



## Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-341



### **UH-60M BLACK HAWK**

As of December 31, 2011

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

---

**UNCLASSIFIED**

**Table of Contents**

Program Information .....	3
Responsible Office .....	3
References .....	3
Mission and Description .....	3
Executive Summary .....	4
Threshold Breaches .....	5
Schedule .....	6
Performance .....	8
Track To Budget .....	10
Cost and Funding .....	11
Low Rate Initial Production .....	18
Nuclear Cost .....	18
Foreign Military Sales .....	18
Unit Cost .....	19
Cost Variance .....	22
Contracts .....	25
Deliveries and Expenditures .....	26
Operating and Support Cost .....	27

## Program Information

### Designation And Nomenclature (Popular Name)

UH-60M (BLACK HAWK)

### DoD Component

Army

## Responsible Office

### Responsible Office

COL Thomas H. Todd, III  
 Utility Helicopters Project Office  
 SFAE-AV-UH  
 Program Executive Office Aviation  
 Redstone Arsenal, AL 35898-5000  
[thomas.todd@us.army.mil](mailto:thomas.todd@us.army.mil)

**Phone** 256-955-8939  
**Fax** 256-955-8109  
**DSN Phone** 645-8939  
**DSN Fax** 645-8109

**Date Assigned** June 29, 2011

## References

### SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 31, 2005

### Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 20, 2011

## Mission and Description

The UH-60M BLACK HAWK serves as the Army's utility helicopter for the current and future force and is in line with the Army's Modernization Strategy, the National Military Strategy, and the National Defense Strategy. The UH-60M is a digital networked platform with greater range and lift to support maneuver Commanders through air assault, general support command and control, and aeromedical evacuation. Full rate production for this new build helicopter began in 2007, and the UH-60M is currently employed in a second combat rotation. The UH-60M, with the integrated Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP) kit, provides day/night and adverse weather emergency evacuation of casualties. The integration of the MEDEVAC MEP onto the UH-60M changes the nomenclature to HH-60M.

## Executive Summary

In March, 2011 the Program Office and the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE) agreed on an Army Cost Position. On June 20, 2011 the Defense Acquisition Executive approved the UH-60M BLACK HAWK Acquisition Program Baseline (APB) completing the Acquisition Decision Memorandum (ADM) to rebaseline. Reports will no longer contain references to the upgrade program.

The five (5) year Multi-Year VIII (FY 2012 – FY 2016) proposal evaluation/negotiation is now on-going with projected award in July 2012.

From January 2011 through December 2011, Sikorsky Aircraft Company (SAC) delivered 92 aircraft to the Army.

Fielded five (5) complete H-60M fielding packages including the 82<sup>nd</sup> Combat Aviation Brigade (CAB), Ft. Bragg, North Carolina and the 101<sup>st</sup> CAB, Ft Campbell, Kentucky.

Utility is currently supporting 349 fielded UH-60M, and 91 HH-60M BLACK HAWK aircraft. Currently, a total of 5 UH-60M models (1-207<sup>th</sup> HI NG) and 12 HH-60M models (1-111 MED GA/FL 1-111 NG) are deployed in Kuwait. Also, a total of 60 UH-60M models (30 4-101<sup>st</sup> and 30 82<sup>nd</sup>) and 15 HH-60M (3-82<sup>nd</sup>) are deployed to Afghanistan.

Completed New Equipment Training (NET) for 82<sup>nd</sup> CAB Ft. Bragg, North Carolina and completed a NET for the Aviation Enterprise in Huntsville, Alabama. Initiated NET for 101<sup>st</sup> CAB, Ft. Campbell, Kentucky. Additionally, conducted HONTEK and MEDEVAC Mission Equipment Package Training for C/7 – 158 Oregon National Guard and 11<sup>th</sup> Aviation Command United States Army Reserve (USAR).

Utility Helicopter Project Management Office (UH PMO) Training Aides, Devices, Simulators and Simulation (TADSS) delivered the Transportable BLACK HAWK Operations Simulator (TBOS) (D8) to Ft. Campbell, Kentucky in support of the UHPO NET. The second BLACK HAWK Avionics Trainer (BHAT-M) was put on contract for production with a planned delivery to the United States Army Aviation Logistics School in FY 2012. Development of the UH-60M BLACK HAWK Electrical Trainer (BHET-M) was placed on contract with a follow-on production contract planned for FY 2012.

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

**Threshold Breaches****APB Breaches**

<b>Schedule</b>		<input type="checkbox"/>
<b>Performance</b>		<input type="checkbox"/>
<b>Cost</b>	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
<b>Unit Cost</b>	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

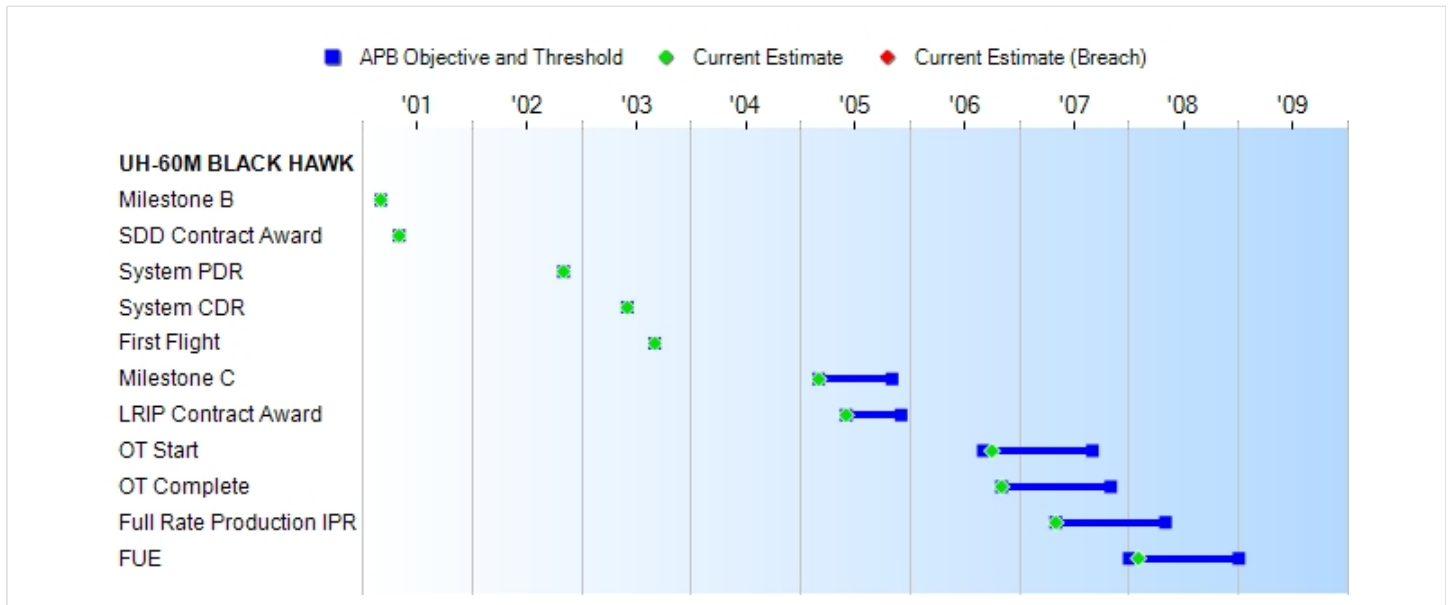
**Nunn-McCurdy Breaches****Current UCR Baseline**

PAUC	None
APUC	None

**Original UCR Baseline**

PAUC	None
APUC	None

**Schedule**



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
Milestone B	MAR 2001	MAR 2001	MAR 2001	MAR 2001
SDD Contract Award	MAY 2001	MAY 2001	MAY 2001	MAY 2001
System PDR	NOV 2002	NOV 2002	NOV 2002	NOV 2002
System CDR	JUN 2003	JUN 2003	JUN 2003	JUN 2003
First Flight	SEP 2003	SEP 2003	SEP 2003	SEP 2003
Milestone C	FEB 2005	MAR 2005	NOV 2005	MAR 2005
LRIP Contract Award	MAR 2005	JUN 2005	DEC 2005	JUN 2005
OT Start	SEP 2006	SEP 2006	SEP 2007	OCT 2006
OT Complete	NOV 2006	NOV 2006	NOV 2007	NOV 2006
Full Rate Production IPR	MAY 2007	MAY 2007	MAY 2008	MAY 2007
FUE	JAN 2008	JAN 2008	JAN 2009	FEB 2008

**Acronyms And Abbreviations**

- CDR - Critical Design Review
- FUE - First Unit Equipped
- IPR - In-Process Review
- LRIP - Low Rate Initial Production
- OT - Operational Test
- PDR - Preliminary Design Review
- SDD - System Design & Development

**Change Explanations**

None

## Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Key Performance Parameters (KPPs)					
Interoperability (meet IERs)	All	N/A	N/A	N/A	N/A
Net-Ready	All	All	All Critical	All	All
Survivability IR Signature	N/A	Existing	Existing	Existing	Existing
Aircraft Survivability Equipment	N/A	Existing	Existing	Existing	Existing
Survivability Fuel Cells	N/A	14.5mm	7.62mm	7.62mm	7.62mm
Force Protection Armor Plating	N/A	14.5mm	7.62mm	7.62mm	7.62mm
External Lift					
Payload	10,000	10,000	4,500	4,888	4,888
Non-KPPs					
Troop Movement					
Airspeed (Sustained Cruise) (KTAS)	175	175	145	142.0	145.0
One Engine Inoperative (KTAS)	100	100	100	TBD	100.0
Combat Radius (w/20 min reserve) (KM)	500	500	225	225.0	225.6
Vertical Rate of Climb (fpm)	750	750	500	725	725
Vertical Rate of Climb w/ One Engine Inoperative (fpm)	200	200	100	TBD	100.0
Internal Lift Capability (290 lbs each)	11	11	11	11	11
Self-Deploy Range (nautical miles)	1260	1260	1056	TBD	1071
Ballistic Protection (ground fired armor piercing (mm))	14.5	14.5	7.62	14.5	14.5
Maintainability (mhrs per flight hr)	4.6	4.6	5.4	2.3	4.1
Unscheduled mhrs per flight hr	1.3	1.3	2.1	.4	1.1



External Lift					
Vertical Rate of Climb (fpm)	500	500	200	200	200
Combat Radius (w/20 min reserve) (KM)	275	275	135	135	135

**Requirements Source:**

Operational Requirements Document (ORD), dated January 29, 2007.

**Acronyms And Abbreviations**

fpm - feet per minute  
hr - hour  
IER - Information Exchange Requirement  
IR - Infra-Red  
KM - Kilometer  
KPP - Key Performance Parameters  
KTAS - Knots True Air Speed  
lbs - Pounds  
mhrs - Man Hours  
min - Minutes  
mm - Millimeter  
TBD - To Be Determined  
w - With

**Change Explanations**

None

## Track To Budget

### General Memo

The Research Development Test & Evaluation (RDT&E) Program Element (PE) 0203744A is shared by the UH-60M program, Integrated Mechanical Diagnostic - Health and Usage Monitoring System (IMD-HUMS), Maintenance Analysis Safety Training (MAST), Helicopter Autonomous Landing System (HALS), Operator Situational Awareness System - MEDEVAC, Aircraft Component Remediation, UH-60M Upgrade Pre-Planned Product Improvements (P3I), Army Component Improvement Program (ACIP), Improved Turbine Engine Program (ITEP) and Future Utility Rotorcraft (FUR). The Upgrade Technology effort as the Program of Record was completed in February 2010. Efforts associated with the Fly-By-Wire Development Testing were in FY 2010 and FY 2011 as directed by the Acquisition Decision Memorandum, dated February 18, 2010. Funds beginning in FY 2012 and out are for the Improved Turbine Engine Program (ITEP). Not all funding associated with the Fly-By-Wire Development Testing and the ITEP is included.

The Aircraft Procurement, Army (APA) ICN AA0492 is shared with other BLACK HAWK modifications such as Crashworthy External Fuel System, Medical Equipment Package, and other safety modifications. No funds from the AA0492 line are included in this SAR.

The APA ICN AA0005 is the parent to the APA ICN A05002.

The APA ICN A05002 is shared with the Multi-Year (MY) VI Procurement of UH-60L aircraft. With this being a shared funding line, only UH-60M Baseline Program costs are included. Procurement of UH-60L aircraft was completed in FY 2006.

Overseas Contingency Operations (OCO) funding in FY 2012 (\$180.1M - ten (10) UH-60M) is included in this SAR; those funds are currently on withhold by Headquarters Department of the Army (HQDA).

Only UH-60M and UH-60M Upgrade Technologies (RDT&E only) funds are included in this SAR.

### RDT&E

APPN 2040	BA 07	PE 0203744A	(Army)
	Project 504	UH-60M Recapitalization/Modifications	(Sunk)

### Procurement

APPN 2031	BA 01		(Army)
	ICN A05002	BLACK HAWK UH-60M (MYP)	(Shared)
APPN 2031	BA 02		(Army)
	ICN AA0492	BLACK HAWK UH-60M Upgrade/Recap	(Sunk)

## Cost and Funding

### Cost Summary

#### Total Acquisition Cost and Quantity

Appropriation	BY2005 \$M			BY2005 \$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	717.5	761.3	837.4	761.3	739.3	780.4	780.4
Procurement	16084.2	21873.7	24061.1	22097.9	20107.8	27314.2	28080.2
Flyaway	15500.4	--	--	21049.7	19398.5	--	26782.0
Recurring	15421.6	--	--	20844.0	19306.3	--	26547.1
Non Recurring	78.8	--	--	205.7	92.2	--	234.9
Support	583.8	--	--	1048.2	709.3	--	1298.2
Other Support	410.8	--	--	874.3	488.7	--	1075.5
Initial Spares	173.0	--	--	173.9	220.6	--	222.7
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	16801.7	22635.0	N/A	22859.2	20847.1	28094.6	28860.6

Confidence Level For the APB Cost 50% - In March, 2011 the Program Office and the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE) agreed on an Army Cost Position which was used to establish the APB, dated June 20, 2011. Costs are reflected at the 50% Confidence Level in accordance with Army Cost guidance, AR 11-18.

It is difficult to calculate mathematically the precise confidence levels associated with life cycle cost estimates prepared for Major Defense Acquisition Programs (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E		8	8
Procurement	1227	1367	1367
Total	1235	1375	1375

The unit of measure for the H-60M program is aircraft, and consists of the UH-60M and the HH-60M (MEDEVAC) aircraft variants.

**Cost and Funding****Funding Summary**

**Appropriation and Quantity Summary  
FY2013 President's Budget / December 2011 SAR (TY\$ M)**

<b>Appropriation</b>	<b>Prior</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>To Complete</b>	<b>Total</b>
RDT&E	780.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	780.4
Procurement	7389.2	1697.5	1222.2	1211.9	1233.5	1408.5	1322.2	12595.2	28080.2
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 2013 Total	8169.6	1697.5	1222.2	1211.9	1233.5	1408.5	1322.2	12595.2	28860.6
PB 2012 Total	7731.7	1525.4	1349.4	1391.2	1317.7	1523.5	1516.9	10984.7	27340.5
Delta	437.9	172.1	-127.2	-179.3	-84.2	-115.0	-194.7	1610.5	1520.1

<b>Quantity</b>	<b>Undistributed</b>	<b>Prior</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>To Complete</b>	<b>Total</b>
Development	8	0	0	0	0	0	0	0	0	8
Production	0	420	81	59	57	56	65	52	577	1367
PB 2013 Total	8	420	81	59	57	56	65	52	577	1375
PB 2012 Total	8	393	71	71	71	65	74	72	550	1375
Delta	0	27	10	-12	-14	-9	-9	-20	27	0

## Cost and Funding

### Annual Funding By Appropriation

#### Annual Funding TY\$

#### 2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2000	--	--	--	--	--	--	9.5
2001	--	--	--	--	--	--	28.8
2002	--	--	--	--	--	--	55.9
2003	--	--	--	--	--	--	96.8
2004	--	--	--	--	--	--	144.8
2005	--	--	--	--	--	--	99.8
2006	--	--	--	--	--	--	106.6
2007	--	--	--	--	--	--	117.5
2008	--	--	--	--	--	--	84.9
2009	--	--	--	--	--	--	30.8
2010	--	--	--	--	--	--	5.0
<b>Subtotal</b>	<b>8</b>	--	--	--	--	--	<b>780.4</b>

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

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
2000	--	--	--	--	--	--	10.2
2001	--	--	--	--	--	--	30.5
2002	--	--	--	--	--	--	58.6
2003	--	--	--	--	--	--	99.5
2004	--	--	--	--	--	--	145.4
2005	--	--	--	--	--	--	97.4
2006	--	--	--	--	--	--	101.3
2007	--	--	--	--	--	--	109.0
2008	--	--	--	--	--	--	77.3
2009	--	--	--	--	--	--	27.7
2010	--	--	--	--	--	--	4.4
<b>Subtotal</b>	<b>8</b>	--	--	--	--	--	<b>761.3</b>

FY 2010-2011 RDTE funding included funds for the Fly-By-Wire flight test program and is no longer a part of the program of record as directed by the February 18, 2010 Acquisition Decision Memorandum (ADM). Subsequent reports will reflect the direction of the ADM. Funds beginning in FY 2012 and out are for the Improved Turbine Engine Program (ITEP). Not all funding associated with the Fly-By-Wire Development Testing and the ITEP is included.

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

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
2004	--	13.5	--	--	13.5	--	13.5
2005	5	82.5	6.1	5.6	94.2	2.8	97.0
2006	17	241.3	7.5	4.5	253.3	15.2	268.5
2007	72	1086.3	85.8	45.4	1217.5	54.4	1271.9
2008	77	1144.5	85.3	63.3	1293.1	61.6	1354.7
2009	66	962.3	92.0	9.0	1063.3	48.2	1111.5
2010	84	1182.5	172.0	4.5	1359.0	124.2	1483.2
2011	99	1512.5	131.4	36.2	1680.1	108.8	1788.9
2012	81	1317.1	148.9	46.4	1512.4	185.1	1697.5
2013	59	982.5	141.7	1.7	1125.9	96.3	1222.2
2014	57	1004.0	145.9	0.9	1150.8	61.1	1211.9
2015	56	1022.5	150.1	0.9	1173.5	60.0	1233.5
2016	65	1189.4	159.3	2.2	1350.9	57.6	1408.5
2017	52	1120.0	160.7	0.9	1281.6	40.6	1322.2
2018	62	1020.3	163.1	2.4	1185.8	31.1	1216.9
2019	72	1309.8	176.6	2.6	1489.0	36.1	1525.1
2020	72	1313.7	181.3	1.3	1496.3	41.9	1538.2
2021	72	1381.1	188.0	1.3	1570.4	42.6	1613.0
2022	72	1484.4	196.0	1.4	1681.8	43.5	1725.3
2023	72	1244.2	193.8	1.4	1439.4	44.4	1483.8
2024	72	1427.8	204.5	1.4	1633.7	44.7	1678.4
2025	72	1140.6	201.1	1.4	1343.1	45.8	1388.9
2026	11	174.0	173.4	0.2	347.6	46.1	393.7
2027	--	--	25.8	--	25.8	6.1	31.9
<b>Subtotal</b>	<b>1367</b>	<b>23356.8</b>	<b>3190.3</b>	<b>234.9</b>	<b>26782.0</b>	<b>1298.2</b>	<b>28080.2</b>

## Annual Funding BY\$

## 2031 | Procurement | Aircraft Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 \$M	Non End Item Recurring Flyaway BY 2005 \$M	Non Recurring Flyaway BY 2005 \$M	Total Flyaway BY 2005 \$M	Total Support BY 2005 \$M	Total Program BY 2005 \$M
2004	--	13.4	--	--	13.4	--	13.4
2005	5	79.6	5.8	5.4	90.8	2.7	93.5
2006	17	226.6	7.0	4.2	237.8	14.3	252.1
2007	72	999.8	79.0	41.8	1120.6	50.1	1170.7
2008	77	1036.9	77.3	57.3	1171.5	55.8	1227.3
2009	66	859.4	82.1	8.0	949.5	43.1	992.6
2010	84	1037.4	150.9	3.9	1192.2	109.0	1301.2
2011	99	1301.3	113.0	31.1	1445.4	93.7	1539.1
2012	81	1111.4	125.6	39.2	1276.2	156.1	1432.3
2013	59	815.4	117.6	1.4	934.4	79.9	1014.3
2014	57	818.7	118.9	0.7	938.3	49.9	988.2
2015	56	819.0	120.3	0.7	940.0	48.0	988.0
2016	65	935.9	125.4	1.7	1063.0	45.3	1108.3
2017	52	865.7	124.2	0.7	990.6	31.4	1022.0
2018	62	774.7	123.8	1.8	900.3	23.6	923.9
2019	72	976.9	131.8	1.9	1110.6	26.9	1137.5
2020	72	962.5	132.8	1.0	1096.3	30.7	1127.0
2021	72	994.0	135.3	0.9	1130.2	30.7	1160.9
2022	72	1049.4	138.6	1.0	1189.0	30.7	1219.7
2023	72	864.1	134.5	1.0	999.6	30.8	1030.4
2024	72	974.0	139.5	1.0	1114.5	30.5	1145.0
2025	72	764.3	134.8	0.9	900.0	30.7	930.7
2026	11	114.5	114.2	0.1	228.8	30.4	259.2
2027	--	--	16.7	--	16.7	3.9	20.6
<b>Subtotal</b>	<b>1367</b>	<b>18394.9</b>	<b>2449.1</b>	<b>205.7</b>	<b>21049.7</b>	<b>1048.2</b>	<b>22097.9</b>

On May 18, 2010, the Aviation Synchronization Conference Council of Colonels recommended the Authorized Acquisition Objective (AAO) increase from 1227 to 1365. Two additional aircraft were procured in the upgrade configuration. These two aircraft will not be fielded as they are in the upgrade configuration and are designated as test aircraft.



**Cost Quantity Information****2031 | Procurement | Aircraft Procurement, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway (Aligned with Quantity) BY 2005 \$M</b>
2004	--	--
2005	5	70.0
2006	17	173.9
2007	72	914.3
2008	77	1103.9
2009	66	839.1
2010	84	1066.6
2011	99	1311.4
2012	81	1061.8
2013	59	844.0
2014	57	820.2
2015	56	806.5
2016	65	936.5
2017	52	777.1
2018	62	851.1
2019	72	976.0
2020	72	964.4
2021	72	964.2
2022	72	970.0
2023	72	972.1
2024	72	974.1
2025	72	865.0
2026	11	132.7
2027	--	--
<b>Subtotal</b>	<b>1367</b>	<b>18394.9</b>

## Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	3/31/2005	3/31/2005
<b>Approved Quantity</b>	40	40
<b>Reference</b>	ADM	ADM
<b>Start Year</b>	2005	2005
<b>End Year</b>	2007	2007

The Acquisition Decision Memorandum (ADM) dated March 31, 2005, contains approval for up to 40 Low Rate Initial Production (LRIP) aircraft units and approval to award Advance Procurement Contract for the first lot of Full Rate Production (FRP) aircraft. Forty (40) LRIP aircraft were procured in FY 2005 - FY 2007. The LRIP aircraft quantity of 40 is less than 10 percent of the total aircraft to be procured.

## Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Memo
Thailand	12/26/2011	2	63.2	
Sweden	1/14/2011	15	277.0	
Taiwan	11/22/2010	60	1705.8	
Jordan	9/1/2010	2	23.9	
Mexico	8/3/2010	3	83.9	
Bahrain	12/12/2007	9	159.2	
United Arab Emirates	12/12/2007	40	884.4	Increase in Total Cost was due to procurement of additional spares, components, and logistics support.

To date all Foreign Military Sales (FMS) have been for the UH-60M configuration of the aircraft. Total Cost \$M reflects all costs associated with the procurement of the aircraft and other services provided to the specific country to include: training, spares, etc.

## Nuclear Cost

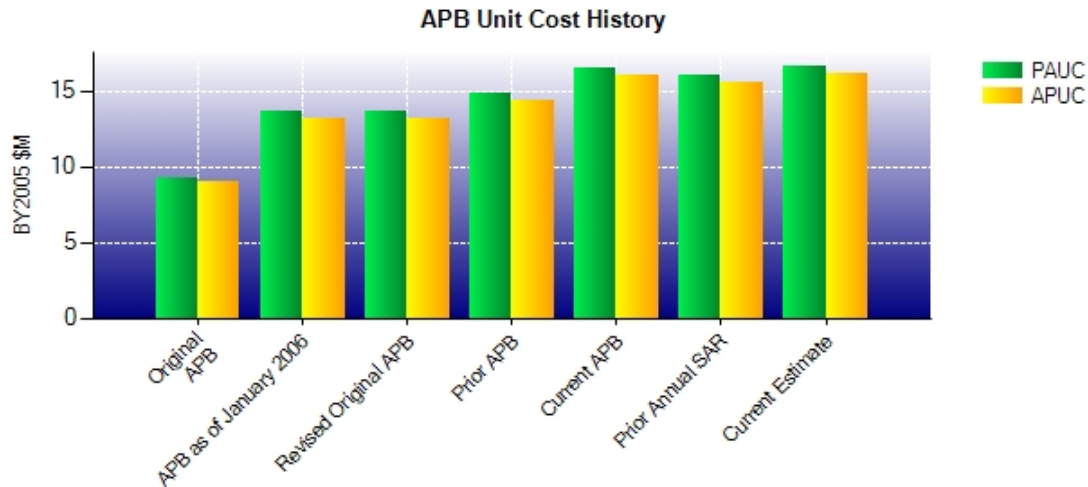
None

**Unit Cost****Unit Cost Report**

	BY2005 \$M	BY2005 \$M	
Unit Cost	Current UCR Baseline (JUN 2011 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	22635.0	22859.2	
Quantity	1375	1375	
Unit Cost	16.462	16.625	+0.99
Average Procurement Unit Cost (APUC)			
Cost	21873.7	22097.9	
Quantity	1367	1367	
Unit Cost	16.001	16.165	+1.02

	BY2005 \$M	BY2005 \$M	
Unit Cost	Revised Original UCR Baseline (MAR 2005 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	16801.7	22859.2	
Quantity	1235	1375	
Unit Cost	13.605	16.625	+22.20
Average Procurement Unit Cost (APUC)			
Cost	16084.2	22097.9	
Quantity	1227	1367	
Unit Cost	13.109	16.165	+23.31

### Unit Cost History



	Date	BY2005 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	FEB 2002	9.250	9.042	12.008	11.812
APB as of January 2006	MAR 2005	13.605	13.109	16.880	16.388
Revised Original APB	MAR 2005	13.605	13.109	16.880	16.388
Prior APB	FEB 2007	14.872	14.338	18.840	18.319
Current APB	JUN 2011	16.462	16.001	20.432	19.981
Prior Annual SAR	DEC 2010	16.064	15.602	19.884	19.429
Current Estimate	DEC 2011	16.625	16.165	20.990	20.541

### SAR Unit Cost History

#### Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
12.008	-0.325	4.705	-0.262	0.996	-0.326	0.000	0.084	4.872	16.880

#### Current SAR Baseline to Current Estimate (TY \$M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.880	-0.238	0.675	0.341	0.476	2.425	0.000	0.430	4.110	20.990

**Initial SAR Baseline to Current SAR Baseline (TY \$M)**

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
11.812	-0.324	4.469	-0.287	0.987	-0.354	0.000	0.085	4.576	16.388

**Current SAR Baseline to Current Estimate (TY \$M)**

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.388	-0.242	0.729	0.323	0.481	2.431	0.000	0.432	4.153	20.541

**SAR Baseline History**

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	APR 2001	MAR 2001	MAR 2001
Milestone C	N/A	MAR 2004	FEB 2005	MAR 2005
FUE	N/A	SEP 2006	JAN 2008	FEB 2008
Total Cost (TY \$M)	N/A	14662.0	20847.1	28860.6
Total Quantity	N/A	1221	1235	1375
Prog. Acq. Unit Cost (PAUC)	N/A	12.008	16.880	20.990

**Cost Variance****Cost Variance Summary**

<b>Summary Then Year \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	739.3	20107.8	--	20847.1
Previous Changes				
Economic	+3.9	-709.9	--	-706.0
Quantity	--	+3291.3	--	+3291.3
Schedule	+27.5	+372.8	--	+400.3
Engineering	-2.1	+657.2	--	+655.1
Estimating	+11.8	+2135.3	--	+2147.1
Other	--	--	--	--
Support	--	+705.6	--	+705.6
Subtotal	+41.1	+6452.3	--	+6493.4
Current Changes				
Economic	--	+378.7	--	+378.7
Quantity	--	--	--	--
Schedule	--	+68.5	--	+68.5
Engineering	--	--	--	--
Estimating	--	+1187.7	--	+1187.7
Other	--	--	--	--
Support	--	-114.8	--	-114.8
Subtotal	--	+1520.1	--	+1520.1
Total Changes	+41.1	+7972.4	--	+8013.5
CE - Cost Variance	780.4	28080.2	--	28860.6
CE - Cost & Funding	780.4	28080.2	--	28860.6

<b>Summary Base Year 2005 \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	717.5	16084.2	--	16801.7
Previous Changes				
Economic	--	--	--	--
Quantity	--	+2330.0	--	+2330.0
Schedule	+24.1	+122.5	--	+146.6
Engineering	+9.5	+529.3	--	+538.8
Estimating	+10.2	+1712.4	--	+1722.6
Other	--	--	--	--
Support	--	+548.9	--	+548.9
Subtotal	+43.8	+5243.1	--	+5286.9
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	+855.1	--	+855.1
Other	--	--	--	--
Support	--	-84.5	--	-84.5
Subtotal	--	+770.6	--	+770.6
Total Changes	+43.8	+6013.7	--	+6057.5
CE - Cost Variance	761.3	22097.9	--	22859.2
CE - Cost & Funding	761.3	22097.9	--	22859.2

Previous Estimate: December 2010

Procurement	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	+378.7
Stretch-out of procurement buy profile from FY 2025 - FY 2026 due to funding reductions. (Schedule)	0.0	+68.5
Adjustment for current and prior escalation. (Estimating)	-41.6	-48.0
Revised estimate to incorporate Standard Labor and Integration, Assembly and Check Out Labor hours based on transition from Multi-Year VII to projected Multi-Year VIII award (labor hours for Multi-Year VIII increased based on actuals from Multi-Year VII). (Estimating)	+514.1	+688.7
Revised estimate to reflect change to Learning Curves on Standard Labor and Integration, Assembly and Check Out. (Estimating)	-50.1	-71.7
Increase due to contract inflation rates being higher than approved DOD rates on Standard Labor and Integration, Assembly and Check Out Labor. (Estimating)	+132.4	+186.5
Funding reductions impacted contractual flexibility clause concerning reduction of quantities below the 100% level. (Estimating) (QR)	+173.1	+217.2
Stand-up of new Combat Aviation Brigade (CAB) (13th). (Estimating)	+17.3	+20.5
Deleted Software Enhancements, because it is part of Post Deployment Software Support. (Estimating)	-42.8	-55.4
Incorporation of estimated impacts of transitioning from Multi-Year VII to projected Multi-Year VIII contract (labor hours for Multi-Year VIII increased based on actuals from Multi-Year VII). (Estimating)	+152.7	+249.9
Adjustment for current and prior escalation. (Support)	-3.4	-4.2
Decrease in Other Support to include: Reduction in number of trainers, addition of Contractor Field Support Representative, increase in New Equipment Training, movement of labor cost to end item recurring cost. (Support)	-64.2	-90.2
Decrease in Initial Spares due to update in cost of spares associated with an aircraft. (Support)	-16.9	-20.4
Procurement Subtotal	+770.6	+1520.1

(QR) Quantity Related



## Contracts

### Appropriation: Procurement

Contract Name	<b>Multiyear/MultiService H-60 Production Contract</b>
Contractor	Sikorsky Aircraft Corp
Contractor Location	Stratford, CT 06614-1378
Contract Number, Type	W58RGZ-08-C-0003, FFP
Award Date	December 12, 2007
Definitization Date	December 12, 2007

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
3938.8	N/A	308	4658.7	N/A	371	4658.7	4658.7

### Cost And Schedule Variance Explanations

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

### Contract Comments

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

The difference between the initial contract price target and the current contract price target is due to addition of supplemental aircraft.

On December 12, 2007, the Army awarded the Multiyear/MultiService H-60 Production contract, W58RGZ-08-C-0003, to Sikorsky Aircraft Corporation. This is a Firm Fixed Price contract valued at approximately \$7.4B which procures H-60 aircraft for the Army and Navy. In FY 2007 a total of 72 aircraft were procured (67 UH and 5 HH); in FY 2008 a total of 77 aircraft were procured (37 UH and 40 HH); in FY 2009 a total of 66 aircraft were procured (53 UH and 13 HH); in FY 2010 a total of 84 aircraft were procured (61 UH and 23 HH) and in FY 2011 a total of 99 aircraft were procured (73 UH and 26 HH).

Multi-Year VII ended procurements in FY 2011 with final deliveries in FY 2013. The next contract, Multi-Year VIII, will be awarded in July 2012 for an additional five (5) years of procurements.

**Deliveries and Expenditures**

<b>Deliveries To Date</b>	<b>Plan To Date</b>	<b>Actual To Date</b>	<b>Total Quantity</b>	<b>Percent Delivered</b>
Development	8	8	8	100.00%
Production	322	356	1367	26.04%
<b>Total Program Quantities Delivered</b>	<b>330</b>	<b>364</b>	<b>1375</b>	<b>26.47%</b>

<b>Expenditures and Appropriations (TY \$M)</b>			
Total Acquisition Cost	28860.6	Years Appropriated	13
Expenditures To Date	7852.4	Percent Years Appropriated	46.43%
Percent Expended	27.21%	Appropriated to Date	9867.1
Total Funding Years	28	Percent Appropriated	34.19%

Deliveries and Expenditures to Date are through December 31, 2011.

## Operating and Support Cost

### Assumptions And Ground Rules

The latest estimate was approved by the Army Cost Position in March 2011. The maintenance concept for the UH-60M is organic, two-level maintenance with the exception of the training base. The training base will continue to be Contractor Logistics Support. A total of 1367 UH/HH aircraft will be procured with 1351 being sustained. Of the sixteen (16) not being sustained two (2) of the aircraft are in the Upgrade configuration and are designated to be test aircraft, fourteen (14) are for BLACK HAWKS with Commander's communication equipment referred to as COMHAWKS.

The total O&S Costs are derived by multiplying the associated O&S average annual cost per aircraft by total number of aircraft fielded then multiplying by the total number of years each aircraft will be fielded. Equation: Average Annual Cost Per Aircraft \* Quantity Fielded \* System Life (\$1.065534 \* 1351 \* 20 = \$28,790.729 Base Year 2005 Dollars in Millions). Demilitarization cost is not included in the Average Annual Cost Per Aircraft but is estimated to be \$84.479 (BY05\$M). For total O&S cost of \$28,875.208 (Base Year 2005 Dollars in Millions).

The total O&S Costs for UH-60L were not reported in the last UH-60L Selected Acquisition Report dated December 31, 1999. The information in the table below is based on Operation and Support Management Information System (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.

Costs BY2005 \$M			
Cost Element	UH-60M BLACK HAWK		UH-60L
	Avg Annual Cost per Aircraft		Avg Annual Cost per Aircraft
Unit-Level Manpower	0.419		0.419
Unit Operations	0.054		0.054
Maintenance	0.372		0.283
Sustaining Support	0.001		--
Continuing System Improvements	0.007		--
Indirect Support	0.213		0.213
Other	--		--
Total Unitized Cost (Base Year 2005 \$)	1.066		0.969

Total O&S Costs \$M	UH-60M BLACK HAWK	UH-60L
Base Year	28875.2	--
Then Year	43490.3	--

Demilitarization cost is not included in the Average Annual Cost Per Aircraft but is estimated to be \$84.479 (BY05 \$M).