Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-202

AH-64E Apache Remanufacture (AH-64E Remanufacture)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

AH-64E Apache Remanufacture (AH-64E Remanufacture)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned August 9, 2012

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated December 16, 2010

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated November 26, 2012

Mission and Description

The Apache AH-64E is the heavy attack helicopter of the current and future force. It is a twin engine, four bladed, tandem seat, attack helicopter with 30 millimeter ammunition, 2.75" rockets, laser & Radio Frequency Hellfire missiles. AH-64E is the Army's network-centric, multi-role weapon system within the future Modular Force Joint Air/Ground Maneuver team operations. It will provide the capability to simultaneously conduct (or quickly transition between) close combat, mobile strike, armed reconnaissance, security and vertical maneuver missions across the full spectrum of warfare from Stability And Support Operations to Major Combat Operations when required in day, night, obscured battlefield and adverse weather conditions. AH-64E will enable the Joint Air/Ground Maneuver Team to dominate the battle space by providing air-ground synergy through real-time Intelligence, Surveillance and Reconnaissance (ISR) information and responsive precision fires. AH-64E will be linked to Joint and Combined Arms Air/Ground Maneuver Teams via Enhanced Digital Communications, Unmanned Aircraft Systems Data Link and Joint Networking waveforms.

The AH-64E is an Apache Attack Helicopter modified as required to effectively and efficiently integrate the Longbow Apache well into the 21st century, by providing improvements to make it relevant in future Modular Force operations. It provides a significantly enhanced warfighting capability over the AH-64A and AH-64D. It is capable of being employed day or night in adverse weather and obscurants, and can effectively engage and destroy advanced threat weapon systems on the air-land battlefield. Tactically, the AH-64E provides significant war fighting advantages over the original AH-64D and multiplies the combat effectiveness of the entire fleet. It will be fully capable of employing the Longbow Fire Control Radar mission kit, the Modernized Target Acquisition Designation System/Modernized Pilot Night Vision System, the Longbow Hellfire missiles, and future improved munitions in addition to the normal complement of AH-64D munitions.

The AH-64E will be fully network-centric capable with current digitized forces and future Modular Force equipped forces. This will enable interoperability with current and future Tactical Operations Center and Army Battle Command System forces. In addition, it will reduce the logistics footprint and enhance its deployability, reduce operational and support costs, improve AH-64D model flight performance and provide a means to effectively utilize already funded technology insertions.

AH-64E will operate within the future force system-of-systems environment, where maximum combat power is delivered to units only in coherent packages of systems with synergistic interdependence. The future Modular Force concept drives the demand for network centric interdependence and joint integration across the force to new levels. The AH-64E meets the challenge of providing and integrating Command and Control, ISR, and communications connectivity for attack/reconnaissance aviation within brigade combat teams, divisions and corps.

Executive Summary

AH-64E Apache, previously known as AB3A and AB3B, has gone through the appropriate process to change the Mission Design Series. On June 28, 2006, the Defense Acquisition Executive (DAE) conducted a successful Milestone (MS) B review of the Apache Block III (AH-64E) program. As a result, the DAE signed an Acquisition Decision Memorandum (ADM), dated July 10, 2006, approving MS B, authorizing the AH-64E program to enter System Development and Demonstration (SDD) and designating it as an Acquisition Category (ACAT) ID program. On July 14, 2006, the Apache Project Manager (PM) awarded an SDD contract to the Boeing Company to begin the development effort for AH-64E. A follow-on ADM was approved on March 7, 2007 authorizing Low Rate Initial Production (LRIP) quantity of 59 aircraft and granting Army authority to procure long-lead items beginning in FY 2009. The Acquisition Program Baseline (APB) milestones established for the Preliminary Design Review and the Critical Design Review were successfully completed on April 19, 2007 and January 30, 2008 respectively. The Limited User Test was successfully executed in November 2009.

The PM was directed in Resource Management Decisions 802 and 700 to increase total quantity procurement by 56 aircraft. These 56 aircraft were New Build (AH-64E) aircraft included in the FY 2011 President's Budget at a total of $2.6 billion. This change was implemented to support an increase to the training base capacity and to establish a new heavy combat aviation brigade in the active component. The baseline program was a remanufacture production. These additional aircraft procurements would be New Build aircraft at a unit cost significantly higher than the remanufacture unit cost. The addition of the New Build aircraft along with minor fact of life changes to the program since the beginning of Research, Development, Test, and Evaluation caused a Nunn-McCurdy unit cost breach to the Average Procurement Unit Cost which was reflected in the December 2009 SAR. The DAE supported a rapid Nunn-McCurdy process which was completed June 1, 2010 with an ADM certifying the program to move forward to MS C and separating the baseline program into two Major Defense Acquisition Programs for cost accounting purposes (AH-64E Remanufacture and AH-64E New Build).

A successful MS C Defense Acquisition Board (DAB) was completed on September 27, 2010. The AH-64E DAB allowed the move into LRIP and advance procurement actions for Full Rate Production (FRP). An LRIP contract was awarded on October 22, 2010. The first AH-64E Remanufacture production delivery occurred October 24, 2011 with a formal roll out ceremony held November 2, 2011. The Initial Operational Test and Evaluation for the AH-64E Remanufacture production aircraft was completed April 2012. A successful DAB was held on August 16, 2012 which approved FRP for the AH-64E Remanufacture program and authorized up to twelve LRIP aircraft for the AH-64E New Build program in FY 2013. The DAE issued an ADM that approved the designation of the AH-64E Remanufacture and AH-64E New Build programs as ACAT IC after approval of theAH-64E Remanufacture APB. The ADM also stated that once the AH-64E New Build program was designated as ACAT IC, the Army Acquisition Executive (AAE) would be responsible for the AH-64E New Build APB and the subsequent AH-64E New Build FRP decision as the Milestone Decision Authority. The APB was approved by the DAE on November 26, 2012. The AH-64E New Build ADM was approved by the AAE on March 11, 2013 and authorized FRP for the New Build program.

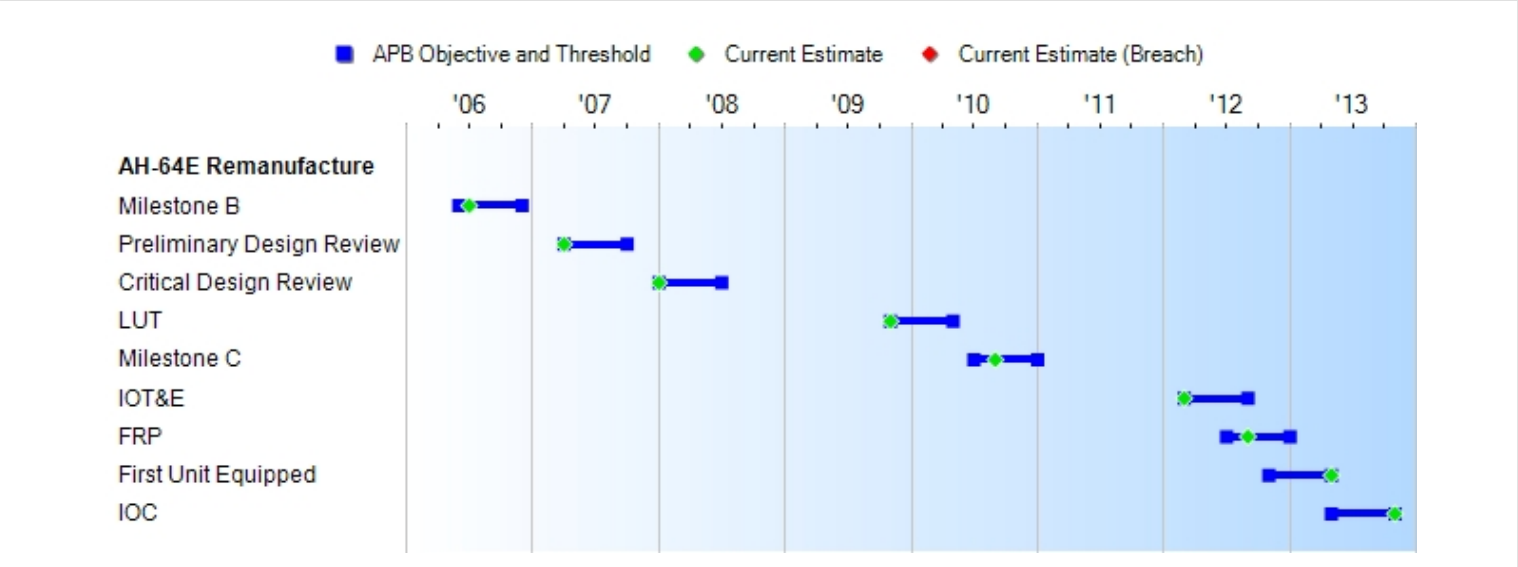
There are no significant software-related issues with this program at this time.

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

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone B	JUN 2006	JUN 2006	DEC 2006	JUL 2006	
Preliminary Design Review	APR 2007	APR 2007	OCT 2007	APR 2007	
Critical Design Review	JAN 2008	JAN 2008	JUL 2008	JAN 2008	
LUT	NOV 2009	NOV 2009	MAY 2010	NOV 2009	
Milestone C	JUL 2010	JUL 2010	JAN 2011	SEP 2010	
IOT&E	MAR 2012	MAR 2012	SEP 2012	MAR 2012	
FRP	JUL 2012	JUL 2012	JAN 2013	SEP 2012	(Ch-1)
First Unit Equipped	NOV 2012	NOV 2012	MAY 2013	MAY 2013	(Ch-2)
IOC	MAY 2013	MAY 2013	NOV 2013	NOV 2013	(Ch-2)

Acronyms And Abbreviations

FRP - Full Rate Production
IOC - Initial Operating Capability
IOT&E - Initial Operational Test and Evaluation
LUT - Limited User Test

Change Explanations

(Ch-1) The Current Estimate for FRP changed from July 2012 to September 2012 per direction from the Acquisition Decision Memorandum, dated September 2012.

(Ch-2) The Department of the Army (DA) mandated a change of the unit designated to be the First Unit Equipped (FUE). Due to this DA mandated change, FUE was slipped from November 2012 to May 2013 and also IOC was slipped from May 2013 to November 2013.

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Net Ready	Fully support execution of all operational activities.	Fully support execution of all operational activities.	Fully support execution of joint critical operational activities.	Met Threshold	Support execution of all critical operational activities
Performance					
6000' PA, 95 F OGE Hover (lbs/payload)	4,100	4,100	3,400	Met Threshold	3400
Mission Reliability					
MTBF(M) hrs.					
Lot 1	22	22	15.3	Met Objective	15.3
Lot 4	22	22	17	TBD	17
MR for 3.5 hr. flight (%)	85	85	80	Met Objective	80
Survivability					
Safe operation (minutes)	30	30	30	Met Objective	30
Survive Band IV MANPADS IR Missile Engagement	IAW JROCM 086-10	IAW JROCM 086-10	IAW JROCM 086-10	Met Objective	IAW JROCM 086-10
Force Protection					
Crewstation armor survivability (mm)	IAW JROCM 086-10	IAW JROCM 086-10	IAW JROCM 086-10	Met Objective	IAW JROCM 086-10
Crewstation armor barrier survivability (mm)	IAW JROCM 086-10	IAW JROCM 086-10	IAW JROCM 086-10	Met Objective	IAW JROCM 086-10

Requirements Source: Capability Production Document (CPD) dated June 1, 2010

Acronyms And Abbreviations

' - feet
% - Percent
F - Fahrenheit
hr - hour
hrs - hours
IAW - In Accordance With
IR - Infrared
JROCM - Joint Requirements Oversight Council Memorandum
lbs - Pounds
MANPADS - Man Portable Air Defense System
mm - Millimeters
MR - Mission Reliability
MTBF(M) - Mean Time Between Failure (Maintenance)
OGE - Out of Ground Effect
PA - Pressure Altitude
TBD - To Be Determined

Change Explanations

None

Memo

Net Ready Key Performance Parameter compliance is achieved by meeting the information exchange capabilities required by the Integrated Architectures Operational View -1 and is demonstrated by achieving Joint Interoperability Certification, Army Interoperability Certification, and DoD Information Assurance and Accreditation Process accreditation.

Demonstrated Performance based upon Director, Operational Test and Evaluation assessment of AH-64E Initial Operational Test and Evaluation.

Track To Budget

RDT&E				
APPN 2040	BA 07	PE 0203744A	(Army)	
	Project D17	Apache Block III		
Procurement				
APPN 2031	BA 01	PE 0210100A	(Army)	
	ICN A05111	Apache Longbow Block III A Reman		
APPN 2031	BA 02	PE 0210102A	(Army)	
	ICN AA6606	AH-64 Mods	(Shared)	(Sunk)

This line is shared because in FY 2009, before AH-64E was a separate program from AH-64 Mods, there was AH-64E advance procurement that has to be captured in the AH-64E SAR.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2010 $M			BY2010 $M	TY $M		
Appropriation	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	1611.8	1504.2	1654.6	1496.4	1664.7	1557.8	1558.2
Procurement	8856.9	10088.1	11096.9	10074.3	10231.9	12041.7	12202.0
Flyaway	7383.2	--	--	8251.7	8543.6	--	10014.5
Recurring	7128.5	--	--	8073.6	8277.0	--	9828.0
Non Recurring	254.7	--	--	178.1	266.6	--	186.5
Support	1473.7	--	--	1822.6	1688.3	--	2187.5
Other Support	1306.3	--	--	1513.4	1496.9	--	1808.6
Initial Spares	167.4	--	--	309.2	191.4	--	378.9
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	10468.7	11592.3	N/A	11570.7	11896.6	13599.5	13760.2

Confidence Level for Current APB Cost 50% -

This estimate, like all previous Cost Analysis Improvement Group (CAIG) and Cost Assessment and Program Evaluation (CAPE) estimates, is built upon a product-oriented work breakdown structure; is based on historical actual cost information to the maximum extent possible; and, most importantly, is based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

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	5	5	5
Procurement	634	634	634
Total	639	639	639

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	984.3	124.5	124.8	156.3	115.1	53.2	0.0	0.0	1558.2
Procurement	1360.0	684.8	759.4	839.0	871.3	888.9	895.3	5903.3	12202.0
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	2344.3	809.3	884.2	995.3	986.4	942.1	895.3	5903.3	13760.2
PB 2013 Total	2315.9	809.3	772.7	677.7	744.1	640.6	633.2	5374.8	11968.3
Delta	28.4	0.0	111.5	317.6	242.3	301.5	262.1	528.5	1791.9

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	5	0	0	0	0	0	0	0	0	5
Production	0	51	40	42	48	48	48	48	309	634
PB 2014 Total	5	51	40	42	48	48	48	48	309	639
PB 2013 Total	5	43	40	38	37	44	37	33	362	639
Delta	0	8	0	4	11	4	11	15	-53	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
2005	--	--	--	--	--	--	57.0
2006	--	--	--	--	--	--	104.1
2007	--	--	--	--	--	--	118.9
2008	--	--	--	--	--	--	185.4
2009	--	--	--	--	--	--	192.2
2010	--	--	--	--	--	--	146.2
2011	--	--	--	--	--	--	90.7
2012	--	--	--	--	--	--	89.8
2013	--	--	--	--	--	--	124.5
2014	--	--	--	--	--	--	124.8
2015	--	--	--	--	--	--	156.3
2016	--	--	--	--	--	--	115.1
2017	--	--	--	--	--	--	53.2
Subtotal	**5**	**--**	**--**	**--**	**--**	**--**	**1558.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2005	--	--	--	--	--	--	61.7
2006	--	--	--	--	--	--	109.7
2007	--	--	--	--	--	--	122.3
2008	--	--	--	--	--	--	187.2
2009	--	--	--	--	--	--	191.6
2010	--	--	--	--	--	--	143.5
2011	--	--	--	--	--	--	87.2
2012	--	--	--	--	--	--	84.6
2013	--	--	--	--	--	--	114.7
2014	--	--	--	--	--	--	111.9
2015	--	--	--	--	--	--	137.5
2016	--	--	--	--	--	--	99.4
2017	--	--	--	--	--	--	45.1
Subtotal	**5**	**--**	**--**	**--**	**--**	**--**	**1496.4**

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
2009	--	11.1	--	--	11.1	--	11.1
2010	8	167.6	--	86.9	254.5	10.0	264.5
2011	16	272.9	--	42.7	315.6	175.4	491.0
2012	27	445.6	--	48.2	493.8	99.6	593.4
2013	40	510.1	--	8.7	518.8	166.0	684.8
2014	42	641.1	--	--	641.1	118.3	759.4
2015	48	692.1	--	--	692.1	146.9	839.0
2016	48	713.8	--	--	713.8	157.5	871.3
2017	48	722.3	--	--	722.3	166.6	888.9
2018	48	727.8	--	--	727.8	167.5	895.3
2019	48	705.7	--	--	705.7	165.6	871.3
2020	41	625.6	--	--	625.6	141.3	766.9
2021	41	626.7	--	--	626.7	149.4	776.1
2022	41	649.3	--	--	649.3	146.2	795.5
2023	41	671.7	--	--	671.7	136.5	808.2
2024	41	686.3	--	--	686.3	112.7	799.0
2025	41	671.4	--	--	671.4	84.6	756.0
2026	15	286.9	--	--	286.9	43.4	330.3
Subtotal	**634**	**9828.0**	**--**	**186.5**	**10014.5**	**2187.5**	**12202.0**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2009	--	11.0	--	--	11.0	--	11.0
2010	8	163.1	--	84.6	247.7	9.7	257.4
2011	16	260.1	--	40.7	300.8	167.3	468.1
2012	27	415.3	--	44.9	460.2	92.9	553.1
2013	40	464.1	--	7.9	472.0	151.0	623.0
2014	42	571.4	--	--	571.4	105.4	676.8
2015	48	605.4	--	--	605.4	128.4	733.8
2016	48	612.7	--	--	612.7	135.2	747.9
2017	48	608.4	--	--	608.4	140.4	748.8
2018	48	601.6	--	--	601.6	138.5	740.1
2019	48	572.5	--	--	572.5	134.3	706.8
2020	41	498.0	--	--	498.0	112.5	610.5
2021	41	489.6	--	--	489.6	116.7	606.3
2022	41	497.8	--	--	497.8	112.1	609.9
2023	41	505.4	--	--	505.4	102.7	608.1
2024	41	506.7	--	--	506.7	83.3	590.0
2025	41	486.5	--	--	486.5	61.3	547.8
2026	15	204.0	--	--	204.0	30.9	234.9
Subtotal	**634**	**8073.6**	**--**	**178.1**	**8251.7**	**1822.6**	**10074.3**

Cost Quantity Information
2031 | Procurement | Aircraft Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2010 $M
2009	--	--
2010	8	106.7
2011	16	175.7
2012	27	387.6
2013	40	545.8
2014	42	534.9
2015	48	602.3
2016	48	612.9
2017	48	612.0
2018	48	602.7
2019	48	592.8
2020	41	498.8
2021	41	490.2
2022	41	492.2
2023	41	505.9
2024	41	508.1
2025	41	506.6
2026	15	298.4
Subtotal	**634**	**8073.6**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	10/7/2010	10/7/2010
Approved Quantity	51	51
Reference	ADM	ADM
Start Year	2010	2010
End Year	2013	2013

LRIP quantity is 51 in accordance with the Acquisition Decision Memorandum (ADM) approved October 7, 2010.

Foreign Military Sales

None

Nuclear Cost

None

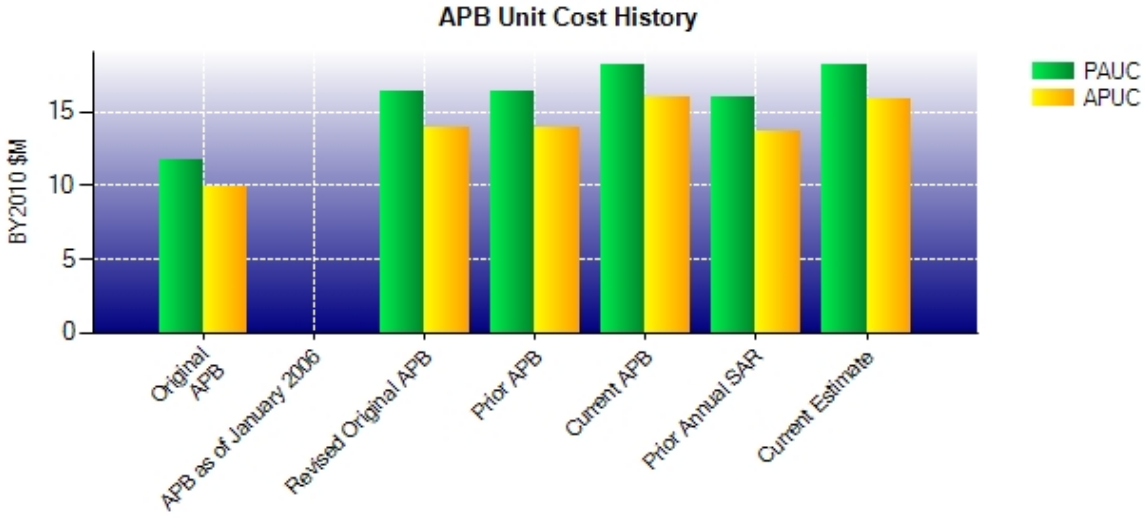
Unit Cost

Unit Cost Report

Unit Cost	BY2010 $M Current UCR Baseline (NOV 2012 APB)	BY2010 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	11592.3	11570.7	
Quantity	639	639	
Unit Cost	18.141	18.108	-0.18
Average Procurement Unit Cost (APUC)			
Cost	10088.1	10074.3	
Quantity	634	634	
Unit Cost	15.912	15.890	-0.14

Unit Cost	BY2010 $M Revised Original UCR Baseline (DEC 2010 APB)	BY2010 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	10468.7	11570.7	
Quantity	639	639	
Unit Cost	16.383	18.108	+10.53
Average Procurement Unit Cost (APUC)			
Cost	8856.9	10074.3	
Quantity	634	634	
Unit Cost	13.970	15.890	+13.74

Unit Cost History



		BY2010 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	AUG 2006	11.735	9.945	13.445	11.649
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	DEC 2010	16.383	13.970	18.618	16.139
Prior APB	DEC 2010	16.383	13.970	18.618	16.139
Current APB	NOV 2012	18.141	15.912	21.282	18.993
Prior Annual SAR	DEC 2011	16.040	13.626	18.730	16.229
Current Estimate	DEC 2012	18.108	15.890	21.534	19.246

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	
13.445	-0.626	-0.159	0.231	0.000	3.961	0.000	1.766	5.173	18.618

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
18.618	0.622	0.000	0.068	0.000	1.533	0.000	0.693	2.916	21.534

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	
11.649	-0.614	-0.056	0.233	0.000	3.147	0.000	1.780	4.490	16.139

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.139	0.586	0.000	0.069	0.000	1.754	0.000	0.698	3.107	19.246

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	JUN 2006	JUN 2006	JUL 2006
Milestone C	N/A	APR 2010	JUL 2010	SEP 2010
IOC	N/A	JAN 2013	MAY 2013	NOV 2013
Total Cost (TY $M)	N/A	8093.9	11896.6	13760.2
Total Quantity	N/A	602	639	639
Prog. Acq. Unit Cost (PAUC)	N/A	13.445	18.618	21.534

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	1664.7	10231.9	--	11896.6
Previous Changes				
Economic	+15.2	+188.3	--	+203.5
Quantity	--	--	--	--
Schedule	--	+141.5	--	+141.5
Engineering	--	--	--	--
Estimating	-1.0	-218.9	--	-219.9
Other	--	--	--	--
Support	--	-53.4	--	-53.4
Subtotal	+14.2	+57.5	--	+71.7
Current Changes				
Economic	+10.7	+183.4	--	+194.1
Quantity	--	--	--	--
Schedule	--	-98.0	--	-98.0
Engineering	--	--	--	--
Estimating	-131.4	+1331.2	--	+1199.8
Other	--	--	--	--
Support	--	+496.0	--	+496.0
Subtotal	-120.7	+1912.6	--	+1791.9
Total Changes	-106.5	+1970.1	--	+1863.6
CE - Cost Variance	1558.2	12202.0	--	13760.2
CE - Cost & Funding	1558.2	12202.0	--	13760.2

Summary Base Year 2010 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	1611.8	8856.9	--	10468.7
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-1.4	-156.5	--	-157.9
Other	--	--	--	--
Support	--	-61.4	--	-61.4
Subtotal	-1.4	-217.9	--	-219.3
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-114.0	+1025.0	--	+911.0
Other	--	--	--	--
Support	--	+410.3	--	+410.3
Subtotal	-114.0	+1435.3	--	+1321.3
Total Changes	-115.4	+1217.4	--	+1102.0
CE - Cost Variance	1496.4	10074.3	--	11570.7
CE - Cost & Funding	1496.4	10074.3	--	11570.7

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+10.7
Revised estimate of Development cost reflects Office of the Secretary of Defense (OSD) Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) approved at Full Rate Production (FRP) in September 2012. (Estimating)	-113.1	-130.4
Adjustment for current and prior escalation. (Estimating)	-0.9	-1.0
RDT&E Subtotal	-114.0	-120.7

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+183.4
Acceleration of procurement buy profile. Due to the delay of the procurement of the AH-64E New Build aircraft, the procurement of the AH-64E Remanufacture aircraft were accelerated to maintain economic order of quantities with the prime contractor. (Schedule)	0.0	-98.0
Adjustment for current and prior escalation. (Estimating)	-7.7	-8.3
Revised estimate to reflect OSD CAPE ICE approved at FRP in September 2012. (Estimating)	+1032.7	+1339.5
Adjustment for current and prior escalation. (Support)	-2.5	-2.8
Increase in Other Support. Revised estimate to Other Support reflects OSD CAPE ICE approved at FRP in September 2012. (Support)	+291.5	+347.8
Increase in Initial Spares. Revised estimate to Initial Spares reflects OSD CAPE ICE approved at FRP in September 2012. (Support)	+121.3	+151.0
Procurement Subtotal	+1435.3	+1912.6

Contracts

Appropriation: RDT&E

Contract Name	**AB3 SDD and Risk and Reduction**
Contractor	The Boeing Company
Contractor Location	Mesa, AZ 85215
Contract Number, Type	W58RGZ-05-C-0001, CPIF
Award Date	July 14, 2006
Definitization Date	July 14, 2006

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
619.3	N/A	5	920.6	N/A	5	951.0	950.9

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/28/2013)	-9.5	-5.4
Previous Cumulative Variances	-10.8	-6.4
Net Change	+1.3	+1.0

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to positive cost performance by the Analysis Integration Test, Systems Integration/Engineering and Software insertions and their associated Overhead and General and Administrative Cost.

The favorable net change in the schedule variance is due to the additional resources for Navigation and Communications. The plan supports on-time completion of required functionality for Follow-On Test and Evaluation.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to government directed changes.

The initial revised contract target price represented initial award of AB3 Risk Reduction and System Development and Demonstration (SDD) in June 2005. The current contract name, contract type, award, definitization, and current contract target price reflect status with the award of the AB3SDD through production Lot 4/6 configuration and associated directed changes to that contract. The contract was 90 percent complete but due to modifications and resources added this change is now 74 percent complete.

Appropriation: Procurement

Contract Name	**AB3 LRIP**
Contractor	The Boeing Company
Contractor Location	5000 E McDowell Road Mesa, AZ 85215
Contract Number, Type	W58RGZ-09-1-0161, FFP
Award Date	July 30, 2009
Definitization Date	April 26, 2012

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
923.4	N/A	51	923.4	N/A	51	923.4	923.4

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.

Appropriation: Procurement

Contract Name	**REU/UTA LRIP**
Contractor	Longbow LLC
Contractor Location	5600 W Sand Lake Rd Orlando, FL 32819-8907
Contract Number, Type	W58RGZ-10-C-0005, FFP
Award Date	October 16, 2009
Definitization Date	December 21, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
175.3	N/A	40	175.3	N/A	40	175.3	175.3

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	5	5	5	100.00%
Production	33	33	634	5.21%
Total Program Quantities Delivered	38	38	639	5.95%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	13760.2	Years Appropriated	9
Expenditures To Date	1770.5	Percent Years Appropriated	40.91%
Percent Expended	12.87%	Appropriated to Date	3153.6
Total Funding Years	22	Percent Appropriated	22.92%

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

Operating and Support Cost

AH-64E Remanufacture

Assumptions and Ground Rules

Cost Estimate Reference:
The Office of the Secretary of Defense (OSD) Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) dated August 15, 2012.

Sustainment Strategy:
The AH-64E Apache is maintained by a mix of soldier and civilian maintainers. Assumes the fielding of 634 Remanufactured aircraft, each flying 203.4 hours per year. The estimate is based on a 20-year service life. The Mean Time Between Failure goal for the aircraft system is 22 hours at maturity once total program reaches (50,000) hours.

Antecedent Information:
The antecedent to the AH-64E Apache is the AH-64D. The AH-64D will be in service until 2027. There are currently 630 AH-64Ds in operation.

Unitized O&S Costs BY2010 $K		
Cost Element	**AH-64E Remanufacture Avg Annual Cost Per AB3 Aircraft**	**Longbow Apache (Antecedent) Avg Annual Cost Per Longbow Aircraft**
Unit-Level Manpower	1204.0	1204.0
Unit Operations	228.0	228.0
Maintenance	947.0	888.0
Sustaining Support	472.0	443.0
Continuing System Improvements	76.0	76.0
Indirect Support	232.0	232.0
Other	0.0	0.0
Total	3159.0	3071.0

Unitized Cost Comments:
In accordance with OSD CAPE ICE dated August 15, 2012

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	AH-64E Remanufacture		AH-64E Remanufacture	Longbow Apache (Antecedent)
Base Year	38506.0	42356.6	40056.1	15350.4
Then Year	53639.0	N/A	58541.9	17869.0

Total O&S Costs Comments:

The AH-64E Apache program completely revised all manpower and support costs to reconcile with the CAPE ICE in support of the Milestone C Full Rate Production Defense Acquisition Board dated August 15, 2012.

The 2011 SAR estimated 690 aircrafts and the 2012 SAR estimates 634.

Disposal Costs

Total Disposal Costs for the AH-64E is $42.13 million in accordance with the OSD CAPE ICE dated August 15, 2012.