Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-271

MQ-1B Unmanned Aircraft System Predator (MQ-1B UAS PREDATOR)

As of FY 2011 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations for MDAP Programs

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(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Information

Program Name

PREDATOR - Unmanned Aircraft System (PREDATOR)

DoD Component

AirForce

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Date Assigned: July 10, 2008

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated February 18, 2010

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated February 18, 2010

Mission and Description

Predator is a medium-altitude, long-endurance, unmanned aircraft system. A Predator system consists of four aircraft, a Ground Control Station (GCS), Launch and Recovery Element (LRE), Ground Data Terminal (GDT), Satellite Communications (SATCOM) terminal, support equipment, maintenance and operations personnel. The Predator aircraft can be disassembled and loaded into a container for travel. The GCS is transportable in a C-130 Hercules (or larger) transport aircraft or installed in a fixed facility. GDT antennaes connected to the LRE provide line-of-sight communication for takeoff and landing before transferring aircraft control to a SATCOM system providing over-the-horizon control.

The primary Predator mission is interdiction and conducting armed reconnaissance against critical, time sensitive targets. When the Predator is not actively pursuing its primary mission, it acts as the Joint Forces Air Component Commander-owned theater asset for reconnaissance, surveillance and target acquisition in support of the Joint Forces commander.

The Predator aircraft is controlled by a pilot located in the GCS. The GCS transmits control commands to the aircraft by a ground-based datalink terminal that also incorporate workstations allowing operators to plan missions, control and monitor the aircraft, reconnaissance sensors and weapons, and exploit received images. Predator carries the Multi-spectral Targeting System which integrates electro-optical, infrared, and laser designator and illuminator into a single sensor. Predator aircraft also carry and employ two laser-guided AGM-114 Hellfire missiles.

An alternate method of employment, Remote Split Operations, employs a smaller version of the GCS called the Launch and Recovery Element (LRE.) The LRE conducts takeoff and landing operations at the forward deployed location while the GCS conducts the mission via extended communication links.

Executive Summary

This is the initial SAR for the Predator program. The Predator was designated an Acquisition Category ID program on May 19, 2008.

Predator began as an Advanced Concept Technology Demonstration (ACTD) in 1994, and transitioned to an Air Force program in 1997. In 2001, the Air Force added a laser designator for use with precision-guided munitions and the ability to employ Hellfire missiles. The Predator system was declared operationally capable (initial operational capability) in March 2005, and has flown over 681,000 hours as of January 31, 2010.

Predator has flown surveillance missions over Bosnia, Kosovo, Iraq and Afghanistan. In January 2010, Predator aircraft began flying humanitarian operations over Haiti. The flights originated from a civilian airport in Puerto Rico and marked the first time a Remotely Piloted Aircraft operated from an active civilian airport, taking turns on the runway with civilian and commercial air traffic.

As of March 12, 2010 General Atomics delivered 236 Predator aircraft with 147 currently in service. There are 32 aircraft on contract with the final aircraft delivery in January 2011. The difference in the number of aircraft delivered and currently in service is due to removal of aircraft from operational service.

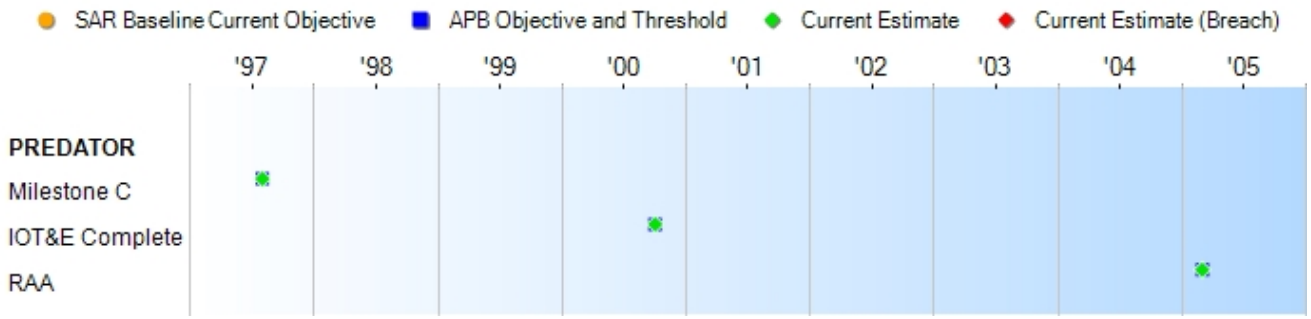
There are no significant software issues with this program.

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

Schedule



Schedule Events				
Events	**SAR Baseline Production Estimate**	**Current APB Production Objective/Threshold**		**Current Estimate**
Milestone C	Aug 1997	Aug 1997	Aug 1997	Aug 1997
IOT&E Complete	Oct 2000	Oct 2000	Oct 2000	Oct 2000
RAA	Mar 2005	Mar 2005	Mar 2005	Mar 2005

Change Explanations

None

Acronyms and Abbreviations

IOT&E - Initial Operational Test and Evaluation
RAA - Required Assets Available

Performance

Performance Characteristics				
SAR Baseline Production Estimate	**Current APB Production Objective/Threshold**		**Demonstrated Performance**	**Current Estimate**
Airworthiness Certification				
Air Force certified as airworthy when operated in accordance with its technical order	Air Force certified as airworthy when operated in accordance with its technical order	Air Force certified as airworthy when operated in accordance with its technical order	System certified on January 31, 2006.	Certification complete
Encrypted Data Links				
NSA Compliant, Defense Information Systems Agency (DISA)-certified datalinks	NSA Compliant, Defense Information Systems Agency (DISA)-certified datalinks	Secure Datalinks for all command, control, and datalinks	System uses various forms of security including encryption and message headers	Secure datalinks.
Endurance				
Aircraft carrying stores with similar weight and aerodynamics of the AGM-114 HELLFIRE, must have a minimum total endurance (including appropriate fuel reserves) of 24 hours	Aircraft carrying stores with similar weight and aerodynamics of the AGM-114 HELLFIRE, must have a minimum total endurance (including appropriate fuel reserves) of 24 hours	Aircraft carrying stores with similar weight and aerodynamics of the AGM-114 HELLFIRE, must have a minimum total endurance (including appropriate fuel reserves) of 16 hours	Aircraft routinely fly with stores for durations greater than the required threshold requirement of 16 hours.	20 hours plus appropriate fuel reserves while carrying two AGM-114 HELLFIRE missiles 16 hours plus appropriate fuel reserves while carrying two AGM-114 HELLFIRE missiles
Sensor/Payload Capabilities				
Daylight				
Provide color, motion video with a National Imagery Interpretability Rating Scale (NIIRS) rating of 5.5 at 60,000 feet slant range	Provide color, motion video with a National Imagery Interpretability Rating Scale (NIIRS) rating of 5.5 at 60,000 feet slant range	Provide color, motion video with a National Imagery Interpretability Rating Scale (NIIRS) rating of 5.5 at 30,000 feet slant range	IOT&E measured performance of 6.2-exceeds threshold requirement.	5.5 at 30,000 feet slant range
Low-light/night				
Provide color, motion video with a National Imagery Interpretability Rating Scale (NIIRS) rating of 5.5 at 45,000 feet slant range	Provide color, motion video with a National Imagery Interpretability Rating Scale (NIIRS) rating of 5.5 at 45,000 feet slant range	Provide color, motion video with a National Imagery Interpretability Rating Scale (NIIRS) rating of 4.5 at 30,000 feet slant range	IOT&E measured performance of 4.6-exceeds threshold requirement.	4.5 at 45,000 feet slant range
Air-to-Surface Weapons				

Carriage/successful employment of a precision air-to-surface weapon compatible with aircraft carriage limits	Carriage/successful employment of a precision air-to-surface weapon compatible with aircraft carriage limits	Carriage/successful employment of a precision air-to-surface weapon compatible with aircraft carriage limits	Aircraft currently operates with two AGM-114 HELLFIRE missiles.	Carriage/successful employment of a precision air-to-surface weapon compatible with aircraft carriage limits
Transportation/Mobility Requirements				
Capable of being transported by C-130 (or equivilant) aircraft by either palletized or roll-on/roll-off capability	Capable of being transported by C-130 (or equivilant) aircraft by either palletized or roll-on/roll-off capability	Capable of being transported by C-130 (or equivilant) aircraft by either palletized or roll-on/roll-off capability	System has been transported by C-130 aircraft.	Capable of being transported by C-130 (or equivilant) aircraft by either palletized or roll-on/roll-off capability
Net Ready				
100 percent of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements in the Joint integrated architecture.	100 percent of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements in the Joint integrated architecture.	100 percent of interfaces; services; policy-enforcement controls; and data correct-ness, avail-ability and processing requirements designated as enterprise-level or critical in the Joint integrated architecture.	TBD	100 percent of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements designated as enterprise-level or critical in the Joint integrated architecture.

Requirements Reference

Capability Development Document for MQ-1 Predator Multi-role Remotely Piloted Aircraft System Increment 2, dated 5 July 2005.

Change Explanations

None

Notes

The Predator program office is working with the User to determine how to document Demonstrated Performance for the Net Ready Key Performance Paramater.

Acronyms and Abbreviations

DISA - Defense Information Systems Agency
IOT&E - Initial Operational Test and Evaluation
NIIRS - National Imagery Interpretability Rating Scale
NSA - National Security Agency

Track to Budget

General Notes

PE 0305205F shared between Predator and Reaper.

RDT&E

Appn	BA	PE
Air Force	3600	07	0305205F

Project	Name	
674755		(Shared)

Appn	BA	PE
Air Force	3600	07	0305219F

Project	Name
675143	5143 Predator

Procurement

Appn	BA	PE
Air Force	3010	04	0305154F

Line Item	Name
10PDTR	

Appn	BA	PE
Air Force	3010	04	0305205F

Line Item	Name	
10PDTR		(Shared)

Appn	BA	PE
Air Force	3010	04	0305219F

Line Item	Name
10PDTR	

Appn	BA	PE
Air Force	3010	05	0305219F

Line Item	Name
11PDTR	

Appn	BA	PE
Air Force	3020	02	0305219F

Line Item	Name
20PRDT	

MILCON

Appn	BA	PE
Air Force	3300	01	0305154F

Project	Name
ADA000	DARP

Appn	BA	PE
Air Force	3300	01	0207245F

Project	Name
ADT000	Predator UAV Operations

Appn	BA	PE
Air Force	3300	01	0305219F

Project	Name
ADT000	Predator UAV Operations

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2008 $M			BY 2008 $M	TY $M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	282.1	282.1	310.3	282.1	267.8	267.8	267.8
Procurement	2845.7	2845.7	3130.3	2847.2	2720.6	2720.6	2720.3
Flyaway	--	--	--	2467.7	--	--	2342.8
Recurring	--	--	--	2434.2	--	--	2307.8
Non Recurring	--	--	--	33.5	--	--	35.0
Support	--	--	--	379.5	--	--	377.5
Other Support	--	--	--	175.7	--	--	171.4
Initial Spares	--	--	--	203.8	--	--	206.1
MILCON	328.6	328.6	361.5	329.6	333.2	333.2	333.2
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	3456.4	3456.4	N/A	3458.9	3321.6	3321.6	3321.3

Cost Notes

Acquisition Costs represent the MQ-1B Block 15 Predator system with VORTEX (Video ORiented Tranceiver for EXchange of information).

The program office completed the latest estimate in November 2009. The estimate was quantified at a 90% confidence level.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	248	248	248
Total	248	248	248

Quantity Notes

Procurement quantity is the number of Predator aircraft. Ground Control Station (GCS) and other equipment costs are included, but not used as a unit of measure.

Cost and Funding

Funding Summary

Appropriation Summary									
FY 2011 President's Budget / December 2009 SAR (TY$ M)									
Appropriation	Prior	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
RDT&E	267.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	267.8
Procurement	2698.0	17.4	4.9	0.0	0.0	0.0	0.0	0.0	2720.3
MILCON	174.4	37.5	71.3	50.0	0.0	0.0	0.0	0.0	333.2
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2011 Total	3140.2	54.9	76.2	50.0	0.0	0.0	0.0	0.0	3321.3
	--	--	--	--	--	--	--	--	--

Quantity Summary										
FY 2011 President's Budget / December 2009 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	248	0	0	0	0	0	0	0	248
PB 2011 Total	0	248	0	0	0	0	0	0	0	248
	--	--	--	--	--	--	--	--	--	--

Cost and Funding

Annual Funding By Appropriation

Annual Funding 3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1998	--	--	--	--	--	--	13.4
1999	--	--	--	--	--	--	4.2
2000	--	--	--	--	--	--	4.8
2001	--	--	--	--	--	--	9.6
2002	--	--	--	--	--	--	14.0
2003	--	--	--	--	--	--	12.3
2004	--	--	--	--	--	--	21.2
2005	--	--	--	--	--	--	25.3
2006	--	--	--	--	--	--	44.0
2007	--	--	--	--	--	--	43.5
2008	--	--	--	--	--	--	36.9
2009	--	--	--	--	--	--	38.6
Subtotal	--	--	--	--	--	--	267.8

Annual Funding 3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	BY 2008 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1998	--	--	--	--	--	--	16.1
1999	--	--	--	--	--	--	5.0
2000	--	--	--	--	--	--	5.6
2001	--	--	--	--	--	--	11.1
2002	--	--	--	--	--	--	16.0
2003	--	--	--	--	--	--	13.8
2004	--	--	--	--	--	--	23.3
2005	--	--	--	--	--	--	27.1
2006	--	--	--	--	--	--	45.7
2007	--	--	--	--	--	--	44.0
2008	--	--	--	--	--	--	36.6
2009	--	--	--	--	--	--	37.8
Subtotal	--	--	--	--	--	--	282.1

$5.9M of the $14.0M (TY$) in FY 2002 was funded through the Defense Emergency Response Fund (DERF).

FY 2010 and beyond RDT&E costs are included in the Operating and Support Cost section.

Annual Funding 3010 | Procurement | Aircraft Procurement, Air Force							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	12	105.2	--	--	105.2	--	105.2
1998	18	135.2	--	--	135.2	--	135.2
1999	11	115.2	--	--	115.2	--	115.2
2000	8	57.1	--	--	57.1	--	57.1
2001	7	30.0	--	--	30.0	--	30.0
2002	24	198.1	--	--	198.1	16.2	214.3
2003	22	106.0	--	--	106.0	5.7	111.7
2004	10	121.8	--	--	121.8	22.9	144.7
2005	22	224.6	--	--	224.6	36.2	260.8
2006	24	142.6	--	--	142.6	21.2	163.8
2007	48	266.0	--	--	266.0	90.7	356.7
2008	24	212.2	--	--	212.2	129.3	341.5
2009	18	353.5	--	12.7	366.2	55.3	421.5
2010	--	--	--	17.4	17.4	--	17.4
2011	--	--	--	4.9	4.9	--	4.9
Subtotal	248	2067.5	--	35.0	2102.5	377.5	2480.0

Annual Funding 3010 | Procurement | Aircraft Procurement, Air Force							
Fiscal Year	Quantity	BY 2008 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	12	125.2	--	--	125.2	--	125.2
1998	18	159.8	--	--	159.8	--	159.8
1999	11	134.7	--	--	134.7	--	134.7
2000	8	65.7	--	--	65.7	--	65.7
2001	7	34.2	--	--	34.2	--	34.2
2002	24	223.2	--	--	223.2	18.2	241.4
2003	22	117.5	--	--	117.5	6.3	123.8
2004	10	131.5	--	--	131.5	24.7	156.2
2005	22	235.6	--	--	235.6	38.0	273.6
2006	24	145.8	--	--	145.8	21.6	167.4
2007	48	264.9	--	--	264.9	90.3	355.2
2008	24	208.1	--	--	208.1	126.9	335.0
2009	18	341.7	--	12.3	354.0	53.5	407.5
2010	--	--	--	16.6	16.6	--	16.6
2011	--	--	--	4.6	4.6	--	4.6
Subtotal	248	2187.9	--	33.5	2221.4	379.5	2600.9

FY 2010 and beyond, excluding encrypted data link requirements, are included in the Operating and Support Cost section.

Organic Depot Activation costs are not included.

Annual Funding 3020 | Procurement | Missile Procurement, Air Force							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2003	--	--	9.9	--	9.9	--	9.9
2004	--	--	14.5	--	14.5	--	14.5
2005	--	--	34.1	--	34.1	--	34.1
2006	--	--	37.7	--	37.7	--	37.7
2007	--	--	144.1	--	144.1	--	144.1
Subtotal	--	--	240.3	--	240.3	--	240.3

Annual Funding 3020 | Procurement | Missile Procurement, Air Force							
Fiscal Year	Quantity	BY 2008 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2003	--	--	11.0	--	11.0	--	11.0
2004	--	--	15.8	--	15.8	--	15.8
2005	--	--	36.1	--	36.1	--	36.1
2006	--	--	38.8	--	38.8	--	38.8
2007	--	--	144.6	--	144.6	--	144.6
Subtotal	--	--	246.3	--	246.3	--	246.3

The 3020 procurement was for HELLFIRE Missiles. There is no Procurement Quantity relationship to Predator aircraft.

Annual Funding 3300 | MILCON | Military Construction, Air Force	
Fiscal Year	**TY $M** **Total Program**
1999	15.0
2000	--
2001	--
2002	--
2003	--
2004	25.7
2005	26.1
2006	59.2
2007	48.4
2008	--
2009	--
2010	37.5
2011	71.3
2012	50.0
Subtotal	333.2

Annual Funding 3300 | MILCON | Military Construction, Air Force	
Fiscal Year	**BY 2008 $M**
	Total Program
1999	17.6
2000	--
2001	--
2002	--
2003	--
2004	27.5
2005	27.1
2006	60.0
2007	48.0
2008	--
2009	--
2010	35.9
2011	67.2
2012	46.3
Subtotal	329.6

Low Rate Initial Production

Predator did not have an LRIP phase.

Foreign Military Sales

None

Nuclear Costs

None

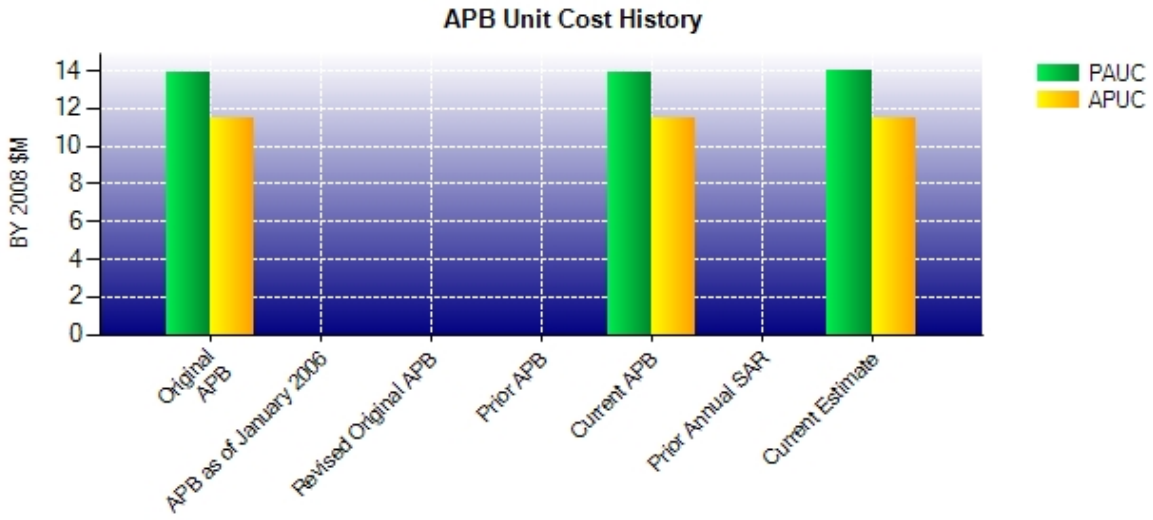
Unit Cost

Unit Cost Report

Item	BY 2008 $M Current UCR Baseline (Feb 2010 APB)	BY 2008 $M Current Estimate (Dec 2009 SAR)	% Change
Program Acquisition Unit Cost			
Cost	3456.4	3458.9	
Quantity	248	248	
Unit Cost	13.937	13.947	+0.07
Average Procurement Unit Cost			
Cost	2845.7	2847.2	
Quantity	248	248	
Unit Cost	11.475	11.481	+0.05

Item	BY 2008 $M Original UCR Baseline (Feb 2010 APB)	BY 2008 $M Current Estimate (Dec 2009 SAR)	% Change
Program Acquisition Unit Cost			
Cost	3456.4	3458.9	
Quantity	248	248	
Unit Cost	13.937	13.947	+0.07
Average Procurement Unit Cost			
Cost	2845.7	2847.2	
Quantity	248	248	
Unit Cost	11.475	11.481	+0.05

Unit Cost History



Item	Date	BY 2008 $M		TY $M	
		PAUC	APUC	PAUC	APUC
Original APB	Feb 2010	13.937	11.475	13.394	10.970
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	N/A	N/A	N/A	N/A	N/A
Current APB	Feb 2010	13.937	11.475	13.394	10.970
Prior Annual SAR	N/A	N/A	N/A	N/A	N/A
Current Estimate	Dec 2009	13.947	11.481	13.392	10.969

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)									
Initial PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
13.394	-0.012	0.000	0.000	0.000	0.008	0.000	0.002	-0.002	13.392

Current SAR Baseline to Current Estimate (TY $M)									
Initial APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
10.970	-0.007	0.000	0.000	0.000	0.004	0.000	0.002	-0.001	10.969

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	N/A	N/A	N/A
Milestone C	N/A	N/A	Aug 1997	Aug 1997
IOC	N/A	N/A	Mar 2005	Mar 2005
Total Cost (TY $M)	N/A	N/A	3321.6	3321.3
Total Quantity	N/A	N/A	248	248
PAUC	N/A	N/A	13.394	13.392

Note: IOC is equivalent to RAA.

Cost Variance

Summary TY $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Production Estimate)	267.8	2720.6	333.2	3321.6
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Current Changes				
Economic	--	-1.8	-1.0	-2.8
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	+1.0	+1.0	+2.0
Other	--	--	--	--
Support	--	+0.5	--	+0.5
Subtotal	--	-0.3	--	-0.3
Total Changes	--	-0.3	--	-0.3
Current Estimate	267.8	2720.3	333.2	3321.3

Summary BY 2008 $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Production Estimate)	282.1	2845.7	328.6	3456.4
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	+1.1	+1.0	+2.1
Other	--	--	--	--
Support	--	+0.4	--	+0.4
Subtotal	--	+1.5	+1.0	+2.5
Total Changes	--	+1.5	+1.0	+2.5
Current Estimate	282.1	2847.2	329.6	3458.9

Initial SAR - Above variances (if any) reflect changes since the SAR Baseline/APB.
SAR Baseline Reference: Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated February 18, 2010

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised FY10 escalation indices. (Economic)	N/A	-1.8
Adjustment for minor changes in FY10 escalation indices. (Estimating)	+1.5	+1.4
Minor changes due to estimate rounding and changes in allocation of funding . (Estimating)	-0.4	-0.4
Adjustment for current and prior escalation. (Support)	+0.3	+0.4
Increase in Other Support (Air Force). (Support)	+0.1	+0.2
Decrease in Initial Spares (Air Force). Minor reallocation between Initial Spares and Other Support. (Support)	0.0	-0.1
Procurement Subtotal	+1.5	-0.3

MILCON	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-1.0
Adjustment for current and prior escalation. (Estimating)	+0.2	+0.2
Minor changes due to new inflation indices (Estimating)	+0.8	+0.8
MILCON Subtotal	+1.0	0.0

Contracts

Contract Identification

Appropriation: Procurement
Contract Name: MD1A Dual Control Mobile Ground Control Station
Contractor: General Atomics Aeronautical Systems, Inc
Contractor Location: Poway, CA 92064-7103
Contract Number: F33657-02-G-4035/39
Contract Type: Cost Plus Fixed Fee (CPFF)
Award Date: June 03, 2005
Definitization Date: August 11, 2006

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
19.5	N/A	N/A	49.5	N/A	N/A	46.4	43.9

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/30/2009)	+4.7	-0.4
Previous Cumulative Variances	--	--
Net Change	+4.7	-0.4

Cost and Schedule Variance Explanations

General Contract Variance Explanation

The net favorable cost variance of $4.7M is due to less labor hours and material costs to build Ground Control Stations.

The net unfavorable schedule variance of $.4M is insignificant and is anticipated to be recovered by end of the contract.

Notes

Initial contract target price of $19.5M increased to $49.5M due to purchase of additional Ground Control Stations.

Contractor Earned Value Management System is undergoing validation by the Defense Contract Management Agency. The Program Office is evaluating recent communications with the contractor to assess the current performance, cost and schedule variances, remaining risks, and an estimate to complete.

Contract Identification

Appropriation: Procurement
Contract Name: Full Rate Production III
Contractor: General Atomics Aeronautical Systems, Inc
Contractor Location: Poway, CA 92064-7103
Contract Number: FA8620-05-G-3028/9
Contract Type: Firm Fixed Price (FFP)
Award Date: July 14, 2006
Definitization Date: September 22, 2006

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
22.4	N/A	7	65.2	N/A	22	65.2	65.2

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

Initial contract target price of $22.4M increased to $65.2M due to the purchase of 15 additional Predator aircraft.

Contract Identification

Appropriation: Procurement
Contract Name: Common Equipment Pre-Production
Contractor: General Atomics Aeronautical Systems, Inc
Contractor Location: Poway, CA 92064-7103
Contract Number: FA8620-05-G-3028/22
Contract Type: Cost Plus Fixed Fee (CPFF), Firm Fixed Price (FFP)
Award Date: September 22, 2006
Definitization Date: September 29, 2007

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
27.6	27.6	N/A	73.0	73.0	N/A	70.3	70.9

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/30/2009)	+1.1	+1.2
Previous Cumulative Variances	--	--
Net Change	+1.1	+1.2

Cost and Schedule Variance Explanations

General Contract Variance Explanation

The net favorable cost variance of $1.1M is due to less labor hours and material costs to build Ground Control Stations.

The net favorable schedule variance of $1.2M is due to delivering hardware earlier than planned.

Notes

Initial target price of $27.6M increased to $73.0M due to purchase of additional Ground Control Stations.

Contractor Earned Value Management System is undergoing validation by the Defense Contract Management Agency. The Program Office is evaluating recent communications with the contractor to assess the current performance, cost and schedule variances, remaining risks, and an estimate to complete.

Contract Identification

Appropriation: Procurement
Contract Name: Full Rate Production IV
Contractor: General Atomics Aeronautical Systems, Inc
Contractor Location: Poway, CA 92064-7103
Contract Number: FA8620-05-G-3028/27
Contract Type: Firm Fixed Price (FFP)
Award Date: September 07, 2007
Definitization Date: September 07, 2007

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
130.6	N/A	46	130.6	N/A	46	130.6	130.6

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Contract Identification

Appropriation: Procurement
Contract Name: FY07 GWOT Common Equipment
Contractor: General Atomics Aeronautical Systems, Inc
Contractor Location: Poway, CA 92064-7103
Contract Number: FA8620-05-G-3028/36
Contract Type: Cost Plus Fixed Fee (CPFF), Firm Fixed Price (FFP)
Award Date: October 30, 2007
Definitization Date: September 30, 2008

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
59.5	59.5	N/A	109.9	109.9	N/A	109.3	109.2

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/30/2009)	+0.6	-0.4
Previous Cumulative Variances	--	--
Net Change	+0.6	-0.4

Cost and Schedule Variance Explanations

General Contract Variance Explanation

The net favorable cost variance $.6M is due to less labor hours and material costs to build Ground Control Stations.

The net unfavorable schedule variance of $.4M is insignificant and is anticipated to be recovered by the end of the contract.

Notes

Initial target price of $59.5M increased to $109.9M due to purchase of additional Ground Control Stations.

Contractor Earned Value Management System is undergoing validation by the Defense Contract Management Agency. The Program Office is evaluating recent communications with the contractor to assess the current performance, cost and schedule variances, remaining risks, and an estimate to complete.

Contract Identification

Appropriation: Procurement
Contract Name: Full Rate Production V
Contractor: General Atomics Aeronautical Systems, Inc
Contractor Location: Poway, CA 92064-7103
Contract Number: FA8620-05-G-3028/42
Contract Type: Firm Fixed Price (FFP)
Award Date: March 31, 2008
Definitization Date: March 31, 2008

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
49.9	N/A	24	161.6	N/A	44	161.6	161.6

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

Initial target price of $49.9M increased to $161.6M due to purchase of initial spares, support equipment, and an additional 20 Predator aircraft.

Deliveries and Expenditures

Deliveries				
Delivered to Date	**Planned to Date**	**Actual to Date**	**Total Quantity**	**Percent Delivered**
Development	0	0	0	--
Production	216	216	248	87.10%
Total Program Quantity Delivered	216	216	248	87.10%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	3321.3	Years Appropriated	14
Expended to Date	2098.3	Percent Years Appropriated	87.50%
Percent Expended	63.18%	Appropriated to Date	3195.1
Total Funding Years	16	Percent Appropriated	96.20%

Operating and Support Cost

Assumptions and Ground Rules

The Program Office estimate is dated November 2009.

There is no antecedent program for Predator.

The O&S estimate includes all CAIG elements – Unit Personnel, Unit Operations, Maintenance, Sustaining Support, Continuing System Improvements, and Indirect Support. The Predator has been flying operations since 1997. Historical costs are the primary basis of estimate (BOE), and utilize monthly Contractor Logistics Support (CLS) cost reports, Air Force Total Ownership Cost (AFTOC) actuals, and other data sources. Future costs are based on flying hour projects, manpower projections, the number of operating locations, and applicable rates and factors. Flying hours are based on the number of anticipated Combat Air Patrols (CAPs). Air Combat Command (ACC) defines a rate of 7,300 flying hours per year per CAP. Per ACC, the attrition rate is one aircraft loss per 18,000 flying hours. It is assumed that the entire force structure will be transitioned to the Air National Guard / Air Force Reserve or retired by FY 2022.

Unit Personnel costs are derived using the AFTOC database to determine an average cost per flying hour for operations, maintenance, and support personnel. Unit Operations cost factors include fuel, training munitions, and TDY costs. Maintenance costs include Operational-level (O-level), Depot-level (D-level), and Government Furnished Equipment (GFE) repair. Sustaining Support is derived from actual costs from previous years captured from AFTOC database, and converted to a cost per flying hour. Continuing System Improvements costs are based on Reliability & Maintainability (R&M) Enhancements and Software Maintenance covered on the CLS contract. Indirect Support costs are based on factors from Air Force Instruction (AFI) 65-503 table A56-1, which were applied against required manpower provided by ACC/A8Q.

The O&S cost estimate is based on 248 Aircraft.

Total estimated flying hours for Predator is 2.6M (million) over the program life cycle.

Procurement retrofit dollars (excluding encrypted data link requirements) and RDT&E funding FY 2010-2022 included in "other" category in the Operating and Support Cost Section.

Cost Estimate Reference:
None

Sustainment Strategy:
None
Antecedent Information:
None

Unitized O&S Costs BY2008 $K		
Cost Element	**PREDATOR Avg Cost Per Flying Hour**	**No Antecedent (Antecedent)**
Mission Pay & Allowance	0.725	--
Unit Level Consumption	0.123	--
Intermediate Maintenance	0.183	--
Depot Maintenance	0.005	--
Contractor Support	1.077	--
Sustaining Support	0.132	--
Indirect	0.211	--
Other	0.580	--
Total	3.036	--

Unitized Cost Comments:
None

Item	Total O&S Cost $M			
	PREDATOR			No Antecedent (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	8205.0	9025.5	7899.7	N/A
Then Year	8999.3	N/A	8559.9	N/A

Total O&S Cost Comment
None

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

Disposal/Demilitarization Total Cost (BY 2008 $M):