



## Selected Acquisition Report (SAR)

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



### **UH-60M Black Hawk Helicopter (UH-60M Black Hawk)**

As of December 31, 2012

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Program Information

**Program Name**

UH-60M Black Hawk Helicopter (UH-60M Black Hawk)

**DoD Component**

Army

## Responsible Office

**Responsible Office**

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## 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. The UH-60M Black Hawk, 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

The eighth Multi-Year/Multi-Service Procurement (MYP) contract (W58RGZ-12-C-0008) covering the years FY 2012 - FY 2016 was awarded on July 6, 2012.

From January 2012 through March 2013, Full Rate Production (FRP) (UH-60M) - 137 aircraft accepted; FRP (HH-60M)- 47 aircraft accepted.

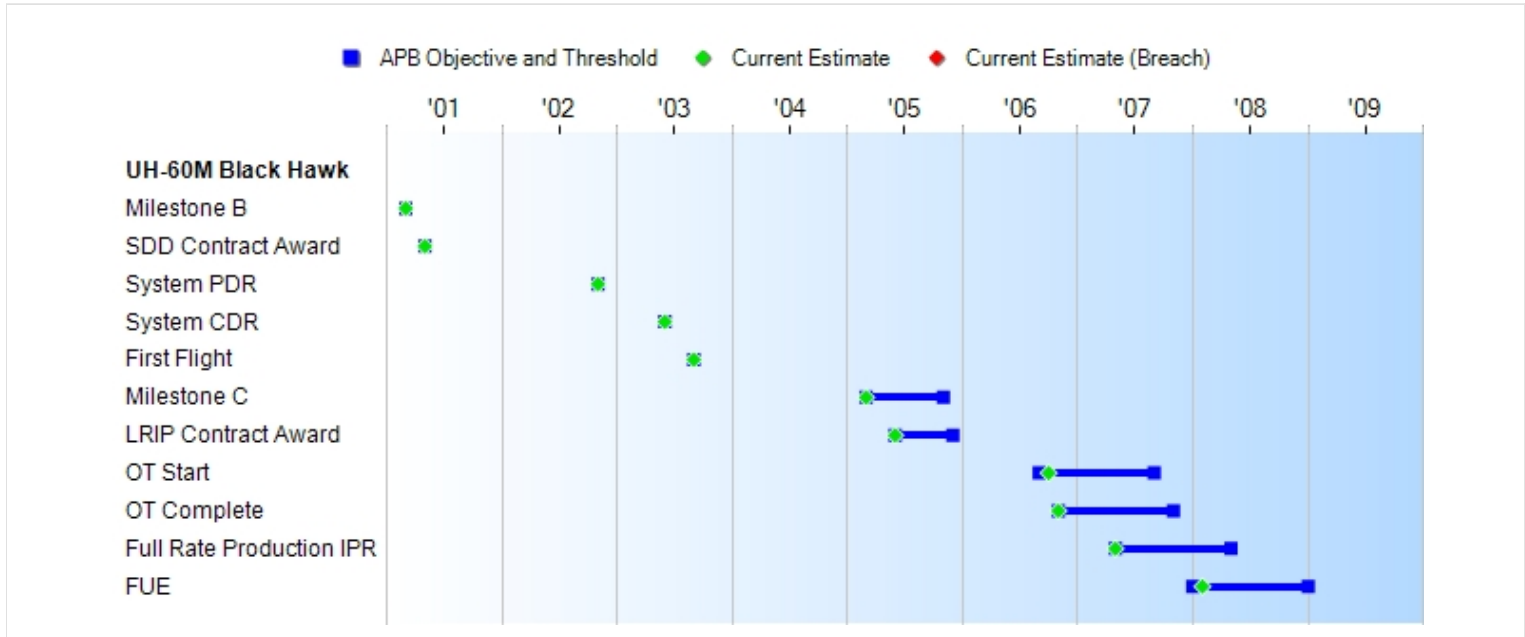
The FRP MY VIII contract requirement is for 476 H-60Ms, including 256 United States Army (USA) UH-60Ms, 120 USA HH-60Ms, 18 United States Air Force (USAF) UH-60Ms, 24 Saudi Arabia National Guard UH-60Ms, 2 Thailand UH-60Ms, and 56 Taiwan UH-60Ms. Two Taiwan aircraft deliveries remain on FRP MY VII contract.

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

## Threshold Breaches

APB Breaches		Explanation of Breach
<b>Schedule</b>	<input type="checkbox"/>	Total Operating and Support (O&S) cost growth is attributable to the inclusion of military personnel costs and the change in aircraft service life from twenty (20) years to twenty-five (25) years.
<b>Performance</b>	<input type="checkbox"/>	
<b>Cost</b>	RDT&E	The current O&S cost in the UH-60M Black Hawk Acquisition Program Baseline (APB) dated June 2011 represents Operations and Maintenance cost not Operating and Support cost. The difference between the two is that Operations and Maintenance cost does not include Military Personnel cost. Incorporated the revised Economic Useful Life (EUL) expectancy from twenty (20) to twenty-five (25) years as identified in the April 22, 2012 memorandum from the Assistant Secretary of the Army (Acquisition, Logistics and Technology)(ASA(ALT)).
	Procurement	
	MILCON	
	Acq O&M	
<b>O&amp;S Cost</b>	<input checked="" type="checkbox"/>	
<b>Unit Cost</b>	PAUC	
	APUC	
Nunn-McCurdy Breaches		
<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	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	1.3	1.3	2.1	.4	1.1

flight hr					
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  
 KTAS - Knots True Air Speed  
 lbs - Pounds  
 mhrs - Man Hours  
 min - Minutes  
 mm - Millimeter  
 N/A - Not Applicable  
 TBD - To Be Determined  
 w - With

### Change Explanations

None

## Track To Budget

### RDT&E

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

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 - Medical Evacuation (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 ITEP. Not all funding associated with the Fly-By-Wire Development Testing and the ITEP is included.

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

### 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	(Shared)	(Sunk)

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 Procurement (MYP) VI 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.

## 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	19571.1	20107.8	27314.2	24913.4
Flyaway	15500.4	--	--	18509.5	19398.5	--	23590.6
Recurring	15421.6	--	--	18309.7	19306.3	--	23361.8
Non Recurring	78.8	--	--	199.8	92.2	--	228.8
Support	583.8	--	--	1061.6	709.3	--	1322.8
Other Support	410.8	--	--	888.5	488.7	--	1099.5
Initial Spares	173.0	--	--	173.1	220.6	--	223.3
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	20332.4	20847.1	28094.6	25693.8

Confidence Level for Current 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 Acquisition Program Baseline (APB), dated June 20, 2011. Costs are reflected at the 50% Confidence Level in accordance with the Army Cost and Economic Analysis Program, 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.

<b>Quantity</b>	<b>SAR Baseline Prod Est</b>	<b>Current APB Production</b>	<b>Current Estimate</b>
RDT&E	8	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 Medical Evacuation (MEDEVAC) aircraft variants.

## 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	780.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	780.4
Procurement	9086.7	1222.2	1163.0	1169.8	1401.0	793.7	733.4	9343.6	24913.4
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	9867.1	1222.2	1163.0	1169.8	1401.0	793.7	733.4	9343.6	25693.8
PB 2013 Total	9867.1	1222.2	1211.9	1233.5	1408.5	1322.2	1216.9	11378.3	28860.6
Delta	0.0	0.0	-48.9	-63.7	-7.5	-528.5	-483.5	-2034.7	-3166.8

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.

The Multi-Year Procurement (MYP) contract VIII was awarded on July 6, 2012. With the incorporation of the contract and the associated cost savings additional aircraft were able to be procured for the same dollar amounts.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	8	0	0	0	0	0	0	0	0	8
Production	0	509	74	65	65	89	35	34	496	1367
PB 2014 Total	8	509	74	65	65	89	35	34	496	1375
PB 2013 Total	8	501	59	57	56	65	52	62	515	1375
Delta	0	8	15	8	9	24	-17	-28	-19	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 - FY 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	89	1298.0	174.5	35.9	1508.4	189.1	1697.5
2013	74	925.4	170.2	2.0	1097.6	124.6	1222.2
2014	65	921.8	169.8	1.1	1092.7	70.3	1163.0
2015	65	929.6	174.5	1.1	1105.2	64.6	1169.8
2016	89	1151.2	180.5	4.5	1336.2	64.8	1401.0
2017	35	572.4	171.8	0.6	744.8	48.9	793.7
2018	34	535.3	174.9	0.6	710.8	22.6	733.4
2019	72	1069.5	197.2	6.3	1273.0	22.7	1295.7
2020	72	1070.0	202.2	1.3	1273.5	42.1	1315.6
2021	72	1134.0	209.3	1.4	1344.7	42.9	1387.6
2022	72	1234.4	217.7	1.4	1453.5	43.7	1497.2
2023	72	982.7	215.6	1.4	1199.7	44.7	1244.4
2024	72	1148.9	226.2	1.4	1376.5	45.1	1421.6
2025	64	832.4	222.0	1.3	1055.7	46.2	1101.9
2026	--	--	44.3	--	44.3	35.3	79.6
<b>Subtotal</b>	<b>1367</b>	<b>20031.0</b>	<b>3330.8</b>	<b>228.8</b>	<b>23590.6</b>	<b>1322.8</b>	<b>24913.4</b>

**Annual Funding BY\$**  
**2031 | Procurement | Aircraft Procurement, 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>
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	999.9	78.9	41.8	1120.6	50.1	1170.7
2008	77	1036.7	77.4	57.3	1171.4	55.8	1227.2
2009	66	859.2	82.2	8.0	949.4	43.1	992.5
2010	84	1037.2	150.9	3.9	1192.0	109.0	1301.0
2011	99	1299.7	113.0	31.1	1443.8	93.5	1537.3
2012	89	1090.6	146.6	30.2	1267.4	158.9	1426.3
2013	74	758.9	139.7	1.6	900.2	102.2	1002.4
2014	65	740.6	136.4	0.9	877.9	56.5	934.4
2015	65	733.0	137.6	0.9	871.5	50.9	922.4
2016	89	890.8	139.7	3.5	1034.0	50.1	1084.1
2017	35	434.6	130.4	0.5	565.5	37.2	602.7
2018	34	398.9	130.3	0.4	529.6	16.9	546.5
2019	72	782.1	144.2	4.6	930.9	16.6	947.5
2020	72	767.9	145.1	0.9	913.9	30.2	944.1
2021	72	798.6	147.3	1.0	946.9	30.3	977.2
2022	72	853.1	150.5	1.0	1004.6	30.2	1034.8
2023	72	666.5	146.3	0.9	813.7	30.3	844.0
2024	72	764.7	150.6	0.9	916.2	30.0	946.2
2025	64	543.7	145.1	0.8	689.6	30.2	719.8
2026	--	--	28.4	--	28.4	22.6	51.0
<b>Subtotal</b>	<b>1367</b>	<b>15776.3</b>	<b>2533.4</b>	<b>199.8</b>	<b>18509.5</b>	<b>1061.6</b>	<b>19571.1</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	1103.7
2009	66	838.9
2010	84	1066.4
2011	99	1310.2
2012	89	1027.5
2013	74	795.5
2014	65	740.4
2015	65	703.9
2016	89	950.9
2017	35	398.2
2018	34	388.3
2019	72	781.4
2020	72	769.9
2021	72	769.3
2022	72	774.1
2023	72	776.0
2024	72	777.1
2025	64	646.4
2026	--	--
<b>Subtotal</b>	<b>1367</b>	<b>15776.3</b>

## Low Rate Initial Production

	<b>Initial LRIP Decision</b>	<b>Current Total LRIP</b>
<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 LRIP aircraft were procured in FY 2005 - FY 2007. LRIP approval was authorized at Milestone C.

## Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Memo
Thailand	9/25/2012	1	31.0	Case Number TH-B-UAD
Thailand	12/26/2011	2	62.3	Case Number TH-B-UAE
Saudi Arabia	11/30/2011	24	638.3	Case Number SI-B-WXP
Sweden	1/14/2011	15	275.7	Case Number SW-B-WAD
Taiwan	11/22/2010	60	1717.7	Case Number TW-B-YZC
Jordan	9/1/2010	2	26.3	Case Number JO-B-WAT
Mexico	8/3/2010	3	83.9	Case Number MX-B-UEJ
United Arab Emirates	12/12/2007	40	825.0	Case Number AE-B-ZUE
Bahrain	9/18/2007	9	151.9	Case Number BA-B-UIR

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.

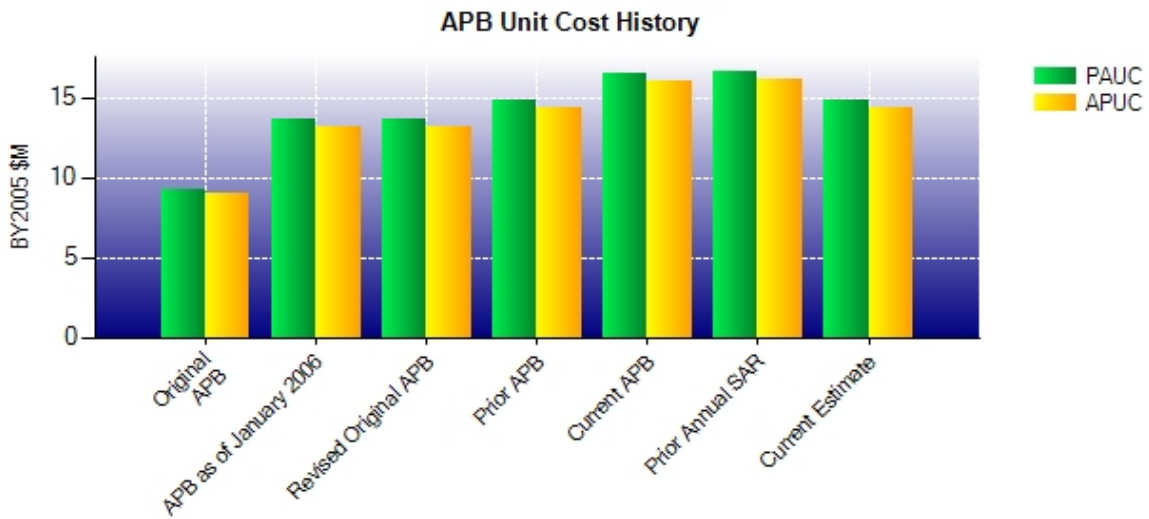
## Nuclear Cost

None

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

	BY2005 \$M	BY2005 \$M	
Unit Cost	Current UCR Baseline (JUN 2011 APB)	Current Estimate (DEC 2012 SAR)	BY % Change
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	22635.0	20332.4	
Quantity	1375	1375	
Unit Cost	16.462	14.787	-10.17
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	21873.7	19571.1	
Quantity	1367	1367	
Unit Cost	16.001	14.317	-10.52
	BY2005 \$M	BY2005 \$M	
Unit Cost	Revised Original UCR Baseline (MAR 2005 APB)	Current Estimate (DEC 2012 SAR)	BY % Change
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	16801.7	20332.4	
Quantity	1235	1375	
Unit Cost	13.605	14.787	+8.69
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	16084.2	19571.1	
Quantity	1227	1367	
Unit Cost	13.109	14.317	+9.22

### Unit Cost History



	Date	BY2005 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
<b>Original APB</b>	FEB 2002	9.250	9.042	12.008	11.812
<b>APB as of January 2006</b>	MAR 2005	13.605	13.109	16.880	16.388
<b>Revised Original APB</b>	MAR 2005	13.605	13.109	16.880	16.388
<b>Prior APB</b>	FEB 2007	14.872	14.338	18.840	18.319
<b>Current APB</b>	JUN 2011	16.462	16.001	20.432	19.981
<b>Prior Annual SAR</b>	DEC 2011	16.625	16.165	20.990	20.541
<b>Current Estimate</b>	DEC 2012	14.787	14.317	18.686	18.225

### 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	0.049	0.675	0.251	0.476	-0.082	0.000	0.437	1.806	18.686

**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	0.046	0.729	0.232	0.481	-0.091	0.000	0.440	1.837	18.225

**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	25693.8
Total Quantity	N/A	1221	1235	1375
Prog. Acq. Unit Cost (PAUC)	N/A	12.008	16.880	18.686



**Cost Variance**

<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	-331.2	--	-327.3
Quantity	--	+3291.3	--	+3291.3
Schedule	+27.5	+441.3	--	+468.8
Engineering	-2.1	+657.2	--	+655.1
Estimating	+11.8	+3323.0	--	+3334.8
Other	--	--	--	--
Support	--	+590.8	--	+590.8
Subtotal	+41.1	+7972.4	--	+8013.5
Current Changes				
Economic	--	+394.0	--	+394.0
Quantity	--	--	--	--
Schedule	--	-123.7	--	-123.7
Engineering	--	--	--	--
Estimating	--	-3447.1	--	-3447.1
Other	--	--	--	--
Support	--	+10.0	--	+10.0
Subtotal	--	-3166.8	--	-3166.8
Total Changes	+41.1	+4805.6	--	+4846.7
CE - Cost Variance	780.4	24913.4	--	25693.8
CE - Cost & Funding	780.4	24913.4	--	25693.8

<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	+2567.5	--	+2577.7
Other	--	--	--	--
Support	--	+464.4	--	+464.4
Subtotal	+43.8	+6013.7	--	+6057.5
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	-2540.2	--	-2540.2
Other	--	--	--	--
Support	--	+13.4	--	+13.4
Subtotal	--	-2526.8	--	-2526.8
Total Changes	+43.8	+3486.9	--	+3530.7
CE - Cost Variance	761.3	19571.1	--	20332.4
CE - Cost & Funding	761.3	19571.1	--	20332.4

Previous Estimate: December 2011

Procurement	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	+394.0
Net overall acceleration of the procurement buy schedule. (Schedule)	0.0	-123.7
Adjustment for current and prior escalation. (Estimating)	-18.4	-22.1
Reduction in Engineering Change Orders (ECOs) is due to lower aircraft cost. (Estimating)	-71.3	-99.5
Incorporation of Multi-Year Procurement 8 Contract with resulting cost savings. (Estimating)	-2450.5	-3325.5
Adjustment for current and prior escalation. (Support)	-1.7	-2.0
Addition of New Equipment Training Requirements. (Support)	+15.6	+14.7
Reduction in Initial Spares/Repair Parts is due to lower aircraft cost. (Support)	-0.5	-2.7
Procurement Subtotal	-2526.8	-3166.8

## Contracts

### Appropriation: Procurement

Contract Name	<b>Multi-Year/Multi-Service 8</b>
Contractor	Sikorsky Aircraft Corporation
Contractor Location	6900 Main ST Stratford, CT 06614
Contract Number, Type	W58RGZ-12-C-0008, FFP
Award Date	July 06, 2012
Definitization Date	July 06, 2012

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
5293.5	N/A	354	5293.5	N/A	354	5293.5	5293.5

### 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.

## Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	8	8	8	100.00%
Production	467	475	1367	34.75%
Total Program Quantities Delivered	475	483	1375	35.13%

### Expenditures and Appropriations (TY \$M)

Total Acquisition Cost	25693.8	Years Appropriated	14
Expenditures To Date	10473.4	Percent Years Appropriated	51.85%
Percent Expended	40.76%	Appropriated to Date	11089.3
Total Funding Years	27	Percent Appropriated	43.16%

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

## Operating and Support Cost

### UH-60M Black Hawk

#### Assumptions and Ground Rules

##### Cost Estimate Reference:

The latest estimate was approved by the Army Cost Position (ACP) in March 2011. The approved estimate was based on a system life of twenty (20) years. 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 1365 being sustained. The two (2) aircraft not being sustained are in the Upgrade configuration and are designated to be test aircraft.

Since the last ACP in March 2011 the Program Office Estimate (POE) has been updated to incorporate the revised Economic Useful Life (EUL) expectancy from twenty (20) to twenty-five (25) years as identified in the April 22, 2012 memorandum from the Assistant Secretary of the Army (Acquisition, Logistics and Technology)(ASA(ALT)).

##### Sustainment Strategy:

The total Operating and Support (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 (\$1.0787721 \* 1365 \* 25 = \$36,813.097 Base Year 2005 Dollars in Millions).

##### Antecedent Information:

The total O&S Costs for UH-60L were not reported in the last UH-60L SAR dated December 31, 1999. The information in the O&S cost table 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.

Unitized O&S Costs BY2005 \$K		
Cost Element	UH-60M Black Hawk Avg Annual Cost per Aircraft	UH-60L (Antecedent) Avg Annual Cost per Aircraft
Unit-Level Manpower	427.517	427.517
Unit Operations	54.160	54.160
Maintenance	373.176	284.609
Sustaining Support	1.225	0.000
Continuing System Improvements	6.157	0.000
Indirect Support	216.538	216.538
Other	0.000	0.000
<b>Total</b>	<b>1078.773</b>	<b>982.824</b>

Unitized Cost Comments:

Total O&S cost growth is attributable to the inclusion of military personnel costs and the change in aircraft service life from twenty (20) years to twenty-five (25) years.

	Total O&S Cost \$M			
	Current Production APB Objective/Threshold		Current Estimate	
	UH-60M Black Hawk		UH-60M Black Hawk	UH-60L (Antecedent)
<b>Base Year</b>	17652.5	19417.8	<b>36813.1</b> <sup>1</sup>	N/A
<b>Then Year</b>	26086.5	N/A	62128.7	N/A

<sup>1</sup> APB O&S Cost BreachTotal O&S Costs Comments:

Total O&S cost growth is attributable to the inclusion of military personnel costs and the change in aircraft service life from twenty (20) years to twenty-five (25) years.

The current O&S cost in the UH-60M Black Hawk Acquisition Program Baseline (APB) dated June 2011 represents Operations and Maintenance cost not Operating and Support cost. The difference between the two is that Operations and Maintenance cost does not include Military Personnel cost.

**Disposal Costs**

Demilitarization cost is estimated to be \$73.672 (BY05\$M).