Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-182

Light Utility Helicopter (LUH)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

Light Utility Helicopter (LUH)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned June 29, 2011

References

SAR Baseline (Production Estimate)

Army Acquisition Executive (AAE) Approved Acquisition Program Baseline (APB) dated June 29, 2006

Approved APB

Army Acquisition Executive (AAE) Approved Acquisition Program Baseline (APB) dated August 22, 2007

Mission and Description

The Army currently utilizes a mix of rotary wing aircraft to accomplish a wide range of administrative and logistical missions, as well as supporting the Homeland Security (HLS) role assigned to selected units of the Army National Guard. These aircraft provide General Support (GS) at various posts, camps, and stations both in the Continental United States and Outside the Continental United States. In most instances, the aircraft now assigned to these missions have reached their serviceable life limit and must be replaced. In other cases, the aircraft used in this role are UH-60 Black Hawks, which are much more capable than required for the role and are more costly to operate and maintain. The light, GS mission requirements are satisfied by Tables of Organization and Equipment (TOE) and Tables of Distribution and Allowances (TDA) aircraft within both active and reserve components. GS TOE mission requirements include time-sensitive transport for urgently needed supplies, parts, equipment, documents, and/or personnel. The TDA light GS mission needs include observer/controller aircraft at Combat Training Centers, aircraft to provide force protection and installation security in sensitive areas (e.g., test sites, ranges, etc.), and chase/instrumentation aircraft for technical or operational testing.

The Light Utility Helicopter (LUH) UH-72A Lakota platform will provide the flexibility to respond to HLS requirements, conduct civil search and rescue operations, support test and training centers, support counterdrug operations, and perform Medical Evacuation (MEDEVAC) missions. The UH-72A Lakota will conduct GS utility helicopter missions and execute tasks as part of an integrated effort with other joint services, government agencies, and non-governmental organizations. The UH-72A Lakota is to be deployed only to non-combat, permissive environments and is to conduct primarily three missions: medical and casualty evacuations, general support, and reconnaissance and surveillance.

Crew seating is comprised of two individual longitudinally adjustable energy absorbing pilot and copilot seats with head rest and four-point safety belts with automatic locking system. The passenger seats have a four-point restraint harness with adjusters in both shoulder straps and the lap belt with a single-action, 45-degree lost-motion rotary buckle. When equipped for MEDEVAC operations to accommodate two North Atlantic Treaty Organization standard litters, passenger seating is limited to a medical attendant and a crew chief.

The aircraft is equipped with modern cockpit communication and navigation avionics required to operate with civilian airspace systems. The cockpit is arranged and lit to be compatible with night vision devices. Included in the avionics are a radar altimetry, full autopilot, and a unique First Limit Indicator, which further simplifies engine monitoring and reduces pilot workload.

The UH-72A is a Federal Aviation Administration (FAA) rotorcraft certified to the airworthiness standards of Title 14, Federal Aviation Regulations Part 29. Part 29 applies to transport category rotorcraft, which are defined as having nine or more seats and gross weights of more than 7,000 pounds.

In addition, the aircraft include provisions for MEDEVAC and hoist kits, as well as four approved modifications: Secure Communications, Cabin Temperature/Ventilation System, Engine Inlet Barrier Filter, and MEDEVAC Interior Kit (storage).

Operational Needs Statements (ONS) have also been issued that approve requirements for the following modifications: Environmental Control Unit, Very Important Personnel (VIP) Mission Kit, and Combat Training Center Mission Equipment Package.

Executive Summary

Since the completion of the three-phase production duplication in October 2010, American Eurocopter (AE) has been focusing on continuous improvement. AE has increased the number of quality gates by reorganizing the number of work stations, which also reduces redundancy and enhances the material flow and production process.

During 2012, UH-72A Security and Support (S&S) Mission Equipment Package (MEP) aircraft began support of U.S. Customs and Border Protection (CBP) with advanced aerial surveillance, reconnaissance, and air mobility to detect and deter illegal activity at the U.S./Mexico border at three separate locations: Tucson, AZ, Laredo, TX, and Harlingen, TX. To date, the UH-72A aircraft have flown approximately 7,580 hours in support of the mission. The aircraft have aided in more than 26,000 apprehension assists and resulted in the confiscation of over 126,500 pounds of marijuana and 100 pounds of cocaine.

The UH-72A aircraft also continue to support the National Guard's Homeland Security mission by providing aerial surveillance and reconnaissance. A recent example of this is the support the aircraft provided during Hurricane Sandy. UH-72A also support air movement operations, civil search and rescue, counter-drug operations, Medical Evacuation (MEDEVAC), and Casulty Evacuation (CASEVAC). Fifty-four S&S MEP equipped aircraft have been fielded as of March 31, 2013, with an additional 46 planned for fielding by the end of FY 2015.

The Program Year (PY) 8 contract option was awarded on November 5, 2012, for 34 aircraft.

Current funding procures 315 aircraft; Authorized Acquisition Objective (AAO) remains unchanged at 345. Contract options remain available for procurement of aircraft through FY 2015.

Current funding limits future modifications to include: Wide Area Augmentation Systems (WAAS) for 100 aircraft and crash survivable Cockpit Voice Data Recorders (CVDR)/Flight Data Recorders (FDR) for 139 aircraft.

Two hundred and fifty-five UH-72A aircraft have been delivered as of March 31, 2013. Fifty-four aircraft have been equipped with the Engine Inlet Barrier Filter (EIBF). Seventy-eight aircraft have the MEDEVAC mission kit. Ninety-two aircraft have been outfitted with Environmental Control Units (ECU). Two hundred and twenty-nine aircraft have been equipped with secure communications. Twelve aircraft have been equipped with the Very Important Personnel (VIP) package.

This is the final SAR submission for the LUH UH-72A Lakota because the program is 90% or more expended.

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

Threshold Breaches

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

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

Explanation of Breach

The Operating and Support (O&S) estimate for the Full Rate Production (FRP) Acquisition Program Baseline (APB) estimate in 2007 did not include military pay or training and was based on an expected Economic Useful Life (EUL) of 20 years. The APB is representative of ownership cost instead of true O&S cost.

The current O&S estimate includes the military pay and training of personnel, an expected EUL of 25 years, additional costs due to schedule and fielding location changes, and additional Department of the Army (DA) directed Operational Needs Statement (ONS) approved modifications support cost.

Schedule

Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
Milestone C - LRIP	JUN 2006	JUN 2006	DEC 2006	JUN 2006
IOT/SLT - Start	FEB 2007	FEB 2007	AUG 2007	MAR 2007
IOT/SLT - End	MAR 2007	MAR 2007	SEP 2007	MAR 2007
FUE	MAR 2007	MAR 2007	SEP 2007	MAY 2007
FRP Decision	MAY 2007	JUL 2007	JAN 2008	AUG 2007

Acronyms And Abbreviations

FRP - Full Rate Production
FUE - First Unit Equipped
IOT - Initial Operational Test
LRIP - Low Rate Initial Production
SLT - System Level Test

Change Explanations

None

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Net Ready / Voice Interoperability (KPP)%	100% Secure Comms	100% Secure Comms	100% Military/Civilian Public Safety Comms	100% Military/Civilian Public Safety Comms	100% Military/Civilian Public Safety Comms
Cabin Size (KPP)	6 Seats/ 2 NATO Litters & 1 Medical Attendant	6 Seats/ 2 NATO Litters & 1 Medical Attendant	6 Seats/ 2 NATO Litters & 1 Medical Attendant	6 Seats/ 2 NATO Litters & 1 Medical Attendant	6 Seats/ 2 NATO Litters & 1 Medical Attendant
Force Protection (KPP)	Air Warrior	Air Warrior	Air Warrior Ensemble	Air Warrior Ensemble	Air Warrior Ensemble
Survivability (KPP)	1994 FAA STD	1994 FAA STD	1989 FAA STD	1994 FAA STD	1994 FAA STD
Performance (KPP)	HOGE at STD Day	HOGE at STD Day	HOGE at STD Day	HOGE at STD Day	HOGE at STD Day

Requirements Source: Capability Development Document (CDD) Version 9.0 dated September 30, 2005 (Joint Requirements Oversight Council Memorandum 216-06 dated October 18, 2006 accepted the CDD in lieu of a separate Capability Production Document (CPD))

Acronyms And Abbreviations

Comms - Communications
FAA - Federal Aviation Administration
HOGE - Hover Out of Ground Effect
NATO - North Atlantic Treaty Organization
STD - Standard

Change Explanations

None

Memo

In reference to the Net Ready/Voice Interoperability KPP, the UH-72A Lakota has demonstrated and currently meets the threshold and commercial secure communication requirements. UH-72A Lakota public safety radios can be encrypted and provide commercial secure communications. A modification to integrate the ARC-231 radio into the UH-72A will provide for military secure communications.

In reference to the Force Protection KPP, the Air Warrior ensemble includes chemical protective undergarment, anti-exposure suite, primary survival gear carrier, flotation collar and survival knife with sheath. It excludes the Air Warrior MicroClimate Unit.

In reference to the Survivability KPP, the UH-72A platform meets the requirements of Title 14 of the Code of Federal Regulations (CFR), Part 29, Sections 561, 562, 785 and 952 as of December 31, 1994. These sections define Federal Aviation Regulations for design and qualification of seating, restraint systems, fuel systems and aircraft structure. These standards protect aircraft occupants from excessive impact loads through dissipation of crash energy via deformation of structure, flammability requirements, and retention of objects inside the aircraft to reduce the severity and occurrence of secondary impacts.

Regarding the Performance KPP, STD day is sea level pressure and altitude, and 59 degrees Fahrenheit conditions. Numerical values assigned to this KPP are 906 pounds HOGE at STD day conditions for both Threshold and Objective. Current demonstrated performance value is 1244 pounds HOGE at STD day conditions.

The UH-72A aircraft continues to perform to these KPPs and there has been no change since the December 2007 SAR.

Track To Budget

RDT&E				
APPN 2040	BA 07	PE 0273744A	(Army)	
	Project D16	Light Utility Helicopter	(Shared)	(Sunk)
	Shared with the UH-60M Black Hawk Program			

Procurement				
APPN 2031	BA 01		(Army)	
	ICN A05001	Light Utility Helicopter	(Shared)	

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2006 $M			BY2006 $M	TY $M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	3.2	3.2	4.2	3.2	3.1	3.1	3.1
Flyaway	--	--	--	3.2	--	--	3.1
Recurring	--	--	--	3.2	--	--	3.1
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	0.0	--	--	0.0
Procurement	1635.1	1704.9	1875.4	1623.7	1879.9	1958.6	1806.2
Flyaway	1564.9	--	--	1532.1	1798.5	--	1702.3
Recurring	1546.0	--	--	1513.0	1777.5	--	1681.5
Non Recurring	18.9	--	--	19.1	21.0	--	20.8
Support	70.2	--	--	91.6	81.4	--	103.9
Other Support	70.2	--	--	91.6	81.4	--	103.9
Initial Spares	0.0	--	--	0.0	0.0	--	0.0
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	1638.3	1708.1	N/A	1626.9	1883.0	1961.7	1809.3

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	322	322	315
Total	322	322	315

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	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
Procurement	1524.3	201.5	80.4	0.0	0.0	0.0	0.0	0.0	1806.2
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	1527.4	201.5	80.4	0.0	0.0	0.0	0.0	0.0	1809.3
PB 2013 Total	1527.2	201.5	179.8	82.9	13.3	0.0	0.0	0.0	2004.7
Delta	0.2	0.0	-99.4	-82.9	-13.3	0.0	0.0	0.0	-195.4

Modification costs are not included in the reported UH-72A Lakota program acquisition costs and are currently estimated at $185.4 (TY$M). Yearly breakdown of modification costs are as follows: Prior $99.3, FY 2013 $70.2, FY 2014 $15.9 (TY$M).

Current funding limits future modifications to 100 Wide Area Augmentation Systems (WAAS) and 139 Cockpit Voice Data Recorders (CVDR)/Flight Data Recorders (FDR).

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	271	34	10	0	0	0	0	0	315
PB 2014 Total	0	271	34	10	0	0	0	0	0	315
PB 2013 Total	0	271	34	30	10	0	0	0	0	345
Delta	0	0	0	-20	-10	0	0	0	0	-30

Cost and Funding

Annual Funding By Appropriation

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

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2004	--	--	3.1	--	3.1	--	3.1
Subtotal	**--**	**--**	**3.1**	**--**	**3.1**	**--**	**3.1**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2006 $M	Non End Item Recurring Flyaway BY 2006 $M	Non Recurring Flyaway BY 2006 $M	Total Flyaway BY 2006 $M	Total Support BY 2006 $M	Total Program BY 2006 $M
2004	--	--	3.2	--	3.2	--	3.2
Subtotal	**--**	**--**	**3.2**	**--**	**3.2**	**--**	**3.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2005	--	--	2.0	--	2.0	--	2.0
2006	16	79.9	7.0	1.0	87.9	0.8	88.7
2007	26	123.4	7.4	3.2	134.0	8.6	142.6
2008	42	204.1	5.4	3.3	212.8	4.5	217.3
2009	44	218.1	9.0	3.1	230.2	12.1	242.3
2010	54	275.8	9.5	3.4	288.7	12.6	301.3
2011	50	262.5	9.8	3.7	276.0	17.0	293.0
2012	39	206.6	10.1	3.1	219.8	17.3	237.1
2013	34	178.1	9.0	--	187.1	14.4	201.5
2014	10	54.8	9.0	--	63.8	16.6	80.4
Subtotal	**315**	**1603.3**	**78.2**	**20.8**	**1702.3**	**103.9**	**1806.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2006 $M	Non End Item Recurring Flyaway BY 2006 $M	Non Recurring Flyaway BY 2006 $M	Total Flyaway BY 2006 $M	Total Support BY 2006 $M	Total Program BY 2006 $M
2005	--	--	2.0	--	2.0	--	2.0
2006	16	77.3	6.8	1.0	85.1	0.8	85.9
2007	26	117.1	7.0	3.0	127.1	8.2	135.3
2008	42	190.6	5.0	3.1	198.7	4.2	202.9
2009	44	200.8	8.3	2.9	212.0	11.1	223.1
2010	54	249.4	8.6	3.1	261.1	11.4	272.5
2011	50	232.6	8.7	3.3	244.6	15.0	259.6
2012	39	179.0	8.7	2.7	190.4	15.0	205.4
2013	34	150.6	7.6	--	158.2	12.2	170.4
2014	10	45.4	7.5	--	52.9	13.7	66.6
Subtotal	**315**	**1442.8**	**70.2**	**19.1**	**1532.1**	**91.6**	**1623.7**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	6/20/2006	6/20/2006
Approved Quantity	42	42
Reference	ADM	ADM
Start Year	2006	2006
End Year	2007	2007

The Current Total LRIP Quantity is more than 10% of the total production quantity due to this being the minimum quantity necessary to establish an initial production base for the system and to permit an orderly increase in the production rate sufficient to lead to Full Rate Production (FRP) upon successful completion of the testing.

LRIP aircraft were procured in FY 2006 and FY 2007 and Full Rate Production (FRP) aircraft were procured in FY 2008 and beyond.

Foreign Military Sales

None

Nuclear Cost

None

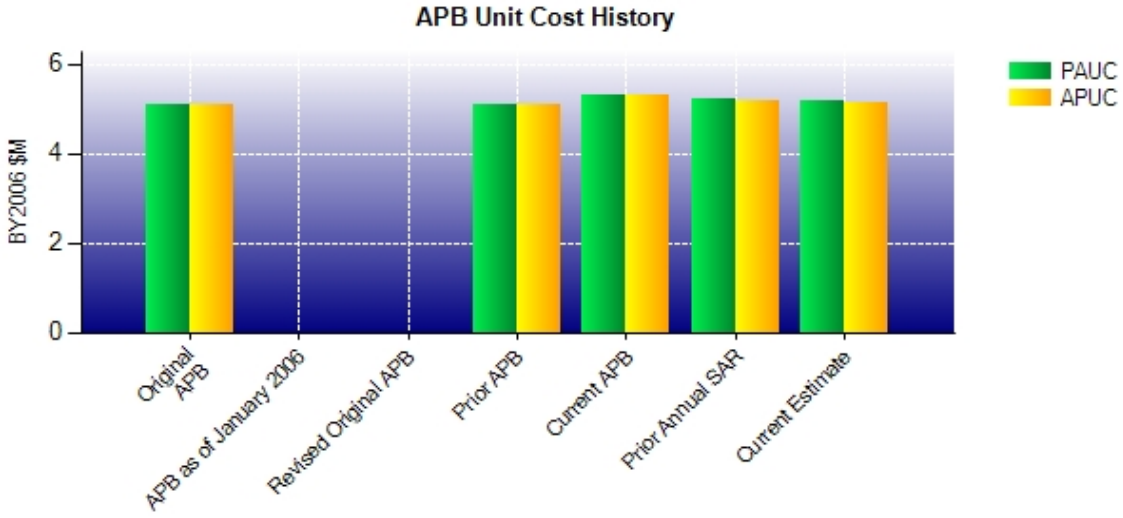
Unit Cost

Unit Cost Report

	BY2006 $M	BY2006 $M	
Unit Cost	**Current UCR Baseline (AUG 2007 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	1708.1	1626.9	
Quantity	322	315	
Unit Cost	5.305	5.165	-2.64
Average Procurement Unit Cost (APUC)			
Cost	1704.9	1623.7	
Quantity	322	315	
Unit Cost	5.295	5.155	-2.64

	BY2006 $M	BY2006 $M	
Unit Cost	**Original UCR Baseline (JUN 2006 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	1638.3	1626.9	
Quantity	322	315	
Unit Cost	5.088	5.165	+1.51
Average Procurement Unit Cost (APUC)			
Cost	1635.1	1623.7	
Quantity	322	315	
Unit Cost	5.078	5.155	+1.52

Unit Cost History



		BY2006 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUN 2006	5.088	5.078	5.848	5.838
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	JUN 2006	5.088	5.078	5.848	5.838
Current APB	AUG 2007	5.305	5.295	6.092	6.083
Prior Annual SAR	DEC 2011	5.200	5.190	5.811	5.802
Current Estimate	DEC 2012	5.165	5.155	5.744	5.734

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
5.848	-0.083	-0.001	-0.053	0.263	-0.298	0.000	0.068	-0.104	5.744

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
5.838	-0.083	-0.001	-0.053	0.263	-0.298	0.000	0.068	-0.104	5.734

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	N/A	N/A	N/A
Milestone C	N/A	N/A	JUN 2006	JUN 2006
FUE	N/A	N/A	MAR 2007	MAY 2007
Total Cost (TY $M)	N/A	N/A	1883.0	1809.3
Total Quantity	N/A	N/A	322	315
Prog. Acq. Unit Cost (PAUC)	N/A	N/A	5.848	5.744

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	3.1	1879.9	--	1883.0
Previous Changes				
Economic	--	-34.2	--	-34.2
Quantity	--	+139.3	--	+139.3
Schedule	--	-17.0	--	-17.0
Engineering	--	+84.9	--	+84.9
Estimating	--	-86.3	--	-86.3
Other	--	--	--	--
Support	--	+35.0	--	+35.0
Subtotal	--	+121.7	--	+121.7
Current Changes				
Economic	--	+8.0	--	+8.0
Quantity	--	-180.3	--	-180.3
Schedule	--	+0.3	--	+0.3
Engineering	--	-2.1	--	-2.1
Estimating	--	-7.7	--	-7.7
Other	--	--	--	--
Support	--	-13.6	--	-13.6
Subtotal	--	-195.4	--	-195.4
Total Changes	--	-73.7	--	-73.7
CE - Cost Variance	3.1	1806.2	--	1809.3
CE - Cost & Funding	3.1	1806.2	--	1809.3

Summary Base Year 2006 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	3.2	1635.1	--	1638.3
Previous Changes				
Economic	--	--	--	--
Quantity	--	+110.5	--	+110.5
Schedule	--	+19.9	--	+19.9
Engineering	--	+74.4	--	+74.4
Estimating	--	-81.4	--	-81.4
Other	--	--	--	--
Support	--	+32.2	--	+32.2
Subtotal	--	+155.6	--	+155.6
Current Changes				
Economic	--	--	--	--
Quantity	--	-148.4	--	-148.4
Schedule	--	+0.3	--	+0.3
Engineering	--	-1.8	--	-1.8
Estimating	--	-6.3	--	-6.3
Other	--	--	--	--
Support	--	-10.8	--	-10.8
Subtotal	--	-167.0	--	-167.0
Total Changes	--	-11.4	--	-11.4
CE - Cost Variance	3.2	1623.7	--	1626.9
CE - Cost & Funding	3.2	1623.7	--	1626.9

Previous Estimate: December 2011

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+8.0
Total Quantity variance resulting from a decrease of 30 UH-72A aircraft from 345 to 315, and an overall acceleration of the procurement buy profile. (Subtotal)	-136.5	-165.9
Quantity variance resulting from a decrease of 30 helicopters from 345 to 315. (Quantity) (QR)	(-137.7)	(-167.2)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+0.3)	(+0.3)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-0.6)	(-0.7)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+1.5)	(+1.7)
Additional Quantity variance related acceleration of the procurement buy profile. (Quantity) (QR)	-10.7	-13.1
Decrease in engineering services required due to early completion of procurement. (Engineering)	-1.2	-1.4
Adjustment for current and prior escalation. (Estimating)	-3.2	-3.7
Decrease in estimate to remove recompete of contract. (Estimating)	-4.6	-5.7
Adjustment for current and prior escalation. (Support)	-0.1	-0.1
Decrease in Other Support for fielding and training requirements associated with the reduction in quantity. (Support) (QR)	-10.7	-13.5
Procurement Subtotal	-167.0	-195.4

(QR) Quantity Related

Contracts

Appropriation: RDT&E	
Contract Name	**LUH Prod & Svcs Contract**
Contractor	EADS North America Defense Company
Contractor Location	1616 Fort Myer Dr. Ste. 1500 Arlington, VA 22209
Contract Number, Type	W58RGZ-06-C-0194, FFP
Award Date	June 30, 2006
Definitization Date	June 30, 2006

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
51.1	N/A	8	1757.5	N/A	305	1757.5	1757.5

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 purchase of an additional 297 aircraft, bringing the total number of aircraft purchased to date to 305. Other items that have increased contract value include the purchase of a procedural trainer, additional hoist and MEDical EVACuation (MEDEVAC) B kits, pilot and maintainer training, additional Contractor Field Service Representative (CFSR) support, Contractor Field Team (CFT) support, engineering service efforts, and Contractor Logistics Support (CLS). Approved modifications include: cabin temperature ventilation kits, engine inlet barrier filter kits, ARC-231 radios, MEDEVAC mission kits, environmental control units, and very important personnel kits. Future modifications include: Cockpit Voice Data Recorders (CVDR) and Wide Area Augmentation Systems (WAAS).

The UH-72A Lakota production contract was awarded on June 30, 2006, for Federal Aviation Administration (FAA) certified, commercial/Non-Development Item aircraft to European Aeronautical Defense and Space Company - North America. These aircraft will be operated and maintained in accordance with FAA regulations and Original Equipment Manufacturer (OEM) procedures for the life of the system; support will be executed through life-cycle CLS (Full and/or Hybrid).

The Program Year (PY) 8 contract option was awarded on November 5, 2012, for 34 aircraft.

Current funding procures 315 aircraft; Authorized Acquisition Objective (AAO) remains unchanged at 345. Contract options remain available for procurement of aircraft through FY 2015.

The estimated price at completion reflects the value of the contract options exercised as of March 31, 2013, and includes modification procurement costs.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	255	255	315	80.95%
Total Program Quantities Delivered	255	255	315	80.95%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1809.3	Years Appropriated	10
Expenditures To Date	1636.1	Percent Years Appropriated	90.91%
Percent Expended	90.43%	Appropriated to Date	1728.9
Total Funding Years	11	Percent Appropriated	95.56%

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

Planned quantity for December 31, 2012, was 242 aircraft; actual delivered quantity was 246 aircraft. Current delivered quantity as of March 31, 2013, was 255 aircraft.

Operating and Support Cost

LUH

Assumptions and Ground Rules

Cost Estimate Reference:

The current Lakota estimate was based on the original Army Cost Position (ACP), which was approved in May 2006 and updated in July 2007 in support of the Full Rate Production (FRP) decision. This estimate was based on an Economic Useful Life (EUL) of 20 years.

Since the last ACP in March 2011, the Program Office Estimate (POE) has been updated to incorporate the revised EUL expectancy of 25 years as identified in the April 22, 2012, memorandum from the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA(ALT)). The current estimate also includes fact of life changes since 2007 that include additional costs due to schedule and fielding location changes and additional Department of the Army (DA) directed Operational Needs Statement (ONS) approved modifications support cost.

Sustainment Strategy:

The Lakota is a Federal Aviation Administration (FAA) certified, Commercial/Non-Development Item (C/NDI) aircraft to be operated and maintained in accordance with FAA regulations and Original Equipment Manufacturer (OEM) procedures for the life of the system; support will be executed through life-cycle Contractor Logistics Support (CLS); the Army National Guard (ARNG) will perform only field-level maintenance with the contractor providing depot/sustainment level maintenance and all other aspects of Integrated Logistics Support (ILS) at both field and depot/sustainment levels. Hybrid CLS will be executed as a contract option. Lakota will have an expected 25-year useful life for 315 operational aircraft when fully fielded, and an average Operating Tempo (OPTEMPO) flying hour profile of 250 hours per year.

Average Annual Cost Per Aircraft is calculated based on total operational cost divided by the number of systems, then divided by the expected useful life of the system. All unit costs are in BY 2006 dollars in thousands, and the current estimate is as of December 31, 2012.

Equation: Average Annual Cost Per Aircraft * Quantity Fielded * Expected System Life = ($766.000 * 315 * 25 = $6,032.250 BY 2006 Dollars in Thousands)

Antecedent Information:

The antecedent system used for this comparison to the Lakota is the UH-60L. While these systems are both utility helicopters, they are supported very differently. The table below reflects the UH-60L Operating and Support (O&S) data for an organically supported system. It does not include any costs for the maintenance labor, which is provided by military personnel. The Lakota is supported by life-cycle CLS; therefore, the cost element categories are not directly comparable.

The information in the O&S cost table for UH-60L is based on Operation and Support Management Information Systems (OSMIS) data for the UH-60L (excluding Contingency Operations (CONOPS)). Sustaining support costs for the UH-60L aircraft are not included in the table because the costs (software maintenance, system specific base operations, systems engineering/program management, and transportation) are not collected in the OSMIS database. The antecedent system cost for Black Hawk UH-60L has been escalated to BY 2006 dollars in thousands for comparison purposes.

Unitized O&S Costs BY2006 $K		
Cost Element	**LUH Average Annual Cost Per Aircraft**	**Black Hawk UH-60L (Antecedent) Average Annual Cost Per Aircraft**
Unit-Level Manpower	187.164	440.372
Unit Operations	87.230	55.788
Maintenance	0.000	293.167
Sustaining Support	4.040	0.000
Continuing System Improvements	0.000	0.000
Indirect Support	63.210	223.048
Other	424.356	0.000
Total	766.000	1012.375

Unitized Cost Comments:

The "Other" cost category above includes the following average annual cost per aircraft (in thousands): CLS, installation support, and overhaul and rework. CLS is accounted for in the "Other" cost category because it is power by the hour, which includes field and depot level maintenance as well as parts and labor supplied by the contractor.

Lakota O&S unitized cost has decreased since 2011 from $801.3K to $766.0K per aircraft as a direct result of an decrease in the definitized CLS support cost per hour and a decrease in the total number of aircraft fielded from 345 to 315. However, the total O&S cost has increased since 2011 from $5,529M to $6,032.2M due to an increased useful life expectancy from 20 to 25 years.

The antecedent system cost for Black Hawk UH-60L uses BY 2006 dollars as the program basis, so the UH-60L costs were escalated to BY 2006 dollars for comparison purposes.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	LUH		LUH	Black Hawk UH-60L (Antecedent)
Base Year	2763.6	3040.0	**6032.2** [1]	0.0
Then Year	3891.5	N/A	8709.7	0.0

[1] **APB O&S Cost Breach**

Total O&S Costs Comments:

The O&S estimate for the Full Rate Production (FRP) Acquisition Program Baseline (APB) estimate in 2007 did not include military pay or training and was based on an expected Economic Useful Life (EUL) of 20 years. The APB is representative of ownership cost instead of true O&S cost.

The current O&S estimate includes the military pay and training of personnel, an expected EUL of 25 years, additional costs due to schedule and fielding location changes, and additional DA directed ONS approved modifications support cost.

Disposal Costs

Demilitarization/disposal costs are estimated to be $4.762M (BY 2006) and are not included in the O&S estimate but are part of program life-cycle costs.