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 December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

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

DoD Component

Air Force

Responsible Office

Responsible Office

Col Carlin Heimann
2530 Loop Road West
WPAFB, OH 45433-7106

carlin.heimann@wpafb.af.mil

Phone 937-255-7764
Fax --
DSN Phone 785-7764
DSN Fax --
Date Assigned August 3, 2012

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 RQ-4A/B Global Hawk Unmanned Aircraft System (UAS) is a high altitude, long endurance 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 program does not have an antecedent system.

The current program profile consists of: Block 20, 30, and 40 aircraft which are larger than Block 10 aircraft and capable of carrying up to a 3,000-pound (lb) payload. All Block 10 aircraft have either been retired or transferred to the Navy or National Aeronautics and Space Administration. Block 20 was 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. The operational Block 20 aircraft have been converted to the Battlefield Airborne Communications Node (BACN) configuration, which provides airborne communications relay and gateway that allows real-time information exchanges between different tactical data link systems and provides decision makers with critical information. Block 30 adds the Airborne Signals Intelligence Payload,that brings Signals Intelligence capability, to the EISS. Block 40 incorporates the Multi-Platform Radar Technology Insertion Program Radar as its only sensor.

Executive Summary

RQ-4A/B Global Hawk Unmanned Aircraft System (UAS) made several accomplishments over the last year. Global Hawk surpassed 85,000 flight hours while accumulating over 69,000 combat hours in support of Overseas Contingency Operations (OCO). Additionally, three Global Hawk aircraft were delivered during 2012: two Block 30M aircraft and one Block 40 aircraft. Three Block 30I aircraft were retrofitted to the Block 30M configuration with the added installation of the Airborne Signals Intelligence Payload. Global Hawk completed critical operational missions to support OCO. The program has been certified to conduct Block 30 Force Development Evaluation to validate that Initial Operational Test and Evaluation (IOT&E) issues have been resolved. Operational use of Global Hawk has demonstrated exploitable images in excess of ranges demonstrated in IOT&E.

As previously reported in the December 2010 SAR, Global Hawk had a Nunn-McCurdy breach, schedule breach, and performance breaches. The program was re-certified to Congress on June 14, 2011. A new Acquisition Program Baseline (APB) will be prepared for the Milestone C decision, anticipated Fall 2013, to re-establish the (Milestone II) Low Rate Initial Production decision that had been rescinded as a result of the Nunn-McCurdy breach. The new APB will establish not only cost objectives/thresholds, but also updated schedule and performance objectives/thresholds consistent with the Global Hawk Block 40 Capability Production Document, to be approved prior to the Milestone C decision.

The President's Budget for FY 2013 divested Block 30s and eliminated Block 30 related funding. However, the FY 2013 National Defense Authorization Act (NDAA) directed the continued operations of the Block 30 aircraft through December 31, 2014. Current Block 30 related investments in modernization have been halted and planned future modernization investments canceled. Extension of the Block 30 lifecycle beyond the December 31, 2014 date established in the NDAA would drive interoperability and operations shortfalls and require substantial additional investment.

Block 40 Early Operational Capability (EOC): Joint Requirements Oversight Council Memorandum (April 20, 2012) directed Global Hawk to proceed with EOC via fielding of two Block 40s in May 2013, providing the high priority Ground Moving Target Indicator (GMTI) capability. The Global Hawk team is on track to deliver GMTI capability in May 2013; Operational Utility Evaluation testing began in March 2013. Block 40 Imagery Intelligence will not initially be available under the EOC. Full Block 40 capability will be demonstrated during IOT&E, August 2014, and will be provided for initial operational capability in Fall 2014. Fully fielded capability is planned for March 2015.

Battlefield Airborne Communications Node (BACN): Two additional Block 20 Global Hawk aircraft, for a total of three, were modified for the BACN mission and delivered in 2012 to support Joint Urgent Operational Need CC-0336. Since deployment, the fleet of BACN Global Hawk aircraft have flown over 7,800 combat hours.

On July 27, 2012, the Air Force was tasked to provide a report to Congress to respond to five questions concerning the Global Hawk Block 30 Divestiture. A consolidated report is in final Air Force coordination for subsequent delivery to Congress.

The program is also responding to the Congressional Defense Committee, as written in Public Law, SR-112-26, Section145, to provide a coordinated Air Force and Navy response to questions pertaining to the limitation on the retirement of U-2 aircraft. The language directed the Secretary of the Air Force, in coordination with the Secretary of the Navy, to produce a plan to reduce the Operating and Support costs of the Global Hawk and the MQ-4C Triton (Broad Area Maritime Surveillance) UAS systems, and report to the congressional intelligence and defense committees. The coordinated response is currently in review by the Assistant Secretary of the Air Force (Acquisition).

Software: Command and control software deficiencies and other software deficiencies related to meeting

Distributed Common Ground System requirements for United States Pacific Command have been corrected and verified during Block 30 developmental flight test.

Software deficiencies, primarily related to the Automatic Collection Manager and Ground Station, were discovered during Block 40 KD 2.2 integration testing, resulting in a follow-on KD 2.2.1 build to correct issues. The new software build was approved for installation and use during Operational Utility Evaluation flight tests, and is not expected to delay the start of interoperability development test flights or the IOT&E schedule. A deficiency was recently submitted that is associated with pilot workstation inadvertent logout. The Global Hawk team will investigate the issue to determine root cause and recommend any mitigation steps or configuration changes to resolve the issue.

Threshold Breaches

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

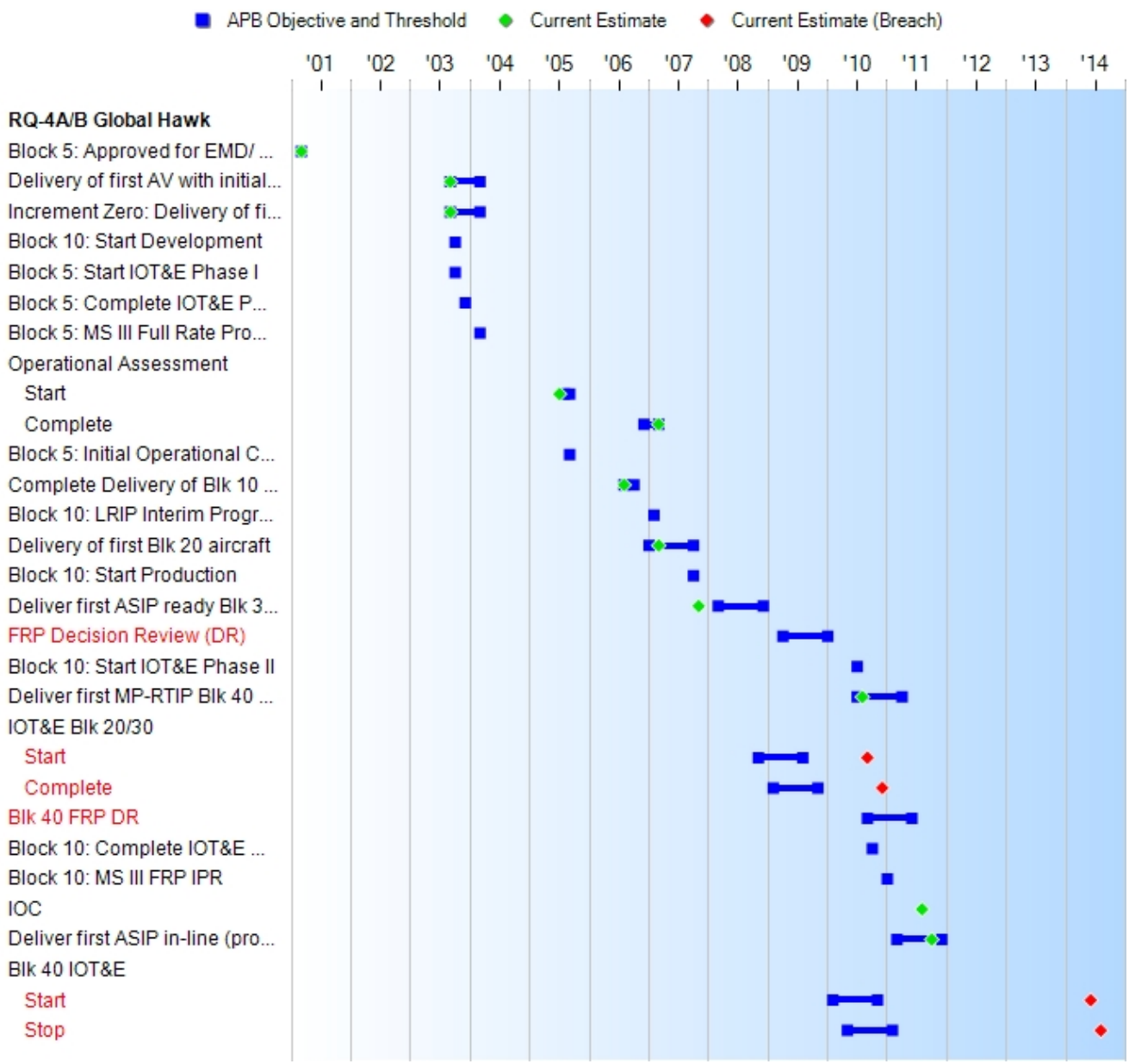
Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

As previously reported in the December 2010 SAR, Global Hawk had a Nunn-McCurdy breach, schedule breach, and performance breaches. The program was re-certified to Congress on June 14, 2011. A new Acquisition Program Baseline (APB) will be prepared for the Milestone C decision, anticipated Fall 2013, to re-establish the (Milestone II) Low Rate Initial Production decision that had been rescinded as a result of the Nunn-McCurdy breach. Current cost data decreased unit costs signifying an APB breach only in Program Acquisition Unit Cost (PAUC) (versus the Nunn-McCurdy breach levels in FY 2011).

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

Schedule


APB Objective and Threshold
Current Estimate
Current Estimate (Breach)
'01
'02
'03
'04
'05
'06
'07
'08
'09
'10
'11
'12
'13
'14
RQ-4A/B Global Hawk
Block 5: Approved for EMD/ ...
Delivery of first AV with initial...
Increment Zero: Delivery of fi...
Block 10: Start Development
Block 5: Start IOT&E Phase I
Block 5: Complete IOT&E P...
Block 5: MS III Full Rate Pro...
Operational Assessment
Start
Complete
Block 5: Initial Operational C...
Complete Delivery of Blk 10 ...
Block 10: LRIP Interim Progr...
Delivery of first Blk 20 aircraft
Block 10: Start Production
Deliver first ASIP ready Blk 3...
FRP Decision Review (DR)
Block 10: Start IOT&E Phase II
Deliver first MP-RTIP Blk 40 ...
IOT&E Blk 20/30
Start
Complete
Blk 40 FRP DR
Block 10: Complete IOT&E ...
Block 10: MS III FRP IPR
IOC
Deliver first ASIP in-line (pro...
Blk 40 IOT&E
Start
Stop

Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	
Block 5: Approved for EMD/ LRIP	FEB 2001	MAR 2001	MAR 2001	MAR 2001	
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	
Block 10: Start Development	OCT 2003	N/A	N/A	N/A	
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 Full Rate Production (FRP) Review	MAR 2004	N/A	N/A	N/A	
Operational Assessment					
Start	N/A	AUG 2005	SEP 2005	JUL 2005	
Complete	N/A	DEC 2006	MAR 2007	MAR 2007	
Block 5: Initial Operational Capability (IOC)	SEP 2005	N/A	N/A	N/A	
Complete Delivery of Blk 10 aircraft	N/A	AUG 2006	OCT 2006	AUG 2006	
Block 10: LRIP Interim Program Review (IPR)	FEB 2007	N/A	N/A	N/A	
Delivery of first Blk 20 aircraft	N/A	JAN 2007	OCT 2007	MAR 2007	
Block 10: Start Production	OCT 2007	N/A	N/A	N/A	
Deliver first ASIP ready Blk 30 aircraft	N/A	MAR 2008	DEC 2008	NOV 2007	
FRP Decision Review (DR)	N/A	APR 2009	JAN 2010	**N/A** [1]	
Block 10: Start IOT&E Phase II	JUL 2010	N/A	N/A	N/A	
Deliver first MP-RTIP Blk 40 aircraft	N/A	JUL 2010	APR 2011	AUG 2010	
IOT&E Blk 20/30					
Start	N/A	NOV 2008	AUG 2009	**SEP 2010** [1]	
Complete	N/A	FEB 2009	NOV 2009	**DEC 2010** [1]	
Blk 40 FRP DR	N/A	SEP 2010	JUN 2011	**N/A** [1]	
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	
IOC	N/A	TBD	TBD	AUG 2011	
Deliver first ASIP in-line (production) Blk 30 aircraft	N/A	MAR 2011	DEC 2011	OCT 2011	
Blk 40 IOT&E					
Start	N/A	FEB 2010	NOV 2010	**JUN 2014** [1]	(Ch-1)
Stop	N/A	MAY 2010	FEB 2011	**AUG 2014** [1]	(Ch-1)

[1] *APB Breach*

Acronyms And Abbreviations

ASIP - Airborne Signals Intelligence Payload
AV - Air Vehicle (same as aircraft)
Blk - Block
EMD - Engineering and Manufacturing Development
IOT&E - Initial Operational Test & Evaluation
LRIP - Low Rate Initial Production
MP-RTIP - Multi Platform Radar Technology Insertion Program
MS - Milestone
N/A - Not Applicable
TBD - To Be Determined

Change Explanations

(Ch-1) Due to a slip in a software update to the Air Force Distributed Common Ground Station (DCGS), which is required for Blk 40 imagery processing, exploitation, and dissemination, Blk 40 IOT&E has been further delayed. The updated DCGS test unit is expected to be available in early June 2014. This results in a slip in the IOT&E start date from October 2013 to June 2014, and a slip in the IOT&E complete date from November 2013 to August 2014. It is likely that a DCGS production unit will be required to complete IOT&E, instead of a DCGS test unit reflected in the current program schedule. The Global Hawk team is working to mitigate any further delays to IOT&E driven by the lack of a DCGS production unit.

Performance

Characteristics	SAR Baseline Dev Est	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 dymanic 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 - 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.	33.1 hrs	33.1 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	TBD	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	The Global Hawk ground station must	TBD	Currently working software to enhance the

		allow operators to perform NRT mission control, mission monitoring, and mission updates/modifications to include dynamic platform and payload control and re-tasking.	allow operators to perform NRT mission control, mission monitoring, and mission updates/modifications to include dynamic platform and payload control and re-tasking.		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.	TBD	Software in work to enhance time-lines
FY 2008 IERs KPP	N/A	Satisfy 100% of all top-level IERs	Satisfy 100% of all top-level IERs designated critical.	TBD	Development work ongoing to improve useability and timeliness
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 NIIRS 5
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 Spot Mode (NIIRS X @ Km)	N/A	40 km at NIIRS 5	30 km at NIIRS 5	TBD	30 km at NIIRS 5

Mission Planning /FY 2010	N/A	8 hours	12 hours	TBD	**16 hours + 6 weeks of 6-DOF**[1]
Delivery of first aircraft with a multi-Intelligence (multi-Int) Capability	N/A	Aircraft multi-Int capable	Aircraft multi-Int capable	Aircraft multi-Int capable.	Aircraft multi-Int capable.
Improved SAR Spot Mode Capability (NIIRS X @ Km)	N/A	185 Km at NIIRS 5	160 Km at NIIRS 5	160 Km at NIIRS 5	160 Km at NIIRS 5
Improved EO Spot Mode (NIIRS X @ Km) KPP	N/A	170 Km at NIIRS 5	80 Km at NIIRS 5	80 Km at NIIRS 5	80 Km at NIIRS 5
Improved IR Spot Mode (NIIRS x @ Km) KPP	N/A	80 Km at NIRRS 5	50 Km at NIIRS 5	50 Km at NIIRS 4.7	**50 Km at NIIRS 4.7**[1]
Effective Time on Station (ETOS)	N/A	90%	85%	56%	85%

[1] *APB Breach*

Requirements Source: 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

Acronyms And Abbreviations

DOF - Degrees of Freedom
EO - Electro-Optical
GIG-KIP - Global Information Grid Key Interface Profile
hrs - hours
IAW - In Accordance With
IR - Infrared
Km - Kilometer
KPP - Key Performance Parameter
N/A - Not Applicable
NCOW-RM - Net-Centric Operation and Warfare Reference Model
NIIRS - National Image Interpretability Rating Scale
NM - Nautical Mile
NRT - Near Real Time
SAR - Synthetic Aperture Radar
STAR - System Threat Assessment Report
TBD - To Be Determined
UAV - Unmanned Air Vehicle

Change Explanations

None

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

Track To Budget

RDT&E				
APPN 3600	BA 07	PE 0305205F	(Air Force)	
	Project 4799	Global Hawk HAEUAV		(Sunk)
APPN 3600	BA 07	PE 0305220F	(Air Force)	
	Project 5144	Global Hawk HAEUAV		(Sunk)
	Project 5146	RQ-4 BLOCK 40		
	Project 5147	RQ-4 GSRA/CSRA		
Procurement				
APPN 3010	BA 07	PE 0305220F	(Air Force)	
	ICN 000075	OTHER PRODUCTION CHARGES RQ-4	(Shared)	(Sunk)
APPN 3010	BA 06	PE 0305220F	(Air Force)	
	ICN 000999	(Air Force)	(Shared)	(Sunk)
APPN 3010	BA 04	PE 0305205F	(Air Force)	
	ICN HAEUAV	(Air Force)	(Shared)	(Sunk)
APPN 3010	BA 04	PE 0305220F	(Air Force)	
	ICN HAEUAV	(Air Force)		
APPN 3010	BA 05	PE 0305220F	(Air Force)	
	ICN HAWK00	(Air Force)		
APPN 3010	BA 04	PE 0305220F	(Air Force)	
	ICN RQ440P	RQ-4 BLOCK 40 PROC		
APPN 3010	BA 05	PE 0305220F	(Air Force)	

	ICN RQ4GCM	GSRA/CSRA MODS		
APPN 3080	BA 02	PE 0305220F	(Air Force)	
	ICN 821800	(Air Force)	(Shared)	(Sunk)
APPN 3080	BA 03	PE 0305220F	(Air Force)	
	ICN 837300	(Air Force)	(Shared)	(Sunk)
MILCON				
APPN 3300	BA 01	PE 0305205F	(Air Force)	
	Project F030011X	(Air Force)	(Shared)	(Sunk)
	Project F04000XX	(Air Force)		(Sunk)
APPN 3300	BA 01	PE 0305220F	(Air Force)	
	Project 0501003X	(Air Force)		(Sunk)
	Project 06BAEY09	(Air Force)		(Sunk)
	Project 07USAFE6	(Air Force)		(Sunk)
	Project 1030060B	(Air Force)		(Sunk)

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2000 $M			BY2000 $M	TY $M		
	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	840.4	3076.8	3384.5	3090.0	906.2	3572.0	3588.1
Procurement	3484.4	4904.9	5395.4	4378.7	4459.8	6022.6	5298.3
Flyaway	3086.5	--	--	3424.8	3972.9	--	4131.3
Recurring	3072.8	--	--	3291.1	3957.0	--	3960.5
Non Recurring	13.7	--	--	133.7	15.9	--	170.8
Support	397.9	--	--	953.9	486.9	--	1167.0
Other Support	173.4	--	--	295.4	216.7	--	358.3
Initial Spares	224.5	--	--	658.5	270.2	--	808.7
MILCON	25.5	121.9	134.1	106.0	28.0	139.8	122.9
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	4350.3	8103.6	N/A	7574.7	5394.0	9734.4	9009.3

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	0	0	0
Procurement	63	54	45
Total	63	54	45

Unit of measure is number of aircraft.

The October 2011 Acquisition Decision Memorandum approving the Lot 10 buy increased the total approved procurement quantity to 42 aircraft. The FY 2014 baseline is 45 aircraft (7 Block 10s, 6 Block 20s, 21 Block 30s, and 11 Block 40s).

Cost and Funding

Funding Summary

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

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	3057.6	199.5	102.4	123.0	49.9	27.6	28.1	0.0	3588.1
Procurement	5020.5	95.9	68.1	43.3	31.2	16.4	16.7	6.2	5298.3
MILCON	122.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	122.9
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	8201.0	295.4	170.5	166.3	81.1	44.0	44.8	6.2	9009.3
PB 2013 Total	8393.5	295.4	206.8	142.0	65.5	44.6	90.1	125.1	9363.0
Delta	-192.5	0.0	-36.3	24.3	15.6	-0.6	-45.3	-118.9	-353.7

Current Estimate changes from previous submission reflect fact of life updates for prior year Research, Development, Test and Evaluation (RDT&E) and Procurement, including a decrease in initial spares as well as a revision of estimates for Global Hawk Ground and Communications Technical Refresh efforts in RDT&E and reduction in scope of retrofits in Procurement.

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

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	45	0	0	0	0	0	0	0	45
PB 2014 Total	0	45	0	0	0	0	0	0	0	45
PB 2013 Total	0	45	0	0	0	0	0	0	0	45
Delta	0	0	0	0	0	0	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

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
2001	--	--	--	--	--	--	129.5
2002	--	--	--	--	--	--	198.3
2003	--	--	--	--	--	--	329.1
2004	--	--	--	--	--	--	351.6
2005	--	--	--	--	--	--	368.3
2006	--	--	--	--	--	--	254.7
2007	--	--	--	--	--	--	223.3
2008	--	--	--	--	--	--	264.6
2009	--	--	--	--	--	--	227.7
2010	--	--	--	--	--	--	219.3
2011	--	--	--	--	--	--	190.9
2012	--	--	--	--	--	--	300.3
2013	--	--	--	--	--	--	199.5
2014	--	--	--	--	--	--	102.4
2015	--	--	--	--	--	--	123.0
2016	--	--	--	--	--	--	49.9
2017	--	--	--	--	--	--	27.6
2018	--	--	--	--	--	--	28.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**3588.1**

Annual Funding BY$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2000 $M	Non End Item Recurring Flyaway BY 2000 $M	Non Recurring Flyaway BY 2000 $M	Total Flyaway BY 2000 $M	Total Support BY 2000 $M	Total Program BY 2000 $M
2001	--	--	--	--	--	--	126.6
2002	--	--	--	--	--	--	191.8
2003	--	--	--	--	--	--	314.0
2004	--	--	--	--	--	--	327.3
2005	--	--	--	--	--	--	334.3
2006	--	--	--	--	--	--	224.4
2007	--	--	--	--	--	--	191.7
2008	--	--	--	--	--	--	222.7
2009	--	--	--	--	--	--	189.1
2010	--	--	--	--	--	--	179.8
2011	--	--	--	--	--	--	153.5
2012	--	--	--	--	--	--	236.6
2013	--	--	--	--	--	--	153.8
2014	--	--	--	--	--	--	77.4
2015	--	--	--	--	--	--	91.3
2016	--	--	--	--	--	--	36.3
2017	--	--	--	--	--	--	19.7
2018	--	--	--	--	--	--	19.7
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**3090.0**

Annual Funding TY$
3010 | Procurement | Aircraft Procurement, Air Force

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
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	98.8	449.6
2008	5	368.4	25.8	50.4	444.6	84.1	528.7
2009	5	418.4	84.9	9.9	513.2	232.9	746.1
2010	4	385.3	86.7	2.5	474.5	103.0	577.5
2011	4	377.6	118.4	--	496.0	194.6	690.6
2012	3	290.8	160.7	--	451.5	236.3	687.8
2013	--	--	9.2	75.0	84.2	11.7	95.9
2014	--	--	39.3	27.0	66.3	1.8	68.1
2015	--	--	41.5	--	41.5	1.8	43.3
2016	--	--	31.2	--	31.2	--	31.2
2017	--	--	16.4	--	16.4	--	16.4
2018	--	--	16.7	--	16.7	--	16.7
2019	--	--	6.2	--	6.2	--	6.2
Subtotal	**45**	**3316.0**	**644.5**	**170.8**	**4131.3**	**1164.5**	**5295.8**

Annual Funding BY$
3010 | Procurement | Aircraft Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2000 $M	Non End Item Recurring Flyaway BY 2000 $M	Non Recurring Flyaway BY 2000 $M	Total Flyaway BY 2000 $M	Total Support BY 2000 $M	Total Program BY 2000 $M
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	252.1	--	--	252.1	59.8	311.9
2007	5	290.0	6.3	--	296.3	83.5	379.8
2008	5	306.2	21.4	41.9	369.5	70.0	439.5
2009	5	341.8	69.4	8.1	419.3	190.2	609.5
2010	4	308.4	69.4	2.0	379.8	82.4	462.2
2011	4	296.6	93.0	--	389.6	152.9	542.5
2012	3	224.0	123.8	--	347.8	182.0	529.8
2013	--	--	6.9	56.2	63.1	8.8	71.9
2014	--	--	28.9	19.9	48.8	1.3	50.1
2015	--	--	30.0	--	30.0	1.3	31.3
2016	--	--	22.1	--	22.1	--	22.1
2017	--	--	11.4	--	11.4	--	11.4
2018	--	--	11.4	--	11.4	--	11.4
2019	--	--	4.2	--	4.2	--	4.2
Subtotal	**45**	**2792.9**	**498.2**	**133.7**	**3424.8**	**951.6**	**4376.4**

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	137.2
2003	3	128.8
2004	4	191.9
2005	4	262.3
2006	5	253.1
2007	5	287.5
2008	5	291.9
2009	5	367.3
2010	4	262.1
2011	4	315.9
2012	3	294.9
2013	--	--
2014	--	--
2015	--	--
2016	--	--
2017	--	--
2018	--	--
2019	--	--
Subtotal	**45**	**2792.9**

Annual Funding TY$
3080 | Procurement | Other Procurement, Air Force

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
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 BY$
3080 | Procurement | Other Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2000 $M	Non End Item Recurring Flyaway BY 2000 $M	Non Recurring Flyaway BY 2000 $M	Total Flyaway BY 2000 $M	Total Support BY 2000 $M	Total Program BY 2000 $M
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 TY$
3300 | MILCON | Military Construction, Air Force

Fiscal Year	Total Program TY $M
2003	11.7
2004	22.2
2005	9.8
2006	14.1
2007	48.6
2008	--
2009	--
2010	16.5
Subtotal	**122.9**

Annual Funding BY$
3300 | MILCON | Military Construction, Air Force

Fiscal Year	Total Program BY 2000 $M
2003	10.9
2004	20.2
2005	8.6
2006	12.1
2007	40.9
2008	--
2009	--
2010	13.3
Subtotal	**106.0**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	3/6/2001	10/21/2011
Approved Quantity	6	42
Reference	ADM	ADM
Start Year	2001	2001
End Year	2004	2011

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the small RQ-4A/B Global Hawk fleet size of 45. This exaggerates the effects of the 10% boundary.

The Global Hawk Low Rate Initial Production (LRIP) quantity now stands at 42 aircraft, based on the October 2011 Acquisition Decision Memorandum (ADM) approving the Lot 10 buy. The FY 2014 President's Budget procurement baseline includes 45 aircraft and associated Ground Stations (ten Launch and Recovery Elements and ten Mission Control Elements).

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost $M	Memo
NATO	9/3/2009	5	2383.0	The North Atlantic Treaty Organization (NATO) Alliance Ground Surveillance (AGS) program is pursuing a Direct Commercial Sale (DCS) to obtain five RQ-4B Global Hawk Block 40-like aircraft equipped with the Multi Platform Radar Technology Insertion Program (MP-RTIP) Synthetic Aperture Radar sensor and integrated with a NATO-unique ground station. Program is a cooperative development effort with 14 of the 28 NATO nations funding the procurement effort (Denmark re-joined in December 2012). US Government (USG) costs include: 41.7% direct financial contribution to NATO for administrative/ prime contract costs; alliance support (program management administration), and agreed MP-RTIP capability enhancements/ configuration changes. The NATO AGS Management Agency (NAGSMA) program office awarded the DCS contract with Northrop Grumman on May 20, 2012. USG support is provided through a “Technical Arrangement” and not a Foreign Military Sales (FMS) case. Office of the Secretary of Defense transitioned the management of NATO AGS to the Air Force in May 2012.
Germany	9/25/2007	1	675.0	The Euro Hawk Risk Reduction Program (RRP) is the DCS between the German Government and Euro Hawk GmbH (Northrop Grumman/Cassidian partnership). The German Government purchased a Euro Hawk system to replace their current signals intelligence system. The system consists of one modified RQ-4B Global Hawk air vehicle and ground segment, and a German-built Signal Intelligence (SIGINT) sensor payload. The USG provides support through a $34.8M FMS case (GY-D-STY). The air vehicle was delivered to Germany for sensor integration in July 2011. Preliminary airworthiness certification issues were resolved in December 2012, and Germany's sensor integration flight testing began on January 11, 2013. Final delivery is projected for Fall 2013. The potential follow on production effort has not advanced to the FMS Letter of Offer and Acceptance stage and thus is not included.

Nuclear Cost

None

Unit Cost

Unit Cost Report

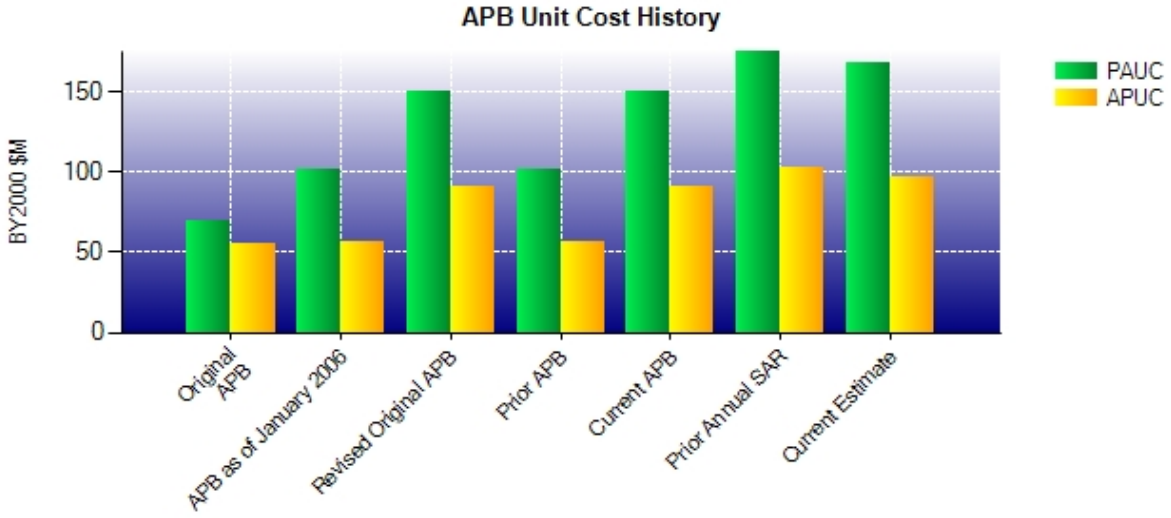
Unit Cost	BY2000 $M Current UCR Baseline (MAR 2007 APB)	BY2000 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	8103.6	7574.7	
Quantity	54	45	
Unit Cost	150.067	**168.327** [1]	+12.17
Average Procurement Unit Cost (APUC)			
Cost	4904.9	4378.7	
Quantity	54	45	
Unit Cost	90.831	97.304	+7.13

Unit Cost	BY2000 $M Revised Original UCR Baseline (MAR 2007 APB)	BY2000 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	8103.6	7574.7	
Quantity	54	45	
Unit Cost	150.067	168.327	+12.17
Average Procurement Unit Cost (APUC)			
Cost	4904.9	4378.7	
Quantity	54	45	
Unit Cost	90.831	97.304	+7.13

[1] **APB Unit Cost Breach**

Global Hawk initially reported a critical Nunn-McCurdy breach and provided detailed Unit Cost reporting in the December 2010 SAR. The unit cost percent change will continue to be measured against the March 2007 Acquisition Program Baseline (APB) until the revised APB is approved.

Unit Cost History



		BY2000 $M		TY $M	
	Date	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 2011	174.589	103.038	208.067	125.293
Current Estimate	DEC 2012	168.327	97.304	200.207	117.740

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
85.619	1.209	20.726	1.664	51.300	22.451	0.000	17.238	114.588	200.207

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
70.790	0.409	14.794	-10.502	14.318	12.427	0.000	15.504	46.950	117.740

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	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	AUG 2011
Total Cost (TY $M)	N/A	5394.0	N/A	9009.3
Total Quantity	N/A	63	N/A	45
Prog. Acq. Unit Cost (PAUC)	N/A	85.619	N/A	200.207

The Global Hawk Full Rate Production Decision Review, which would have replaced the previously planned Milestone III decision, is no longer applicable given the cancellation of the Global Hawk Block 30 production in the FY 2013 President's Budget.

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	906.2	4459.8	28.0	5394.0
Previous Changes				
Economic	+27.2	+3.4	+3.7	+34.3
Quantity	--	-608.5	--	-608.5
Schedule	+555.6	-472.6	-8.1	+74.9
Engineering	+1547.2	+644.3	+117.0	+2308.5
Estimating	+490.7	+812.4	-20.7	+1282.4
Other	--	--	--	--
Support	+75.0	+799.4	+3.0	+877.4
Subtotal	+2695.7	+1178.4	+94.9	+3969.0
Current Changes				
Economic	+5.2	+15.0	-0.1	+20.1
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-19.0	-253.2	+0.1	-272.1
Other	--	--	--	--
Support	--	-101.7	--	-101.7
Subtotal	-13.8	-339.9	--	-353.7
Total Changes	+2681.9	+838.5	+94.9	+3615.3
CE - Cost Variance	3588.1	5298.3	122.9	9009.3
CE - Cost & Funding	3588.1	5298.3	122.9	9009.3

Summary Base Year 2000 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	840.4	3484.4	25.5	4350.3
Previous Changes				
Economic	--	--	--	--
Quantity	--	-406.8	--	-406.8
Schedule	+414.4	-357.2	-2.1	+55.1
Engineering	+1405.8	+661.3	+98.3	+2165.4
Estimating	+379.6	+618.5	-18.3	+979.8
Other	--	--	--	--
Support	+73.7	+636.5	+2.5	+712.7
Subtotal	+2273.5	+1152.3	+80.4	+3506.2
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-23.9	-177.5	+0.1	-201.3
Other	--	--	--	--
Support	--	-80.5	--	-80.5
Subtotal	-23.9	-258.0	+0.1	-281.8
Total Changes	+2249.6	+894.3	+80.5	+3224.4
CE - Cost Variance	3090.0	4378.7	106.0	7574.7
CE - Cost & Funding	3090.0	4378.7	106.0	7574.7

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+5.2
Revised estimates for ground station and communications technical refresh efforts. (Estimating)	+14.9	+22.8
Adjustment for current and prior escalation. (Estimating)	-1.6	-2.0
Adjusted Prior Years (FY 2001 - FY 2011) to reconcile to actual expenditures. (Estimating)	-37.2	-39.8
RDT&E Subtotal	-23.9	-13.8

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+15.0
Adjustment for current and prior escalation. (Estimating)	-4.1	-5.5
Reduction in scope of communications system retrofits. (Estimating)	-128.8	-192.3
Revised estimate for production-related program management (Estimating)	+3.2	+3.7
Adjusted Prior Years (FY 2008 - FY 2011) to reconcile to actual expenditures. (Estimating)	-47.8	-59.1
Adjustment for current and prior escalation. (Support)	-1.7	-2.1
Decrease in Initial Spares. (Support)	-70.8	-88.4
Revised estimate for peculiar support equipment. (Support)	-8.0	-11.2
Procurement Subtotal	-258.0	-339.9

MILCON	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-0.1
Adjustment for current and prior escalation. (Estimating)	+0.1	+0.1
MILCON Subtotal	+0.1	0.0

Contracts

Appropriation: RDT&E	
Contract Name	**Global Hawk EMD Ground Station Re-Architecture (GSRA)**
Contractor	Northrop Grumman Integrated Systems
Contractor Location	San Diego, CA 92127-2412
Contract Number, Type	F33657-01-C-4600/2, CPIF
Award Date	September 29, 2009
Definitization Date	October 27, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
16.2	N/A	N/A	91.3	N/A	N/A	88.8	88.5

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/22/2013)	-4.7	-1.2
Previous Cumulative Variances	-3.1	-0.5
Net Change	-1.6	-0.7

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to increased rates that occurred as part of the Northrop Grumman Corporation (NGC) corporate restructuring, as well as underestimated system engineering costs. These are a result of NGC merging two different System Engineering Organizations, which caused some delays but will benefit future programs by sharing NGC resources and reducing total costs across the enterprise.

The unfavorable net change in the schedule variance is due to materials for the software lab that have been purchased, but have not yet been received.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the addition of GSRA Phase 1A, supplier software licenses, change requests, and CY 2012 Blockload hardware/software maintenance licenses.

This contract includes Phase 0 (study phase through System Requirements Review) and Phase 1A (development, program management, systems engineering, acceptance testing, administrative support, custom software using a modular open systems approach).

Appropriation: Procurement

Contract Name	**LRIP Lot 9 Air Vehicle and EISS**
Contractor	Northrop Grumman
Contractor Location	San Diego, CA 92150-9066
Contract Number, Type	FA8620-09-C-4001, FFP
Award Date	April 22, 2009
Definitization Date	February 04, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
188.2	N/A	4	188.4	N/A	4	188.4	188.4

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP contract.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the addition of a Contract Line Item Number (CLIN) for replacement of Government Furnished Property (GFP) and Government Furnished Equipment (GFE) that has fallen into disrepair. Previously, only GFP and GFE repair were covered under the contract. By adding the CLIN and funding, the Government is better positioned to replace GFP and GFE more expediently.

This contract procures four air vehicles (two Block 30 and two Block 40) and two Enhanced Integrated Sensor Suite (EISS) sensors.

Appropriation: Procurement

Contract Name	**LRIP Lot 10**
Contractor	Northrop Grumman
Contractor Location	San Diego, CA 92150-9066
Contract Number, Type	FA8620-10-C-4000, FPIF
Award Date	May 05, 2010
Definitization Date	

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
30.0	580.6	4	422.9	653.0	4		

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

Cost And Schedule Variance Explanations

None

General Contract Variance Explanation

Complete variance data and estimated price at completion will be provided upon contract definitization, anticipated in April 2013.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial target reflecting the value of Advance Procurement, while the current target reflects the amount currently obligated on the Undefinitized Contract Action (UCA) including all Advance Procurement funding. The ceiling value reflects the Not-to-Exceed price of the UCA and was increased to allow for continued support of production deliveries.

Advance Procurement was awarded in May 2010. Subsequently, this contract was awarded on October 28, 2011 as an Undefinitized Contract Action (UCA). This contract procures four air vehicles (two Block 30 with Enhanced Integrated Sensor Suite (EISS) sensors and Airborne Signals Intelligence Payload (ASIP) sensors and two Block 40 with Multi-Platform Radar Technology Insertion Program (MP-RTIP) sensors) and three ASIP retrofit kits.

Appropriation: Procurement

Contract Name	**LRIP Lot 8 Payloads FPIF**
Contractor	Northrop Grumman Systems Corporation
Contractor Location	17066 Goldentop Road San Diego, CA 92127-2412
Contract Number, Type	FA8620-11-C-3004/1, FPIF
Award Date	December 14, 2010
Definitization Date	August 12, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
209.8	213.9	8	214.8	236.0	8	212.3	212.7

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/22/2012)	+2.9	-0.5
Previous Cumulative Variances	--	--
Net Change	+2.9	-0.5

Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to reduction of risk pressures for Multi-Platform Radar Technology Insertion Program (MP-RTIP) production and test execution.

The unfavorable cumulative schedule variance is due to the late contract modification of a restructured delivery schedule for MP-RTIP sensors.

Contract Comments

This is the first time this contract is being reported.

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 the addition of Lot 8 K2.2 software fielding and Airborne Signals Intelligence Payload (ASIP) Interface Message Alternate Version, as well as exercising an option for an ASIP retrofit calibration flight.

This contract procures five ASIP and two MP-RTIP sensors.

Appropriation: Procurement

Contract Name	**LRIP Lot 9 Payloads FPIF**
Contractor	Northrop Grumman Systems Corporation
Contractor Location	17066 Goldentop Road San Diego, CA 92127-2412
Contract Number, Type	FA8620-10-C-4007/1, FPIF
Award Date	May 20, 2010
Definitization Date	August 12, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
184.6	203.3	7	184.6	203.3	7	181.2	181.5

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/22/2013)	+3.6	-4.2
Previous Cumulative Variances	+1.6	+7.4
Net Change	+2.0	-11.6

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to lower than planned cost for the Multi-Platform Radar Technology Insertion Program (MP-RTIP) sensors.

The unfavorable net change in the schedule variance is due to late/behind schedule factory acceptance test activities for three Airborne Signals Intelligence Payloads (ASIP).

Contract Comments

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

This contract procures five ASIP and two MP-RTIP sensors.

Appropriation: Procurement

Contract Name	**LRIP Lot 9 Payloads FFP**
Contractor	Northrop Grumman Systems Corporation
Contractor Location	17066 Goldentop Road San Diego, CA 92127-2412
Contract Number, Type	FA8620-10-C-4007/2, FFP
Award Date	May 20, 2010
Definitization Date	August 12, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
20.1	N/A	15	137.9	N/A	522	137.9	137.9

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP contract.

Contract Comments

This is the first time this contract is being reported.

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the strategy to add additional spares and Peculiar Support Equipment (PSE).

This contract procures PSE (339 items) and Enhanced Integrated Sensor Suite and Airborne Signals Intelligence Payload spares (183 items) for the Lot 9 Payloads captured under the Low Rate Initial Production (LRIP) Lot 9 Payloads FPIF contract, as well as supporting labor for the PSE and spares.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	38	38	45	84.44%
Total Program Quantities Delivered	38	38	45	84.44%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	9009.3	Years Appropriated	13
Expenditures To Date	6622.6	Percent Years Appropriated	68.42%
Percent Expended	73.51%	Appropriated to Date	8496.4
Total Funding Years	19	Percent Appropriated	94.31%

The above data is current as of 4/25/2013.

Operating and Support Cost

RQ-4A/B Global Hawk

Assumptions and Ground Rules

Cost Estimate Reference:

The costs shown below are based on the FY 2012 Program Office Estimate (POE), September 2012.

Sustainment Strategy:

Global Hawk sustainment is accomplished by a combination of civil service, military, and contractor personnel. The Global Hawk is being maintained using a two level maintenance (2LM) concept – Organizational and Depot, which supports the maximum use of rapid transportation, minimum turnaround times for repair, and a capability to deploy with minimum direct mission support equipment. The 2LM concept is used at both the Forward Operation Locations and Main Operating Bases. Air Combat Command accomplishes organizational level maintenance tasks via military, civilian, and contractor support. The contractor accomplishes depot level maintenance tasks and repair actions under a Contractor Logistics Support contract.

The Global Hawk system is comprised of four Blocks (10/20/30/40), each with its own distinct capability set. The Air Force procured and has since divested/retired seven Block 10 aircraft. Six Block 20 aircraft were procured and four have been converted to provide a communications relay capability known as Battlefield Airborne Communications Node (BACN) in response to the Secretary of Defense direction on the BACN Joint Urgent Operational Need, dated May 28, 2009. BACN costs are excluded from the costs reported for the Acquisition Category (ACAT) ID Global Hawk Program. Block 30 aircraft added the Airborne Signal Intelligence Program sensor to the Enhanced Integrated Sensor Suite giving it both Imagery Intelligence and Signals Intelligence. A total of 21 Block 30 aircraft will be procured. Block 40 integrates the Multi-Platform Radar Technology Insertion Program (MP-RTIP) sensor onto the Global Hawk air vehicle. The MP-RTIP sensor provides a Ground Moving Target Indicator mode to support detection and tracking of moving targets and a Synthetic Aperture Radar imaging mode to support detection and identification of ground stationary targets. A total of eleven Block 40 aircraft will be procured.

Current sustainment planning assumes that Block 30s will fly through December 2014, while Block 40s will fly through 2032. At this time, the Life Cycle Sustainment Plan, the Concept of Operations, and the Operations Tempo are all being re-examined in light of operational and budget decisions that reduced the Global Hawk fleet size and planned annual flying hours. Costs below span FY 2003 through FY 2032, the entire period of planned Global Hawk production fleet operations. Flying hours and aircraft inventory vary annually from FY 2003 through FY 2015 as Block 10, 20, 30 and 40 aircraft are delivered and then, as Block 10, 20 and 30 aircraft are divested. Steady state is achieved beginning in FY 2016 when the program becomes Block 40 only. Steady state runs through FY 2029. A phase-out period begins in FY 2030 and the life cycle ends in FY 2032. During steady state, the program will have 12 aircraft (11 Block 40 aircraft and 1 specially-instrumented Block 20 test aircraft) and will fly 8,064 hours per year.

Antecedent Information:

There is no antecedent system for the Global Hawk.

Unitized O&S Costs BY2000 $M		
Cost Element	**RQ-4A/B Global Hawk Avg Annual Cost per Aircraft**	**No Global Hawk Antecedent (Antecedent)**
Unit-Level Manpower	3.6	0.0
Unit Operations	1.8	0.0
Maintenance	4.0	0.0
Sustaining Support	5.9	0.0
Continuing System Improvements	0.8	0.0
Indirect Support	1.7	0.0
Other	0.0	0.0
Total	17.8	--

Unitized Cost Comments:

Unitized costs are calculated by dividing total estimated O&S costs in BY 2000 dollars ($7,313.5M) by total life cycle operational aircraft years (412), resulting in an average annual O&S cost per aircraft of $17.75M.

	Total O&S Cost $M			
	Current Development APB Objective/Threshold		Current Estimate	
	RQ-4A/B Global Hawk		RQ-4A/B Global Hawk	No Global Hawk Antecedent (Antecedent)
Base Year	0.0	0.0	7313.5	N/A
Then Year	0.0	N/A	10124.6	N/A

Total O&S Costs Comments:

The total estimated flying hours for the life of the program is 253,617, a decrease from the previous estimated flying hours of 501,301. This decrease assumes Block 30s do not fly after December 2014.

Disposal Costs

Neither the current POE nor the most recent Independent Cost Estimate include disposal costs. Disposal costs will be included in the next POE update scheduled for fall 2013.