding	929.5	3088.2	471.4	4489.1

Previous Estimate: December 2010

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+5.7
Development and test of capability improvements to fielded aircraft through modification. (Engineering)	+12.3	+15.3
Adjustment for current and prior escalation. (Estimating)	-3.9	-4.1
RDT&E Subtotal	+8.4	+16.9

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+38.4
Common Sensor Payload descope associated with Target Location Accuracy. (Engineering)	-113.7	-129.6
Adjustment for current and prior escalation. (Estimating)	-14.7	-15.3
Decrease due to hardware pricing lower than previously estimated. (Estimating)	-78.0	-72.8
Adjustment for current and prior escalation. (Support)	-4.0	-4.4
Increase in Initial Spares estimate. (Support)	+43.7	+42.8
Decrease in Other Support due to a change in scope of logistics efforts. (Support)	-55.2	-55.2
Procurement Subtotal	-221.9	-196.1

MILCON	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+10.7
MILCON funding aligned to be consistent with Gray Eagle consolidated basing strategy from thirteen to five sites. (Estimating)	-314.7	-343.4
Adjustment for current and prior escalation. (Estimating)	-4.9	-5.3
MILCON Subtotal	-319.6	-338.0

Contracts

Appropriation: RDT&E

Contract Name	**SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD)**
Contractor	GENERAL ATOMIC AERONAUTICAL SYSTEMS, INC
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-05-C-0069, CPIF
Award Date	August 08, 2005
Definitization Date	August 08, 2005

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
214.4	N/A	N/A	376.1	N/A	N/A	470.7	463.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	-4.1	-1.1
Previous Cumulative Variances	+0.4	-9.9
Net Change	-4.5	+8.8

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to additional functionality and development of software releases for modifications.

The favorable net change in the schedule variance is due to air vehicle production where aircraft numbers 20 and 21 are being utilized for Maintenance Training and Software prove out.

Contract Comments

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

The difference between the initial contract price target and the current contract price target is due to contract modifications from initial Mod (00002) to current Calendar Year 2011 Mod (00014) that includes undefinitized work.

Appropriation: Procurement

Contract Name	**ER/MP SDD Additional Hardware**
Contractor	GENERAL ATOMIC AERONAUTICAL SYSTEMS, INC
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-05-C-0069/1, CPIF
Award Date	June 30, 2009
Definitization Date	June 30, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
67.5	N/A	N/A	72.1	N/A	N/A	58.7	58.8

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	+7.5	-1.2
Previous Cumulative Variances	+4.8	-3.4
Net Change	+2.7	+2.2

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to Engineering Support and Program Management which have incurred fewer hours than baselined.

The favorable net change in the schedule variance is due to improved material deliveries from the subcontractor.

Contract Comments

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

The difference between the initial contract price target and the current contract price target is due to additional contract mods in Calendar Year 2011 (Limited Usage Test, STARLite, and 2.0L Engine).

Appropriation: RDT&E

Contract Name	**Production Readiness Test Asset (PRTA)**
Contractor	GENERAL ATOMIC 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	N/A	83.6	N/A	4	77.7	74.8

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	+6.7	-0.8
Previous Cumulative Variances	+3.5	-0.2
Net Change	+3.2	-0.6

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to System Engineering requiring fewer hours than planned for sub-elements Engineering Support and Critical Safety. Additionally, work element Datalink Spares experienced a reduction in material costs.

The unfavorable net change in the schedule variance is due to work element Aircraft Spares and late delivery of engine components.

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 of $17.9M and options exercised during Calendar Year 2011 of $25.1M

Initial SAR quantity was listed as N/A and has been corrected to be quantity four.

Appropriation: Procurement

Contract Name	**Low Rate Initial Production (LRIP-1)**
Contractor	GENERAL ATOMIC 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	235.6	254.4	26	211.9	210.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	+0.7	-12.1
Previous Cumulative Variances	+0.9	+2.8
Net Change	-0.2	-14.9

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to Program Management and One System Ground Control Station (OSGCS). Work elements required fewer hours than budgeted in Production Planning and Manufacturing Management.

The unfavorable net change in the schedule variance is due to late deliveries of forty-eight inch antennas. Additionally, Integration Assembly Test and Checkout has Work In Process with aircraft waiting on an Engineering Change Proposal to incorporate C-band functionality.

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.

Initial contract quantity was listed as N/A and has been corrected to be quantity twenty six.

Appropriation: RDT&E

Contract Name	**FY09 Supplemental Hardware**
Contractor	GENERAL ATOMIC AERONAUTICAL SYSTEMS, INC
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-10-C-0068/1, 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
90.0	111.1	N/A	86.5	93.5	8	85.5	85.0

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	+0.6	-4.0
Previous Cumulative Variances	+0.5	+2.8
Net Change	+0.1	-6.8

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to Program Management which incurred fewer hours than planned in Manufacturing, Production Support, Program Management, and Quality Support.

The unfavorable net change in the schedule variance is due to Aircraft Spares being behind schedule versus the planned need.

Contract Comments

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

The difference between the initial contract price target and the current contract price target is due to reductions at inital contract definitization (February 28, 2011. $83.610) and then target price adjustments for multiple modification definitizations during 2011.

Appropriation: Procurement

Contract Name	**LRIP II**
Contractor	GENERAL ATOMIC 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	288.6	298.2	29	288.6	288.6

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	+2.9	+2.7
Previous Cumulative Variances	--	--
Net Change	+2.9	+2.7

Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to Program Management and System Engineering requiring fewer hours than planned.

The favorable cumulative schedule variance is due to Propulsion where the Thielert 2.0 Heavy Fuel Engines (HFE) were received earlier than planned.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to initial contract price was based on a Not To Exceed (NTE) price.

This is the first time this contract is being reported.

Initial quantity of twenty six awarded and quantity of three added at definitization. Total quantity is twenty-nine which includes six platoons and five attrition aircraft. LRIP II contract was definitized December 6, 2011. Initial ceiling price was N/A and is updated to $298.2 million.

Appropriation: RDT&E

Contract Name	**Engineering Services**
Contractor	GENERAL ATOMIC 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 29, 2011

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	120.0	N/A	N/A	113.9	108.8

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	+6.5	-1.7
Previous Cumulative Variances	--	--
Net Change	+6.5	-1.7

Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to Level 2 Airworthiness Phase 2 requiring fewer hours than planned.

The unfavorable cumulative schedule variance is due to Ground Control Station integration and revision B software delays impacting the start of corresponding maintenance and operator manuals.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to Contract Modifications thru Mod number 0051.

This is the first time this contract is being reported.

Appropriation: Acq O&M

Contract Name	**Program Of Record (POR) Replenishment Spares**
Contractor	GENERAL ATOMIC AERONAUTICAL SYSTEMS, INC
Contractor Location	14200 Kirkham Way Poway, CA 92064
Contract Number, Type	W58RGZ-11-C-0143, CPFF
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
75.9	N/A	N/A	75.9	N/A	N/A	75.9	75.9

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	-1.6	0.0
Previous Cumulative Variances	--	--
Net Change	-1.6	+0.0

Cost And Schedule Variance Explanations

The unfavorable cumulative cost variance is due to Field Level Spares (Air Vehicle/TALS) where Work In Process (WIP) on Thielert engine components cannot be claimed until associated sub-assemblies are completed.

Contract Comments

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	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	4745.3	Years Appropriated	8
Expenditures To Date	903.8	Percent Years Appropriated	61.54%
Percent Expended	19.05%	Appropriated to Date	3039.1
Total Funding Years	13	Percent Appropriated	64.04%

Delivery and Expenditure data is as of February 2, 2012.

Operating and Support Cost

Assumptions And Ground Rules
Estimate based on CAPE Independent Cost Estimate dated 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 an 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. O&S data assumes a peacetime optempo. There is no antecedent for this program.

Costs BY2010 $M		
Cost Element	**MQ-1C UAS GRAY EAGLE Average annual cost per system**	**No Antecedent**
Unit-Level Manpower	10.44	--
Unit Operations	3.04	--
Maintenance	10.96	--
Sustaining Support	3.76	--
Continuing System Improvements	0.41	--
Indirect Support	3.19	--
Other	0.04	--
Total Unitized Cost (Base Year 2010 $)	31.84	--

Total O&S Costs $M	MQ-1C UAS GRAY EAGLE	No Antecedent
Base Year	11463.0	--
Then Year	15203.8	--

Lifecycle demilitarization/disposal costs are not included in the above estimate.