



Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-252



RQ-4A/B Global Hawk Unmanned Aircraft System (RQ-4A/B Global Hawk)

As of FY 2011 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations for MDAP Programs	3
Program Information	5
Responsible Office	5
References	5
Mission and Description	6
Executive Summary	7
Threshold Breaches	9
Schedule	10
Performance	13
Track to Budget	16
Cost and Funding	17
Low Rate Initial Production	28
Foreign Military Sales	29
Nuclear Costs	29
Unit Cost	30
Cost Variance	33
Contracts	37
Deliveries and Expenditures	42
Operating and Support Cost	43

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

Global Hawk (RQ-4 A/B) (Global Hawk)

DoD Component

AirForce

Responsible Office

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Date Assigned: March 17, 2008

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 6, 2001

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 23, 2007

Mission and Description

The Global Hawk system is a high altitude, long endurance, Unmanned Aircraft System (UAS) with an integrated sensor suite and ground segment that provides Intelligence, Surveillance, and Reconnaissance (ISR) capabilities to joint warfighters. The system provides high-resolution, high-quality, digital Synthetic Aperture Radar (SAR) to include Ground Moving Target Indicator, plus Electro-Optical (EO), and medium wave Infrared (IR) imagery of targets and other critical areas of interest. The current program profile consists of: Block 10 which carries up to a 2,000-lb payload featuring a basic Integrated Sensor Suite with EO/IR and SAR and the Block 20, 30, and 40 aircraft which are larger and capable of carrying up to a 3,000-lb payload. The Block 20 is designed to be Image Intelligence only and carries an Enhanced Integrated Sensor Suite (EISS) that is designed for increased performance range and location accuracy over the Block 10 payload. Block 30 adds the Airborne Signals Intelligence Payload that brings Signals Intelligence capability. Block 40 incorporates the Multi-Platform Radar Technology Insertion Program Radar as its only sensor.

Executive Summary

Acquisition Program Baseline (APB) Breach - On February 2, 2009, the Program Manager submitted a Program Deviation Report (PDR) notifying Air Force of a Global Hawk (GH) APB schedule breach. This breach impacted the Block 20/30 Initial Operational Test & Evaluation (IOT&E) - Start/Complete, Full Rate Production Decision Review, Block 40 IOT&E – Start/Complete and Block 40 Full Rate Production Decision Review dates. Primary factors were: Development Testing (DT) discoveries, concurrent multi-block development and production testing, test resource constraints and weather cancellations. The program office conducted an extensive re-planning effort that not only incorporated previous actions to preserve schedule (additional flight test resources, Air Combat Command flight test support and an in-depth assessment of test points required) but also relooked at assumptions involving schedule drivers, event durations (based on past performance) and the interrelationships between individual schedule events. The results were incorporated into the Integrated Master Schedule and briefed at the Spring 2009 Defense Acquisition Board (DAB).

FY 2011 President's Budget (PB) Unit Cost Increase - Based on the FY 2011 PB, the increase in the Average Procurement Unit Cost is 11.07%, exceeding the 10% threshold for Acquisition Program Baseline cost breach. The major driver of the increase is the addition of 23 aircraft based on refinement of the GH mission and required attrition aircraft (accounts for ~64% of the increase). The aircraft quantity increase was primarily the more expensive Block 30 multi-intelligence (multi-INT) system. The second major driver (~15% of the increase) was additional spares to support increased Combat Air Patrols and flying hours. A PDR is currently being staffed.

Block 20 Mishap - On May 28, 2009, a Block 20 aircraft #2016 (AF-9) experienced an in-flight emergency for a flight control malfunction during a DT flight. A Safety Investigation Board was appointed and all flight testing suspended until the board completed its investigation. On September 9, 2009 the program returned to flight with a 9.5 hour mission utilizing new actuators which performed as expected.

Airworthiness Certification - The Global Hawk Program Manager signed the Airworthiness Certificate for the Block 20/30i production aircraft on October 26, 2009.

Board Area Maritime Surveillance (BAMS) Unmanned Aircraft System (UAS) Synergy - The Navy and the Air Force signed a Memorandum of Agreement (MOA) on August 28, 2008 stating their intent to explore synergetic areas for continuing development. To date, the programs have identified: production, ground station re-architecture, communication links, and airframe as potential candidates. Subsequently, the BAMS UAS and GH program managers provided regular briefings to the Joint Staff concerning synergy progress.

Battlefield Airborne Communications Node (BACN) - On May 28, 2009, the Deputy Secretary of Defense directed the acceleration of two BACN payloads onto GH Block 20 aircraft to support Joint Urgent Operational Need 336. A Memorandum of Agreement between Aeronautical Systems Center and Electronic Systems Center (ESC), to execute the BACN effort, was signed and working groups established. Currently, the GH program office has transferred two Block 20 aircraft to ESC for modification to the BACN configuration. To reduce risk during testing, Northrop Grumman was asked to accelerate the second GH based on the early delivery. Incorporation of this highly important mission impacts the Block 40 development test schedule by approximately four months.

Haiti Relief Support - Global Hawk team continues to support Haitian relief efforts with additional Global Hawk missions from Patuxent River Naval Air Station. The system flew six missions over Haiti earning praise from Southern Command.

Program Accomplishments:

Overseas Contingency Operations (OCO) - Accumulated over 29,000 combat hours in support of OCO

Delivered eleven Global Hawk aircraft during 2008-2009

March 22, 2008 - Established unofficial world endurance record for Unmanned Air Vehicles (33.1 hours)

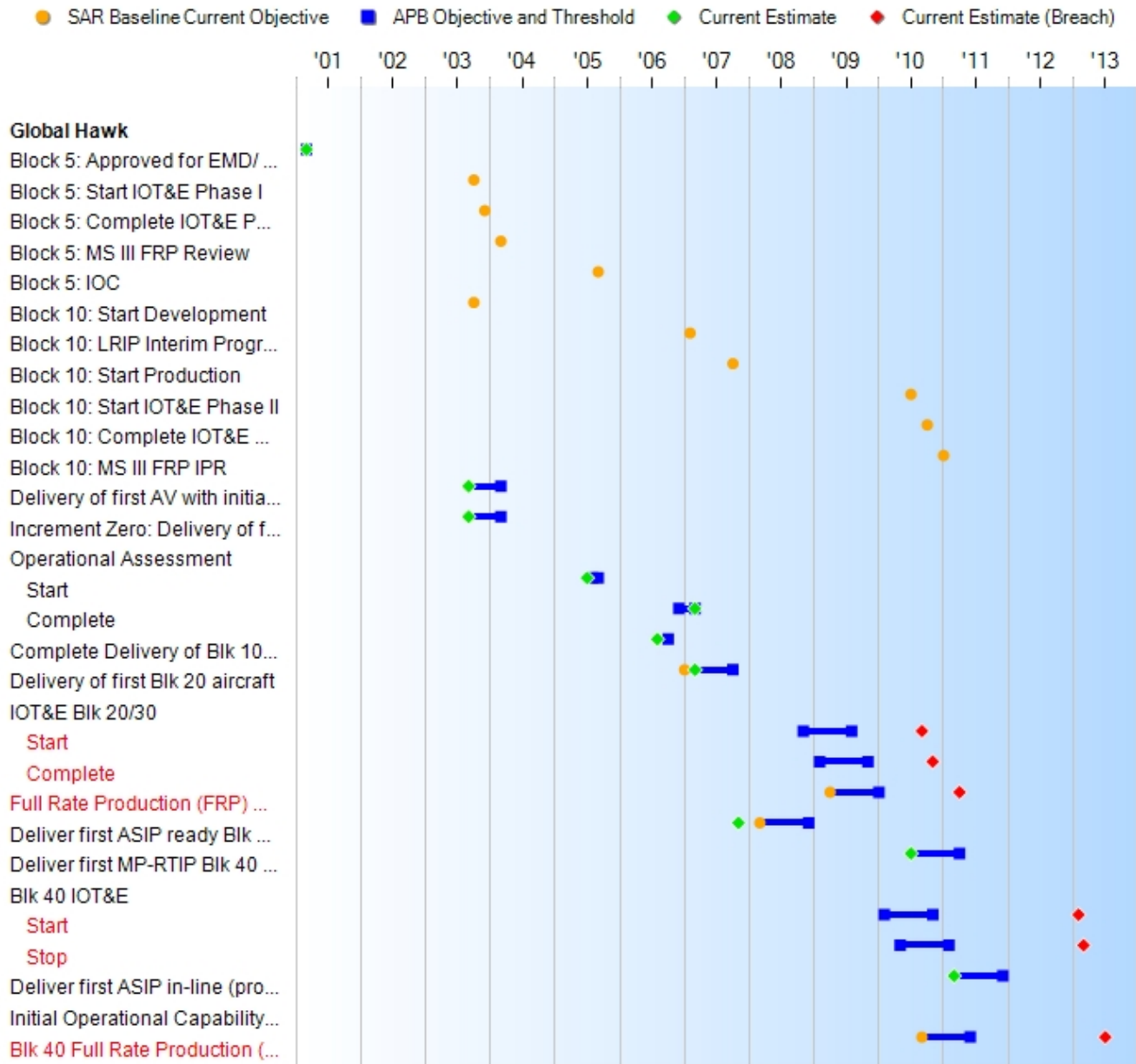
On March 31, 2008 Mr. Steven B. Amburgey assumed directorship of the Global Hawk program with Col Robert K. Barry assuming the duties of Deputy Director on June 7, 2009

Software Issues - On track to meet Block 20/30 IOT&E. At this time there are no significant software issues

Threshold Breaches

APB Breaches		Explanation of Breach
Schedule	<input checked="" type="checkbox"/>	<p>Acquisition Program Baseline (APB) Schedule Breach - On February 2, 2009, the Program Manager submitted a Program Deviation Report (PDR) notifying Air Force of a Global Hawk (GH) APB schedule breach. This breach impacted the Block 20/30 Initial Operational Test & Evaluation (IOT&E) - Start/Complete, Full Rate Production Decision Review, Block 40 IOT&E – Start/Complete and Block 40 Full Rate Production Decision Review dates. Primary factors were: Development Testing (DT) discoveries, concurrent multi-block development and production testing, test resource constraints and weather cancellations. The program office conducted an extensive re-planning effort that not only incorporated previous actions to preserve schedule (additional flight test resources, Air Combat Command flight test support and an in-depth assessment of test points required) but also relooked at assumptions involving schedule drivers, event durations (based on past performance) and the interrelationships between individual schedule events. The results were incorporated into the Integrated Master Schedule and briefed at the Spring 2009 Defense Acquisition Board (DAB).</p> <p>FY 2011 President's Budget (PB) APB Procurement Cost Breach - Based on the FY 2011 PB, the total Procurement cost exceeds the 10% APB procurement cost breach threshold. The major driver of the increase is the addition of 23 aircraft based on the refinement of the GH mission and required attrition aircraft.</p> <p>FY 2011 PB APB Unit Cost Breach - Based on the FY 2011 PB, the increase in the Average Procurement Unit Cost (APUC) is 11.02%, exceeding the 10% APB unit cost breach threshold. The major driver of the APUC increase is the addition of 23 aircraft based on refinement of the GH mission and required attrition aircraft (accounts for ~64% of the increase). The aircraft quantity increase was primarily the more expensive Block 30 multi-intelligence system. The second major driver (~15% of the increase) was additional spares to support increased Combat Air Patrols and flying hours.</p>
Performance	<input type="checkbox"/>	
Cost	<input type="checkbox"/>	
RDT&E	<input type="checkbox"/>	
Procurement	<input checked="" type="checkbox"/>	
MILCON	<input type="checkbox"/>	
Acq O&M	<input type="checkbox"/>	
O&S Cost	<input type="checkbox"/>	
Unit Cost	<input type="checkbox"/>	
PAUC	<input type="checkbox"/>	
APUC	<input checked="" type="checkbox"/>	
Nunn-McCurdy Breaches		
Current UCR Baseline		
PAUC	None	
APUC	None	
Original UCR Baseline		
PAUC	None	
APUC	None	

Schedule



Schedule Events				
Events	SAR Baseline Development Estimate	Current APB Development Objective/Threshold		Current Estimate
Block 5: Approved for EMD/ LRIP	Feb 2001	Mar 2001	Mar 2001	Mar 2001
Block 5: Start IOT&E Phase I	Oct 2003	N/A	N/A	N/A
Block 5: Complete IOT&E Phase I	Dec 2003	N/A	N/A	N/A
Block 5: MS III FRP Review	Mar 2004	N/A	N/A	N/A
Block 5: IOC	Sep 2005	N/A	N/A	N/A
Block 10: Start Development	Oct 2003	N/A	N/A	N/A
Block 10: LRIP Interim Program Review (IPR)	Feb 2007	N/A	N/A	N/A
Block 10: Start Production	Oct 2007	N/A	N/A	N/A
Block 10: Start IOT&E Phase II	Jul 2010	N/A	N/A	N/A
Block 10: Complete IOT&E Phase II	Oct 2010	N/A	N/A	N/A
Block 10: MS III FRP IPR	Jan 2011	N/A	N/A	N/A
Delivery of first AV with initial Spiral 1 capability	N/A	Sep 2003	Mar 2004	Sep 2003
Increment Zero: Delivery of first AV with initial Spiral 1 capability	N/A	Sep 2003	Mar 2004	Sep 2003
Operational Assessment				
Start	N/A	Aug 2005	Sep 2005	Jul 2005
Complete	N/A	Dec 2006	Mar 2007	Mar 2007
Complete Delivery of Blk 10 aircraft	N/A	Aug 2006	Oct 2006	Aug 2006
Delivery of first Blk 20 aircraft	N/A	Jan 2007	Oct 2007	Mar 2007
IOT&E Blk 20/30				
Start	N/A	Nov 2008	Aug 2009	Sep 2010¹ (Ch-1)
Complete	N/A	Feb 2009	Nov 2009	Nov 2010¹ (Ch-1)
Full Rate Production (FRP) Decision Review (DR)	N/A	Apr 2009	Jan 2010	Apr 2011¹ (Ch-1)
Deliver first ASIP ready Blk 30 aircraft	N/A	Mar 2008	Dec 2008	Nov 2007
Deliver first MP-RTIP Blk 40 aircraft	N/A	Jul 2010	Apr 2011	Jul 2010
Blk 40 IOT&E				
Start	N/A	Feb 2010	Nov 2010	Feb 2013¹ (Ch-1)
Stop	N/A	May 2010	Feb 2011	Mar 2013¹ (Ch-1)
Deliver first ASIP in-line (production) Blk 30 aircraft	N/A	Mar 2011	Dec 2011	Mar 2011
Initial Operational Capability (IOC)	N/A	TBD	TBD	TBD
Blk 40 Full Rate Production (FRP) Decision Review	N/A	Sep 2010	Jun 2011	Jul 2013¹ (Ch-1)

¹ APB Breach

Change Explanations

(Ch-1) Primary factors for the schedule changes listed below are Development Testing (DT) discoveries; concurrent multi-block development and production testing; test resource constraints and weather cancellations.

Block 20/30 Initial Operational Test & Evaluation (IOT&E) - Start (July 2009 to September 2010)

Block 20/30 IOT&E Complete (October 2009 to November 2010)

Full Rate Production Decision Review (December 2009 to April 2011)

Block 40 IOT&E – Start (February 2010 to February 2013)

Block 40 IOT&E Complete (May 2010 to March 2013)

Block 40 Full Rate Production Decision Review (September 2009 to July 2013)

Acronyms and Abbreviations

ASIP - Airborne Signals Intelligence Payload

AV - Air Vehicle (same as aircraft)

DR - Decision Review

EMD - Engineering and Manufacturing Development

FOC - Full Operational Capability

FRP - Full Rate Production

IOC - Initial Operational Capability

IOT&E - Initial Operational Test & Evaluation

IPR - Interim Program Review

LRIP - Low Rate Initial Production

MP-RTIP - Multi Platform Radar Technology Insertion Program

MS - Milestone

ORD - Operational Requirements Document

OT - Operational Test

SIGINT - Signals Intelligence

TBD - To Be Determined

Performance

Performance Characteristics				
SAR Baseline Development Estimate	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
Block 5: Endurance - Air Vehicle (AV)				
Should be capable of flying an enroute distance of 3000 NM, remaining on -station 24 hours, and recover at the launch base.	N/A	N/A	N/A	N/A
Block 5: Airspace Coordination - Global Hawk System				
The Global Hawk system must be sufficiently robust to allow world wide system employment in all classes of airspace.	N/A	N/A	N/A	N/A
Block 5: Mission Execution - Ground Station				
The ground station will allow UAV operators to perform NRT mission control, mission monitoring, and mission updates/ modifications to include dynamic platform and payload control and retasking.	N/A	N/A	N/A	N/A
Block 5: Information Exchange Requirements (IERS)				
100% of all top-level IERS.	N/A	N/A	N/A	N/A
Block 10: System Survivability - Air Vehicle (AV)				
The AV must be equipped to employ active counter measures against radar and IR-guided threats to the system as identified in the STAR.	N/A	N/A	N/A	N/A
Block 10: Mean Time Between Critical Failure (MTBCF)				
System MTBCF of 160 hours.	N/A	N/A	N/A	N/A
Block 10: Signal Intelligence (SIGINT)				

TBD	N/A	N/A	N/A	N/A
Endurance -- Aircraft (all Lots) KPP				
N/A	40 hours	The Global Hawk aircraft, in mission capable configuration, must have a minimum total endurance of 28 hours plus appropriate fuel reserves IAW Air Force Instructions.	28 hrs	31 hrs
Airspace Coordination -- Global Hawk System (All Lots) KPP				
N/A	The Global Hawk system must be sufficiently robust to allow world wide system employment in all classes of airspace	The Global Hawk system must be sufficiently robust to allow world wide system employment in all classes of airspace	Currently flying in all classes of airspace	Sufficiently robust to allow world wide system employment in all classes of airspace
Mission Execution --Ground Station KPP				
N/A	The Global Hawk ground station must allow operators to perform NRT mission control, mission monitoring, and mission updates/modifications to include dynamic platform and payload control and re-tasking.	The Global Hawk ground station must allow operators to perform NRT mission control, mission monitoring, and mission updates/modifications to include dynamic platform and payload control and re-tasking.	Demonstrated ability to control and retask aircraft	Currently working software to enhance the processes
Net Ready -All activity interfaces, services, policy-enforcement controls, and data-sharing of the NCOW-RM and GIG-KIPs will be satisfied to the requirements of the specific Joint Integrated Architecture products (including data correctness, data availability and data processing), and information assurance accreditation, specified in the threshold (T) and objective (O) values.				
N/A	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements in the Joint integrated architecture.	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements designated as enterprise -level or critical in the Joint integrated architecture.	Successfully exchanging data with multi-services IESs (Army)	Software in work to enhance time-lines
FY08 Information Exchange Requirements (IERs) KPP				
N/A	Satisfy 100% of all top-level IERs	Satisfy 100% of all top-level IERs designated critical.	Meeting all IERs required to date	Development work ongoing to improve useability and time-lines

Baseline SAR Spot Mode Capability (NIIRS X @ Km) KPP				
N/A	160 km at NIIRS 5	120 km at NIIRS 5	TBD	120 km at NIIRS5
Baseline EO Spot Mode (NIIRS X @ Km)				
N/A	80 km at NIIRS 5	40 km at NIIRS 5	TBD	40 km at NIIRS 5
Baseline IR Sport Mode (NIIRS X @ Km)				
N/A	40 km at NIIRS 5	30 km at NIIRS 5	TBD	30 km at NIIRS 5
Mission Planning /FY10				
N/A	8 hours	12 hours	TBD	12 hrs
Delivery of first aircraft with a multi-Intelligence (multi-Int) Capability				
N/A	Aircraft multi-Int capable	Aircraft multi-Int capable	TBD	Aircraft multi-Int capable. 1st aircraft (Block 30/40) in production.
Improved SAR Spot Mode Capability (NIIRS X @Km)				
N/A	185 Km at NIIRS 5	160 Km at NIIRS 5	TBD	160 km at NIIRS5
Improved EO Spot Mode (NIIRS X @ Km)KPP				
N/A	170 Km at NIIRS 5	80 Km at NIIRS 5	TBD	80 km at NIIRS 5
Improved IR Spot Mode (NIIRS x @ Km)KPP				
N/A	80 Km at NIIRS 5	50 Km at NIIRS 5	TBD	30 km at NIIRS 5
Effective Time on Station (ETOS)				
N/A	90%	85%	TBD	85%

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

Requirements Reference

Capability Development Document (CDD) for Global Hawk Remotely Piloted Aircraft (RPA) System Blocks 10/20/30/40 (Combat Air Forces (CAF) 353-92-C) dated July 28, 2006

Change Explanations

None

Track to Budget

RDT&E

Appn	BA	PE	Project	Name
Air Force	3600	07	0305205F	
			4755	Global Hawk HAEUAV/Predator (Shared) (Sunk)
Air Force	3600	07	0305220F	
			5144	Global Hawk HAEUAV

Procurement

Appn	BA	PE	Line Item	Name
Air Force	3010	04	0305220F	
			HAEUAV	(Air Force)
Air Force	3080	03	0305220F	
			HAEUAV	(Air Force)
Air Force	3010	05	0305220F	
			HAEUAV	(Air Force)

MILCON

Appn	BA	PE	Project	Name
Air Force	3300	01	0305205F	
				(Air Force) (Shared) (Sunk)
Air Force	3300	01	0305220F	
				(Air Force)

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2000 \$M			BY 2000 \$M	TY \$M		
	SAR Baseline Development Estimate	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Development Estimate	Current APB Development Objective	Current Estimate
RDT&E	840.4	3076.8	3384.5	3233.6	906.2	3572.0	3753.4
Procurement	3484.4	4904.9	5395.4	7764.5 ¹	4459.8	6022.6	9816.1
Flyaway	--	--	--	6502.4	--	--	8265.8
Recurring	--	--	--	6469.8	--	--	8225.0
Non Recurring	--	--	--	32.6	--	--	40.8
Support	--	--	--	1262.1	--	--	1550.3
Other Support	--	--	--	417.0	--	--	512.4
Initial Spares	--	--	--	845.1	--	--	1037.9
MILCON	25.5	121.9	134.1	119.0	28.0	139.8	138.8
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	4350.3	8103.6	N/A	11117.1	5394.0	9734.4	13708.3

¹ APB Breach

Total Quantity			
Quantity	SAR Baseline Development Estimate	Current APB Development	Current Estimate
RDT&E	0	0	0
Procurement	63	54	77
Total	63	54	77

Quantity Notes

Unit of measure is number of aircraft.

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	2386.7	243.4	218.0	197.0	168.5	154.3	156.9	228.6	3753.4
Procurement	3185.5	800.9	859.2	903.0	725.1	636.5	562.5	2143.4	9816.1
MILCON	107.5	31.3	0.0	0.0	0.0	0.0	0.0	0.0	138.8
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2011 Total	5679.7	1075.6	1077.2	1100.0	893.6	790.8	719.4	2372.0	13708.3
PB 2009 Total	5772.1	870.7	856.9	836.9	702.8	189.4	172.6	339.3	9740.7
Delta	-92.4	204.9	220.3	263.1	190.8	601.4	546.8	2032.7	3967.6

Funding Notes

Funding for the Multi Platform Radar Technology Insertion Program and Airborne Signals Intelligence Payload sensors depot activation is not included in this report.

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	34	4	4	5	5	5	4	16	77
PB 2011 Total	0	34	4	4	5	5	5	4	16	77
PB 2009 Total	0	34	5	5	5	5	0	0	0	54
Delta	0	0	-1	-1	0	0	5	4	16	23

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
2001	--	--	--	--	--	--	129.7
2002	--	--	--	--	--	--	213.0
2003	--	--	--	--	--	--	334.9
2004	--	--	--	--	--	--	356.2
2005	--	--	--	--	--	--	377.0
2006	--	--	--	--	--	--	257.7
2007	--	--	--	--	--	--	224.1
2008	--	--	--	--	--	--	265.5
2009	--	--	--	--	--	--	228.6
2010	--	--	--	--	--	--	243.4
2011	--	--	--	--	--	--	218.0
2012	--	--	--	--	--	--	197.0
2013	--	--	--	--	--	--	168.5
2014	--	--	--	--	--	--	154.3
2015	--	--	--	--	--	--	156.9
2016	--	--	--	--	--	--	114.2
2017	--	--	--	--	--	--	114.4
Subtotal	--	--	--	--	--	--	3753.4

Annual Funding 3600 RDT&E Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	BY 2000 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	--	--	--	--	--	--	126.8
2002	--	--	--	--	--	--	206.0
2003	--	--	--	--	--	--	319.6
2004	--	--	--	--	--	--	331.6
2005	--	--	--	--	--	--	342.2
2006	--	--	--	--	--	--	227.1
2007	--	--	--	--	--	--	192.4
2008	--	--	--	--	--	--	223.5
2009	--	--	--	--	--	--	190.0
2010	--	--	--	--	--	--	200.2
2011	--	--	--	--	--	--	177.0
2012	--	--	--	--	--	--	157.3
2013	--	--	--	--	--	--	132.3
2014	--	--	--	--	--	--	119.2
2015	--	--	--	--	--	--	119.1
2016	--	--	--	--	--	--	85.3
2017	--	--	--	--	--	--	84.0
Subtotal	--	--	--	--	--	--	3233.6

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
2001	--	21.0	--	--	21.0	--	21.0
2002	3	153.8	--	--	153.8	9.5	163.3
2003	3	143.9	--	5.3	149.2	31.9	181.1
2004	4	220.2	--	0.7	220.9	32.7	253.6
2005	4	302.6	--	--	302.6	56.5	359.1
2006	5	290.7	--	--	290.7	68.9	359.6
2007	5	343.3	7.5	--	350.8	99.3	450.1
2008	5	417.1	25.8	--	442.9	138.6	581.5
2009	5	543.7	103.7	10.0	657.4	156.3	813.7
2010	4	452.4	134.9	2.7	590.0	210.9	800.9
2011	4	429.2	119.4	3.3	551.9	307.3	859.2
2012	5	490.2	100.6	2.6	593.4	309.6	903.0
2013	5	584.4	56.6	2.6	643.6	81.5	725.1
2014	5	540.1	64.3	2.6	607.0	29.5	636.5
2015	4	479.9	65.5	2.7	548.1	14.4	562.5
2016	5	557.2	73.9	2.7	633.8	0.3	634.1
2017	5	546.1	64.1	2.8	613.0	0.3	613.3
2018	6	492.7	65.0	2.8	560.5	0.3	560.8
2019	--	--	89.8	--	89.8	--	89.8
2020	--	--	74.4	--	74.4	--	74.4
2021	--	--	47.2	--	47.2	--	47.2
2022	--	--	41.6	--	41.6	--	41.6
2023	--	--	26.2	--	26.2	--	26.2
2024	--	--	56.0	--	56.0	--	56.0
Subtotal	77	7008.5	1216.5	40.8	8265.8	1547.8	9813.6

Annual Funding 3010 Procurement Aircraft Procurement, Air Force							
Fiscal Year	Quantity	BY 2000 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	--	20.3	--	--	20.3	--	20.3
2002	3	147.0	--	--	147.0	9.1	156.1
2003	3	135.3	--	5.0	140.3	30.0	170.3
2004	4	201.8	--	0.6	202.4	30.0	232.4
2005	4	269.4	--	--	269.4	50.3	319.7
2006	5	252.2	--	--	252.2	59.7	311.9
2007	5	290.1	6.3	--	296.4	84.0	380.4
2008	5	347.2	21.5	--	368.7	115.4	484.1
2009	5	446.1	85.1	8.2	539.4	128.2	667.6
2010	4	365.6	109.0	2.2	476.8	170.4	647.2
2011	4	341.3	95.0	2.6	438.9	244.4	683.3
2012	5	383.3	78.7	2.0	464.0	242.1	706.1
2013	5	449.4	43.5	2.0	494.9	62.6	557.5
2014	5	408.4	48.5	2.0	458.9	22.3	481.2
2015	4	356.8	48.7	2.0	407.5	10.7	418.2
2016	5	407.3	54.0	2.0	463.3	0.2	463.5
2017	5	392.5	46.1	2.0	440.6	0.2	440.8
2018	6	348.2	46.0	2.0	396.2	0.2	396.4
2019	--	--	62.4	--	62.4	--	62.4
2020	--	--	50.8	--	50.8	--	50.8
2021	--	--	31.7	--	31.7	--	31.7
2022	--	--	27.5	--	27.5	--	27.5
2023	--	--	17.0	--	17.0	--	17.0
2024	--	--	35.8	--	35.8	--	35.8
Subtotal	77	5562.2	907.6	32.6	6502.4	1259.8	7762.2

Cost Quantity Information		
3010 Procurement Aircraft Procurement, Air Force		
Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned With Quantity) BY 2000 \$M
2001	--	--
2002	3	137.3
2003	3	128.9
2004	4	192.0
2005	4	262.3
2006	5	253.2
2007	5	287.7
2008	5	350.0
2009	5	454.4
2010	4	318.3
2011	4	340.8
2012	5	384.7
2013	5	450.6
2014	5	431.8
2015	4	358.8
2016	5	382.7
2017	5	386.2
2018	6	442.5
2019	--	--
2020	--	--
2021	--	--
2022	--	--
2023	--	--
2024	--	--
Subtotal	77	5562.2

Annual Funding									
3080 Procurement Other Procurement, Air Force									
Fiscal Year	Quantity	TY \$M						Total Support	Total Program
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway				
2003	--	--	--	--	--	--	0.6	0.6	
2004	--	--	--	--	--	--	0.2	0.2	
2005	--	--	--	--	--	--	0.3	0.3	
2006	--	--	--	--	--	--	0.3	0.3	
2007	--	--	--	--	--	--	--	--	
2008	--	--	--	--	--	--	0.8	0.8	
2009	--	--	--	--	--	--	0.3	0.3	
Subtotal	--	--	--	--	--	--	2.5	2.5	

Annual Funding 3080 Procurement Other Procurement, Air Force							
Fiscal Year	Quantity	BY 2000 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2003	--	--	--	--	--	0.6	0.6
2004	--	--	--	--	--	0.2	0.2
2005	--	--	--	--	--	0.3	0.3
2006	--	--	--	--	--	0.3	0.3
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	0.7	0.7
2009	--	--	--	--	--	0.2	0.2
Subtotal	--	--	--	--	--	2.3	2.3

Annual Funding 3300 MILCON Military Construction, Air Force	
Fiscal Year	TY \$M
	Total Program
2003	11.7
2004	22.3
2005	9.9
2006	14.1
2007	49.5
2008	--
2009	--
2010	31.3
Subtotal	138.8

Annual Funding 3300 MILCON Military Construction, Air Force	
Fiscal Year	BY 2000 \$M
	Total Program
2003	10.9
2004	20.2
2005	8.7
2006	12.1
2007	41.7
2008	--
2009	--
2010	25.4
Subtotal	119.0

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	3/6/2001	6/12/2009
Approved Quantity	6	34
Reference	ADM	ADM
Start Year	2001	2001
End Year	2004	2012

The FY 2011 President's Budget changed the Global Hawk (GH) procurement baseline to include 77 aircraft and associated Ground Stations (10 Launch & Recovery Elements (LRE) and 10 Mission Control Elements (MCE)). The March 2001 Acquisition Decision Memorandum (ADM) established Low Rate Initial Production (LRIP) quantities of six aircraft and two MCE/LRE. The LRIP aircraft quantity was limited to five per year in the June 2006 ADM. The May 2007 ADM approved LRIP procurement for Lot 6. LRIP will continue until successful completion of Block 20/30 Initial Operational Test & Evaluation and a Full Rate Production Decision. With the June 2009 ADM approving the Lot 8 buy, the LRIP quantity now stands at 34 aircraft. The total LRIP quantity exceeds 10% of the expected program buy. The small GH fleet size (77) exaggerates the effects of the 10% boundary.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Description
Germany	1/31/2007	0	30.3	This case does not include aircraft or ground stations which are being procured by direct sales from Northrop Grumman. This case includes Government Furnished Equipment (GFE), support equipment, Joint Mission Planning software, technical data, Time Compliance Technical Orders, technical support, flight testing, GFE repair and training.

Notes

The German Government requested to purchase a Euro Hawk system to replace their current signals intelligence (SIGINT) system. This Euro Hawk system is a modified RQ-4B Global Hawk to accommodate a European Aeronautic Defence and Space Company developed SIGINT payload. The Letter of Offer & Acceptance (LOA) was received on January 30, 2007. The LOA provides support for classified items, training, flight testing, and other requirements from the US Government through a Foreign Military Sales case. The German Government will not be purchasing any US sensors for integration on the aircraft. The Euro Hawk rollout ceremony took place on October 8, 2009 with the ferry flight from Palmdale to Edwards Air Force Base (AFB) on December 18, 2009. The ferry flight from Edwards AFB to Manching, Germany is scheduled for December 2010.

Nuclear Costs

None

Unit Cost

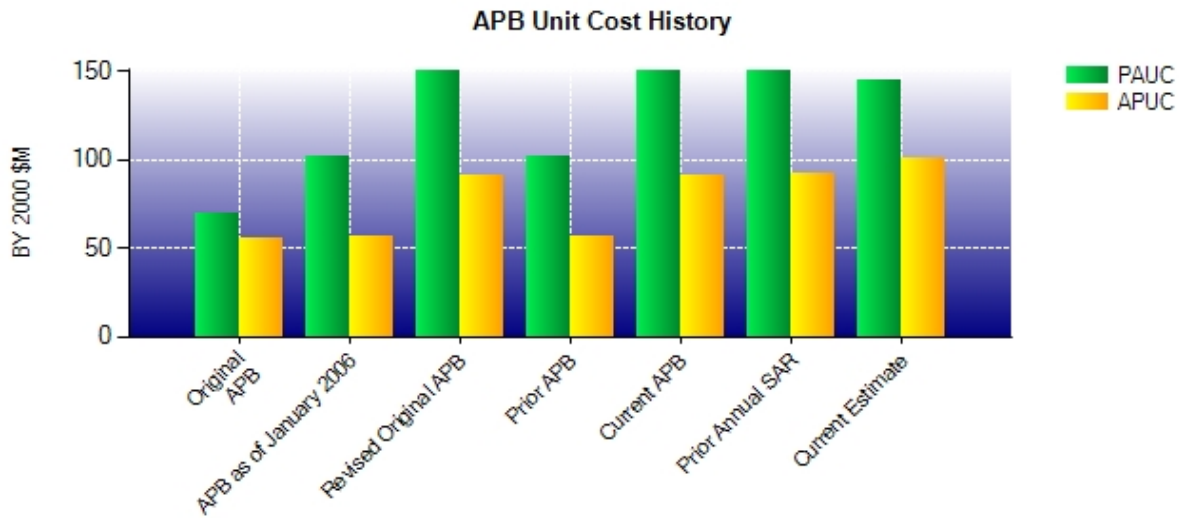
Unit Cost Report

Item	BY 2000 \$M	BY 2000 \$M	% Change
	Current UCR Baseline (Mar 2007 APB)	Current Estimate (Dec 2009 SAR)	
Program Acquisition Unit Cost			
Cost	8103.6	11117.1	
Quantity	54	77	
Unit Cost	150.067	144.378	-3.79
Average Procurement Unit Cost			
Cost	4904.9	7764.5	
Quantity	54	77	
Unit Cost	90.831	100.838¹	+11.02

Item	BY 2000 \$M	BY 2000 \$M	% Change
	Revised Original UCR Baseline (Mar 2007 APB)	Current Estimate (Dec 2009 SAR)	
Program Acquisition Unit Cost			
Cost	8103.6	11117.1	
Quantity	54	77	
Unit Cost	150.067	144.378	-3.79
Average Procurement Unit Cost			
Cost	4904.9	7764.5	
Quantity	54	77	
Unit Cost	90.831	100.838	+11.02

¹ APB Unit Cost Breach

Unit Cost History



Item	Date	BY 2000 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Mar 2001	69.052	55.308	85.619	70.790
APB as of January 2006	Dec 2002	101.896	56.953	115.459	65.673
Revised Original APB	Mar 2007	150.067	90.831	180.267	111.530
Prior APB	Dec 2002	101.896	56.953	115.459	65.673
Current APB	Mar 2007	150.067	90.831	180.267	111.530
Prior Annual SAR	Dec 2007	150.035	91.724	180.383	112.870
Current Estimate	Dec 2009	144.378	100.838	178.030	127.482

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY \$M)									
Initial PAUC Development Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
85.619	-0.875	-2.114	-14.455	60.679	32.503	0.000	16.673	92.411	178.030

Current SAR Baseline to Current Estimate (TY \$M)									
Initial APUC Development Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
70.790	-0.943	0.583	-21.565	38.201	26.173	0.000	14.243	56.692	127.482

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone I	N/A	N/A	N/A	N/A
Milestone II	N/A	Feb 2001	N/A	Mar 2001
Milestone III	N/A	N/A	N/A	N/A
IOC	N/A	N/A	N/A	TBD
Total Cost (TY \$M)	N/A	5394.0	N/A	13708.3
Total Quantity	N/A	63	N/A	77
PAUC	N/A	85.619	N/A	178.030

The Global Hawk Full Rate Production Decision Review, previously a Milestone III decision, is currently projected to occur in April 2011.

Cost Variance

Summary TY \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Development Estimate)	906.2	4459.8	28.0	5394.0
Previous Changes				
Economic	+29.7	+5.1	+3.2	+38.0
Quantity	--	-486.9	--	-486.9
Schedule	+478.4	-1243.2	-8.1	-772.9
Engineering	+1613.8	+1853.4	+117.0	+3584.2
Estimating	+326.0	+973.5	-35.6	+1263.9
Other	--	--	--	--
Support	+184.1	+533.3	+3.0	+720.4
Subtotal	+2632.0	+1635.2	+79.5	+4346.7
Current Changes				
Economic	-27.8	-77.7	+0.1	-105.4
Quantity	--	+1522.8	--	+1522.8
Schedule	+77.2	-417.3	--	-340.1
Engineering	--	+1088.1	--	+1088.1
Estimating	+165.8	+1041.8	+31.2	+1238.8
Other	--	--	--	--
Support	--	+563.4	--	+563.4
Subtotal	+215.2	+3721.1	+31.3	+3967.6
Adjustments	--	--	--	--
Total Changes	+2847.2	+5356.3	+110.8	+8314.3
Current Estimate	3753.4	9816.1	138.8	13708.3

Summary BY 2000 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Development Estimate)	840.4	3484.4	25.5	4350.3
Previous Changes				
Economic	--	--	--	--
Quantity	--	-321.6	--	-321.6
Schedule	+368.0	-894.8	-2.1	-528.9
Engineering	+1444.8	+1509.3	+98.3	+3052.4
Estimating	+247.1	+754.4	-30.5	+971.0
Other	--	--	--	--
Support	+154.8	+421.4	+2.5	+578.7
Subtotal	+2214.7	+1468.7	+68.2	+3751.6
Current Changes				
Economic	--	--	--	--
Quantity	--	+1107.1	--	+1107.1
Schedule	+46.4	-310.9	--	-264.5
Engineering	--	+788.8	--	+788.8
Estimating	+132.1	+783.6	+25.3	+941.0
Other	--	--	--	--
Support	--	+442.8	--	+442.8
Subtotal	+178.5	+2811.4	+25.3	+3015.2
Adjustments	--	--	--	--
Total Changes	+2393.2	+4280.1	+93.5	+6766.8
Current Estimate	3233.6	7764.5	119.0	11117.1

Previous Estimate: December 2007

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-27.8
Increase due to IOT&E slip of approximately one year (Schedule)	+46.4	+77.2
Adjustment for current and prior escalation. (Estimating)	+3.9	+4.7
Program reductions for higher Air Force priorities (Estimating)	-7.7	-9.2
Increase due to refinement of program estimates for Ground Station Re-architecture and Radar Technology Insertion Program (RTIP) sensor integration (Estimating)	+135.9	+170.3
RDT&E Subtotal	+178.5	+215.2

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-77.7
Increase due to buying three aircraft later than originally planned. Planned aircraft buys in FY 2010, FY 2011 and FY 2015 were each reduced by one aircraft and the three aircraft were rescheduled to be bought in FY 2018 (Air Force) (Schedule)	0.0	+10.7
Total Quantity variance resulting from an increase of 23 aircraft from 54 to 77 (Air Force). (Subtotal)	+1728.9	+2378.8
Quantity variance resulting from an increase of 23 aircraft from 54 to 77 (Air Force). (Quantity)	(+1107.1)	(+1522.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+321.1)	(+442.1)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+611.6)	(+841.9)
Allocation to Schedule resulting from Quantity change (Schedule) (QR)	(-310.9)	(-428.0)
Increase associated with changed technical definitions for Family of Airborne Terminals, Joint Tactical Radio System, and Ground Segment Re-architecture (Engineering)	+177.2	+246.2
Adjustment for current and prior escalation. (Support)	+4.0	+5.0
Increase in Other Support (Air Force) driven primarily by the addition of calibration support for the Advanced Signals Intelligence Payload and added peculiar support equipment due to increase in planned Combat Air Patrols from 6 to 9. (Support)	+27.0	+41.0
Increase in Initial Spares (Air Force) driven primarily by increase in planned Combat Air Patrols (from 6 to 9) (Support)	+411.5	+517.2
Adjustment for current and prior escalation. (Estimating)	+14.0	+17.2
Increase due to refinement of program estimates for Radar Technology Insertion Program, Airborne Signal Intelligence Payload, and increased risk funds to improve program confidence interval (Estimating)	+448.8	+582.7
Correction to align support and flyaway. (Subtotal)	0.0	0.0
(Estimating)	(-0.3)	(-0.2)
(Support)	(+0.3)	(+0.2)
Procurement Subtotal	+2811.4	+3721.1

(QR) Quantity Related

MILCON	\$M	
--------	-----	--

Current Change Explanations	Base Year	Then Year
Revised escalation indices (Economic)	N/A	+0.1
Adjustment for current and prior escalation (Estimating)	0.0	-0.1
Addition of combined maintenance & operations facility for European Command (EUCOM) forward operating location (Estimating)	+25.3	+31.3
<hr/> MILCON Subtotal	+25.3	+31.3

Contracts

Contract Identification

Appropriation: RDT&E
Contract Name: Global Hawk EMD
Contractor: Northrop Grumman
Contractor Location: San Diego, CA 92150-9066
Contract Number: F33657-01-C-4600
Contract Type: Cost Plus Award Fee (CPAF)
Award Date: March 15, 2001
Definitization Date: January 22, 2002

Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
41.5	N/A	0	1601.3	N/A	0	1594.8	1601.3

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 (12/31/2009)	-21.2	-15.3
Previous Cumulative Variances	+6.0	-14.7
Net Change	-27.2	-0.6

Cost and Schedule Variance Explanations

General Contract Variance Explanation

The net unfavorable changes in cost and schedule variance are primarily attributed to rework as a result of Development Testing discoveries and flight test delays.

Notes

The difference between the initial contract price and current contract price is the addition of Spirals 2, 3 and 4, as well as Multi Platform Radar Technology Insertion Program integration and other modernization efforts.

Contract Identification

Appropriation: Procurement
Contract Name: LRIP Lot 4
Contractor: Northrop Grumman Integrated Systems
Contractor Location: San Diego, CA 92150-9066
Contract Number: FA8620-04-C-3430
Contract Type: Fixed Price Incentive(Firm Target) (FPIF)
Award Date: March 31, 2004
Definitization Date: May 31, 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
50.7	N/A	N/A	280.1	310.8	4	279.1	282.7

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 (12/31/2009)	+4.1	-1.3
Previous Cumulative Variances	-0.9	-8.9
Net Change	+5.0	+7.6

Cost and Schedule Variance Explanations**General Contract Variance Explanation**

The net favorable change in cost variance is due to the use of Lot 3 source data which allowed under budget completion of technical orders documentation tasks. The net favorable change in schedule variance reflects progress in aircraft deliveries.

Notes

The initial contract price reflects award of only long lead items. The current contract price reflects the total buy. This contract procures four aircraft (one Block 30 and three Block 20), one Mission Control element, one Launch & Recovery Element, and three Enhanced Integrated Sensor Suites. This is the last time this contract will be reported since it is now more than 90% complete.

Contract Identification

Appropriation: Procurement
Contract Name: LRIP Lot 5
Contractor: Northrop Grumman Integrated Systems
Contractor Location: San Diego, CA 92150-9066
Contract Number: FA8620-05-C-4692
Contract Type: Fixed Price Incentive(Firm Target) (FPIF)
Award Date: August 24, 2005
Definitization Date: December 21, 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
60.2	N/A	N/A	319.5	353.5	5	324.7	323.0

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 (12/31/2009)	+8.2	-9.7
Previous Cumulative Variances	+3.4	-6.2
Net Change	+4.8	-3.5

Cost and Schedule Variance Explanations**General Contract Variance Explanation**

The net favorable change in cost variance is primarily due to cost improvements/learning from previous production lots. The net unfavorable change in schedule variance is driven by late Spares/Peculiar Support Equipment, Enhanced Integrated Sensor Suite Payloads testing delays, flight test capacity constraints, actuator development issues, and Sensor Management Unit development issues.

Notes

The previously reported award date of March 31, 2004, was incorrect. This report now shows the correct award date of August 24, 2005. The initial contract price reflects award of only long lead items. The current contract price reflects the total buy. This contract procures five aircraft (four Block 30 and one Block 40), one Mission Control Element, one Launch and Recovery Element, and four Enhanced Integrated Sensor Suites. This is the last time this contract will be reported as it is now more than 90% complete.

Contract Identification

Appropriation: Procurement
Contract Name: LRIP Lot 6
Contractor: Northrop Grumman Integrated Systems
Contractor Location: San Diego, CA 92150-9066
Contract Number: FA8620-06-C-3002
Contract Type: Fixed Price Incentive(Firm Target) (FPIF)
Award Date: May 24, 2006
Definitization Date: March 27, 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
60.6	N/A	N/A	327.7	357.4	5	339.4	338.7

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 (12/31/2009)	+9.5	-10.4
Previous Cumulative Variances	--	--
Net Change	+9.5	-10.4

Cost and Schedule Variance Explanations**General Contract Variance Explanation**

The net favorable cost variance is primarily due to less than planned subcontractor administrator support over the past year. The net unfavorable schedule variance is primarily due to continued flight test capacity constraints and actuator development issues.

Notes

The initial contract price reflects award of only long lead items. The current contract price reflects the total buy. This contract procures five aircraft (all Block 30), three Mission Control Elements, three Launch and Recovery Elements, and five Enhanced Integrated Sensor Suites.

Contract Identification

Appropriation: Procurement
Contract Name: LRIP Lot 7
Contractor: Northrop Grumman Integrated Systems
Contractor Location: San Diego, CA 92150-9066
Contract Number: FA8620-07-C-4015
Contract Type: Fixed Price Incentive(Firm Target) (FPIF)
Award Date: February 22, 2007
Definitization Date: October 23, 2009

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
5.0	N/A	N/A	369.5	416.3	5	372.0	374.2

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 (12/31/2009)	-1.1	-9.6
Previous Cumulative Variances	--	--
Net Change	-1.1	-9.6

Cost and Schedule Variance Explanations**General Contract Variance Explanation**

The unfavorable net changes in cost and schedule variance are the result of hardware and software changes driven by discovery from development test, Block 40 development delays, limited shared resources supporting multiple contracts, and flight test capacity constraints.

Notes

The initial contract price reflects award of only selected long lead items. The current contract price reflects the total buy. This contract procures five aircraft (two Block 30 and three Block 40), one Mission Control Element, one Launch & Recovery Element, four Enhanced Integrated Sensor Suites and three Multi Platform Radar Technology Insertion Program sensors.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	16	16	77	20.78%
Total Program Quantity Delivered	16	16	77	20.78%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	13708.3	Years Appropriated	10
Expended to Date	4105.3	Percent Years Appropriated	41.67%
Percent Expended	29.95%	Appropriated to Date	6755.3
Total Funding Years	24	Percent Appropriated	49.28%

Total expenditures per Global Hawk program office records as of December 30, 2009.

Operating and Support Cost

Assumptions and Ground Rules

Estimated Operating and Support (O&S) Costs are based on the December 2009 Global Hawk (GH) Program Office Estimate as shown below. Changes in assumptions of the number of Combat Air Patrols (CAPs) supported by GH and the number of flying hours per year at steady state have increased the overall estimated O&S costs. The number of CAPs assumed has increased from six to nine, while the number of planned flying hours per year at steady state has increased from 28,080 to 38,772.

GH is designed to be forward-based at three operating locations around the world and home-based at two main operating bases - Beale AFB and Grand Forks AFB.

The support planning concept is 2-level maintenance. Organizational maintenance will be performed by a mix of contractor and military personnel. Initial depot maintenance is being performed by the contractor (i.e., Contractor Logistics Support (CLS)). The GH system has been designated as a core candidate and planning is continuing to establish organic depot repair capability as determined by the Source of Repair Assignment Process (SORAP) and Depot Maintenance Activation Working Group (DMAWG). SORAPs have been performed on all GH commodities to help determine the long term depot maintenance strategy. The completed SORAPs include a mix of both organic and CLS recommendations. Partnering will be utilized to support items with an organic recommendation as determined by the DMAWG.

The program office estimate includes costs for leasing commercial Ku Satellite Communication (SATCOM) time. Future Air Force plans are to move away from commercial leases to other military means that would provide SATCOM at no cost to GH.

Operations & Maintenance costs will be incurred during a twelve-year phase-in period (2003-2014) and a four-year phase-out period (2033-2036). Steady state for the nine CAPs is planned to begin in 2015 and continue through 2032 for a total planned steady state period of 18 years.

There is no antecedent system for the GH.

Cost Estimate Reference:

None

Sustainment Strategy:

None

Antecedent Information:

None

Unitized O&S Costs BY2000 \$K		
Cost Element	Global Hawk Avg Annual \$ Per FH @ Steady State (SS)	No Global Hawk Antecedent (Antecedent)
Mission Pay & Allowance	3.100	--
Unit Level Consumption	0.700	--
Intermediate Maintenance	0.000	--
Depot Maintenance	0.000	--
Contractor Support	6.600	--
Sustaining Support	6.500	--
Indirect	0.800	--
Other	0.000	--
Total	17.700	--

Unitized Cost Comments:

None

Item	Total O&S Cost \$M			
	Global Hawk		No Global Hawk Antecedent (Antecedent)	
	Current Development APB Objective/Threshold	Current Estimate		
Base Year	N/A	N/A	16259.2	N/A
Then Year	N/A	N/A	27547.3	N/A

Total O&S Cost Comment

None

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

Disposal/Demilitarization Total Cost (BY 2000 \$M):