Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-437

AH-64E Apache New Build (AH-64E New Build)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Program Information

Program Name

AH-64E Apache New Build (AH-64E New Build)

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 Acqusition Program Baseline (APB) dated December 16, 2010

Approved APB

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

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 forAH-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 the AH-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

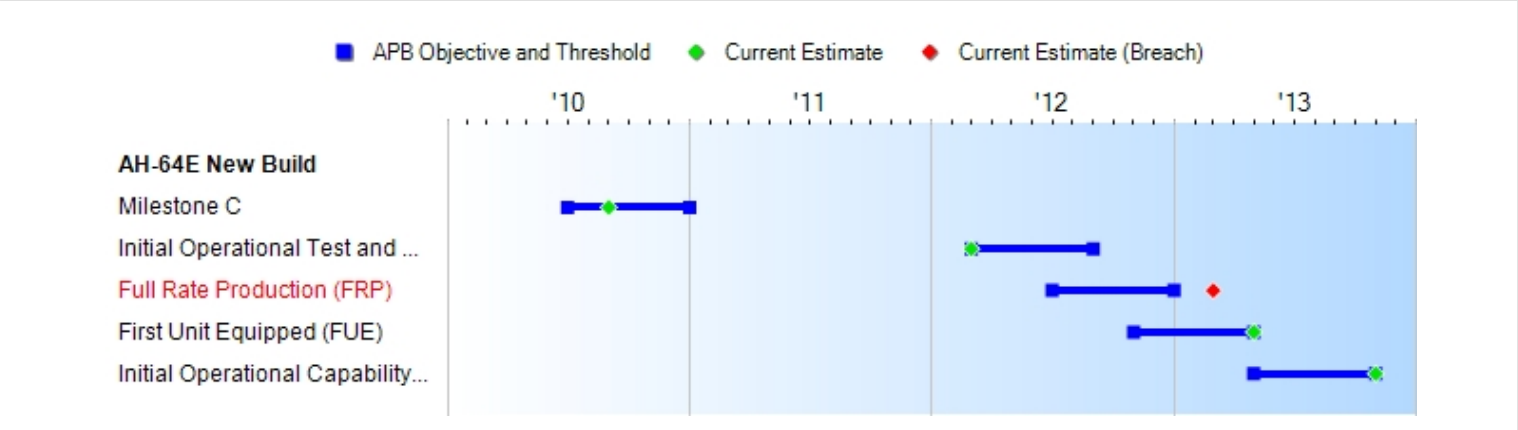
APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

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

Explanation of Breach

New Build Full-Rate Production (FRP) decision changed from July 2012 to March 2013. In reference to the Acquisition Decision Memorandum (ADM), the Defense Acquisition Executive (DAE) approved FRP for the Remanufacture program, but approved only an extended Low Rate Initial Production for the New Build program. The DAE also delegated the Milestone Decision Authority for both the New Build and Remanufacture programs to the Army Acquisition Executive (AAE), contingent upon DAE's approval of Remanufacture Acquisition Program Baseline (APB). The DAE approved the Remanufacture APB on November 26, 2012. The Program Manager, Apache through the Program Executive Officer, Aviation, requested an Apache Block IIIB New Build FRP ADM from the AAE on January 11, 2013. The AAE signed the New Build FRP ADM on March 11, 2013 and the APB is currently in the signature process as both documents reflect the current FRP date of March 2013.

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone C	JUL 2010	JUL 2010	JAN 2011	SEP 2010	
Initial Operational Test and Evaluation (IOT&E)	MAR 2012	MAR 2012	SEP 2012	MAR 2012	
Full Rate Production (FRP)	JUL 2012	JUL 2012	JAN 2013	**MAR 2013**[1]	(Ch-1)
First Unit Equipped (FUE)	NOV 2012	NOV 2012	MAY 2013	MAY 2013	(Ch-2)
Initial Operational Capability (IOC)	MAY 2013	MAY 2013	NOV 2013	NOV 2013	(Ch-2)

[1] *APB Breach*

Change Explanations

(Ch-1) FRP changed from July 2012 to March 2013. In reference to the Acquisition Decision Memorandum (ADM), the Defense Acquisition Executive (DAE) approved FRP for the Remanufacture program, but approved only an extended Low Rate Initial Production for the New Build program. The DAE also delegated the Milestone Decision Authority for both the New Build and Remanufacture programs to the Army Acquisition Executive (AAE), contingent upon DAE's approval of Remanufacture Acquisition Program Baseline (APB). The DAE approved the Remanufacture APB on November 26, 2012. The Program Manager, Apache through the Program Executive Officer, Aviation, requested an Apache AH-64E New Build FRP ADM from the AAE on January 11, 2013.

(Ch-2) FUE changed from November 2012 to May 2013. IOC changed from May 2013 to November 2013. In accordance with the AH-64E Remanufacture and New Build Acquisition Strategy signed September 4, 2012, "it is important to understand the new build aircraft are delivered in the same configuration and procured using the same contracts. The competition strategy for AH-64E applies to both programs. The term "New Build" does not equate to a different or unique Apache aircraft. The only difference between the Remanufacture and New Build aircraft is the cost." Performance baselines will be the same for both the Remanufacture and New Build aircraft programs and is reflected in both the AH-64E Remanufacture and AH-64E New Build APBs. No unit will be fielded strictly with AH-64E New Build aircraft therefore, once the IOC and FUE milestones have been achieved as scheduled in the Remanufacture APB it will be reflective for both the Remanufacture and New Build aircraft programs.

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	Fully support execution of all operational activities.
Performance					
6000' PA, 95F OGE Hover (lbs/payload)	4,100	4,100	3,400	Met Threshold	3,400
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	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 Systems
mm - millimeter
MR - Mission Reliability
MTBF(M) - Mean Time Between Failure (Mission)
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

Procurement			
APPN 2031	BA 01	PE 0210100A	(Army)
	ICN A05133	Apache Longbow Block IIIB New Build	

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	0.0	0.0	--	0.0	0.0	0.0	0.0
Flyaway	0.0	--	--	0.0	0.0	--	0.0
Recurring	0.0	--	--	0.0	0.0	--	0.0
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	0.0	--	--	0.0	0.0	--	0.0
Procurement	2307.0	2134.6	2348.1	1961.4	2510.4	2326.2	2484.5
Flyaway	2054.0	--	--	1637.5	2234.1	--	2067.1
Recurring	2054.0	--	--	1596.1	2234.1	--	2015.3
Non Recurring	0.0	--	--	41.4	0.0	--	51.8
Support	253.0	--	--	323.9	276.3	--	417.4
Other Support	253.0	--	--	268.2	276.3	--	346.1
Initial Spares	0.0	--	--	55.7	0.0	--	71.3
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	2307.0	2134.6	N/A	1961.4	2510.4	2326.2	2484.5

Confidence Level for Current APB Cost 50% - Based on the Independent Cost Estimate (ICE) prepared for the Acquisition Program Baseline (APB).

The ICE to support Apache Block III New Build (AB3B) Milestone (MS) C decision is similar to all life-cycle cost estimates previously performed by the Cost Assessment and Program Evaluation (CAPE). This ICE is built upon a work breakdown structure that wherever possible uses actual cost information along with conservative assumptions that are consistent with contractor and government performance demonstrated in other successful Department acquisition programs. This strategy fully supports the APB objective and threshold positions.

It is difficult to precisely calculate confidence levels associated with life cycle cost estimates for Major Defense Acquisition Programs (MDAPs). Despite collecting and incorporating extensive historical cost information, our projections show that the estimate is equally likely to be too low or too high when executing the current program. We are confident that, as we accumulate additional cost data, we will be better able to predict the life cycle costs.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	56	56	56
Total	56	56	56

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Procurement	84.3	371.1	0.0	0.0	0.0	0.0	0.0	2029.1	2484.5
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	84.3	371.1	0.0	0.0	0.0	0.0	0.0	2029.1	2484.5
PB 2013 Total	104.2	371.1	475.2	385.2	95.7	391.9	114.9	217.6	2155.8
Delta	-19.9	0.0	-475.2	-385.2	-95.7	-391.9	-114.9	1811.5	328.7

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	0	10	0	0	0	0	0	46	56
PB 2014 Total	0	0	10	0	0	0	0	0	46	56
PB 2013 Total	0	0	10	10	11	4	11	0	12	58
Delta	0	0	0	-10	-11	-4	-11	0	34	-2

Cost and Funding

Annual Funding By Appropriation

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
2012	--	84.3	--	--	84.3	--	84.3
2013	10	315.6	--	1.8	317.4	53.7	371.1
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	--
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	--
2019	--	75.0	--	--	75.0	--	75.0
2020	7	250.9	--	50.0	300.9	55.2	356.1
2021	7	287.2	--	--	287.2	63.1	350.3
2022	7	238.0	--	--	238.0	52.1	290.1
2023	7	238.8	--	--	238.8	52.3	291.1
2024	7	244.9	--	--	244.9	53.6	298.5
2025	7	221.5	--	--	221.5	56.2	277.7
2026	4	59.1	--	--	59.1	31.2	90.3
Subtotal	**56**	**2015.3**	**--**	**51.8**	**2067.1**	**417.4**	**2484.5**

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
2012	--	78.6	--	--	78.6	--	78.6
2013	10	287.1	--	1.6	288.7	48.9	337.6
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	--
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	--
2019	--	60.8	--	--	60.8	--	60.8
2020	7	199.7	--	39.8	239.5	44.0	283.5
2021	7	224.4	--	--	224.4	49.3	273.7
2022	7	182.5	--	--	182.5	39.9	222.4
2023	7	179.7	--	--	179.7	39.3	219.0
2024	7	180.8	--	--	180.8	39.6	220.4
2025	7	160.5	--	--	160.5	40.7	201.2
2026	4	42.0	--	--	42.0	22.2	64.2
Subtotal	**56**	**1596.1**	**--**	**41.4**	**1637.5**	**323.9**	**1961.4**

Cost Quantity Information
2031 | Procurement | Aircraft Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2010 $M
2012	--	--
2013	10	365.7
2014	--	--
2015	--	--
2016	--	--
2017	--	--
2018	--	--
2019	--	--
2020	7	200.9
2021	7	225.1
2022	7	182.6
2023	7	179.9
2024	7	181.0
2025	7	186.4
2026	4	74.5
Subtotal	**56**	**1596.1**

Low Rate Initial Production

The Low-Rate Initial Production contract phase will only apply to the AH-64E Remanufacture program. The AH-64E New Build program is not scheduled to begin until after the Full-Rate Production decision was made in March 2013.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost $M	Memo
Korea		36	1790.0	Letter of Acceptance (LOA) Signature Date is April 2013.
Saudi Arabia		12	1402.0	Implemented 1st Quarter 2012 Cost includes support, peculiar ground support equipment, initial spares, contractor logistics support window, Contractor Field Service Representatives (CFSRs), United States Government (USG) technical support, two Longbow Crew Trainers (LCTs), training of pilots, maintainers, etc.
Saudi Arabia	8/5/2011	24	2731.0	Fully Implemented.
Saudi Arabia	12/22/2009	12	510.0	Implemented 1st Quarter 2012.
Taiwan	12/22/2008	31	1915.0	Deliveries of aircraft to begin in Calendar Year (CY) 2012.

Nuclear Cost

None

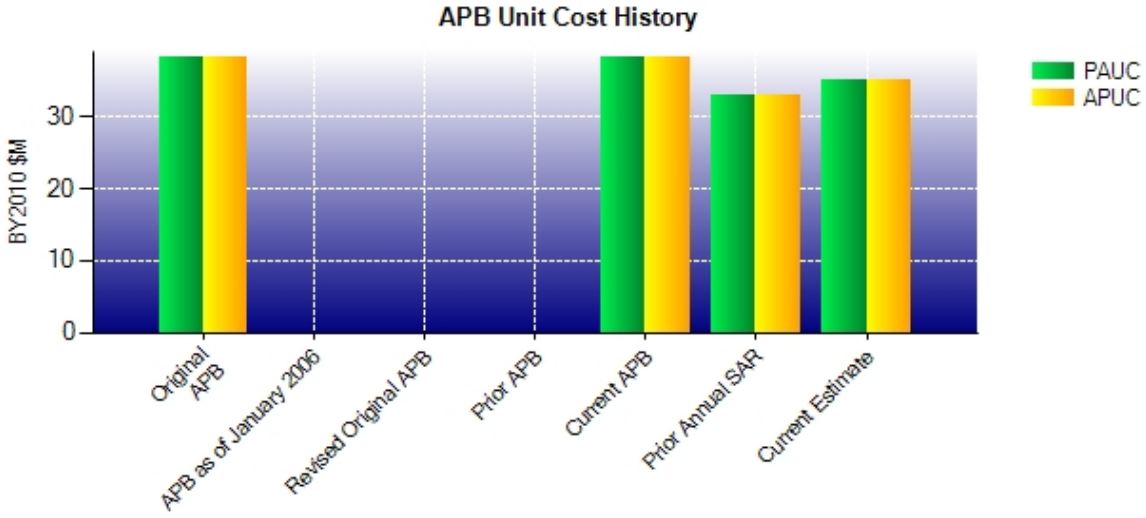
Unit Cost

Unit Cost Report

	BY2010 $M	BY2010 $M	
Unit Cost	**Current UCR Baseline (DEC 2010 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	2134.6	1961.4	
Quantity	56	56	
Unit Cost	38.118	35.025	-8.11
Average Procurement Unit Cost (APUC)			
Cost	2134.6	1961.4	
Quantity	56	56	
Unit Cost	38.118	35.025	-8.11

	BY2010 $M	BY2010 $M	
Unit Cost	**Original UCR Baseline (DEC 2010 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	2134.6	1961.4	
Quantity	56	56	
Unit Cost	38.118	35.025	-8.11
Average Procurement Unit Cost (APUC)			
Cost	2134.6	1961.4	
Quantity	56	56	
Unit Cost	38.118	35.025	-8.11

Unit Cost History



		BY2010 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	DEC 2010	38.118	38.118	41.539	41.539
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	N/A	N/A	N/A	N/A	N/A
Current APB	DEC 2010	38.118	38.118	41.539	41.539
Prior Annual SAR	DEC 2011	32.864	32.864	37.169	37.169
Current Estimate	DEC 2012	35.025	35.025	44.366	44.366

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	
44.829	1.229	-0.126	4.250	0.000	-8.139	0.000	2.323	-0.463	44.366

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
44.829	1.229	-0.126	4.250	0.000	-8.139	0.000	2.323	-0.463	44.366

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	JUL 2010	SEP 2010
IOC	N/A	N/A	MAY 2013	NOV 2013
Total Cost (TY $M)	N/A	N/A	2510.4	2484.5
Total Quantity	N/A	N/A	56	56
Prog. Acq. Unit Cost (PAUC)	N/A	N/A	44.829	44.366

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	--	2510.4	--	2510.4
Previous Changes				
Economic	--	+35.4	--	+35.4
Quantity	--	+104.2	--	+104.2
Schedule	--	+56.4	--	+56.4
Engineering	--	--	--	--
Estimating	--	-575.9	--	-575.9
Other	--	--	--	--
Support	--	+25.3	--	+25.3
Subtotal	--	-354.6	--	-354.6
Current Changes				
Economic	--	+33.4	--	+33.4
Quantity	--	-111.2	--	-111.2
Schedule	--	+181.6	--	+181.6
Engineering	--	--	--	--
Estimating	--	+120.1	--	+120.1
Other	--	--	--	--
Support	--	+104.8	--	+104.8
Subtotal	--	+328.7	--	+328.7
Total Changes	--	-25.9	--	-25.9
CE - Cost Variance	--	2484.5	--	2484.5
CE - Cost & Funding	--	2484.5	--	2484.5

Summary Base Year 2010 $M				
	RDT&E	**Proc**	**MILCON**	**Total**
SAR Baseline (Prod Est)	--	2307.0	--	2307.0
Previous Changes				
Economic	--	--	--	--
Quantity	--	+88.3	--	+88.3
Schedule	--	+0.1	--	+0.1
Engineering	--	--	--	--
Estimating	--	-508.2	--	-508.2
Other	--	--	--	--
Support	--	+18.9	--	+18.9
Subtotal	--	-400.9	--	-400.9
Current Changes				
Economic	--	--	--	--
Quantity	--	-88.5	--	-88.5
Schedule	--	-4.0	--	-4.0
Engineering	--	--	--	--
Estimating	--	+95.8	--	+95.8
Other	--	--	--	--
Support	--	+52.0	--	+52.0
Subtotal	--	+55.3	--	+55.3
Total Changes	--	-345.6	--	-345.6
CE - Cost Variance	--	1961.4	--	1961.4
CE - Cost & Funding	--	1961.4	--	1961.4

Previous Estimate: December 2011

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+33.4
Quantity variance from 58 to 56 resulted from a decrease of 2 Overseas Contingency Operations (OCO) funded War Replacement Aircraft (WRA) aircraft that were reported in last year's SAR. (Subtotal)	-51.7	-64.9
Quantity variance from 58 to 56 resulted from a decrease of 2 OCO funded WRA aircraft that were reported in last year's SAR. (Quantity) (QR)	(-88.5)	(-111.2)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-4.0)	(-5.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+40.8)	(+51.3)
Stretch-out of procurement buy profile. At Milestone (MS) C, all 56 AH-64E New Build aircraft were planned and funded to be procured by FY 2016 (FY 2017 deliveries). Since that time, funding for 46 of the 56 AH-64E New Build aircraft has been shifted outside the Future Year Defense Program (FYDP) to higher priority programs. (Schedule)	0.0	+186.6
Adjustment for current and prior escalation. (Estimating)	-4.3	-4.6
Stretch-out of procurement buy profile. At MS C, all 56 AH-64E New Build aircraft were planned and funded to be procured by FY 2016 (FY 2017 deliveries). Since that time, funding for 46 of the 56 AH-64E New Build aircraft has been shifted outside the FYDP to higher priority programs. (Estimating)	+59.3	+73.4
Adjustment for current and prior escalation. (Support)	-0.2	-0.3
Increase in Other Support to reflect 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. (Support)	+34.9	+78.5
Increase to Initial Spares reflect OSD CAPE FRP ICE dated September 2012. (Support)	+17.3	+26.6
Procurement Subtotal	+55.3	+328.7

(QR) Quantity Related

Contracts

General Contract Memo

AH-64E New Build advance procurement contract was awarded in third quarter FY 2012.

Appropriation: Procurement

Contract Name	**FRP**
Contractor	The Boeing Company
Contractor Location	5000 E McDowell Road Mesa, AZ 85215-9707
Contract Number, Type	W58RGZ-12-C-0055, FFP
Award Date	June 29, 2012
Definitization Date	September 11, 2013

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
200.2	N/A	96	200.2	N/A	96	200.2	200.2

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	0	0	0	--
Production	0	0	56	0.00%
Total Program Quantities Delivered	0	0	56	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	2484.5	Years Appropriated	2
Expenditures To Date	7.7	Percent Years Appropriated	13.33%
Percent Expended	0.31%	Appropriated to Date	455.4
Total Funding Years	15	Percent Appropriated	18.33%

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

Operating and Support Cost

AH-64E New Build

Assumptions and Ground Rules

Cost Estimate Reference:
In accordance with 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. The strategy assumes the fielding of 56 New Build 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 New Build Average Annual Cost per Aircraft	Longbow Apache (Antecedent) Average Annual Cost per Longbow Apache 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 the OSD CAPE ICE dated August 15, 2012.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	AH-64E New Build		AH-64E New Build	Longbow Apache (Antecedent)
Base Year	N/A	N/A	3538.1	15350.4
Then Year	N/A	N/A	5170.9	17869.0

Total O&S Costs Comments:

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

Changing estimating methodologies from the FRP Program Office Estimate to the OSD CAPE ICE resulted in the cost variations observed between the 2011 AH-64D SAR and the 2012 AH-64D SAR. Further, the 2011 SAR estimated 690 aircraft and the 2012 SAR estimates 56.

Disposal Costs

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