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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0607135A I Apache Product Improvement Program							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	-	86.099	69.862	-	69.862	66.131	54.577	31.383	32.917	-	340.969
ES2: Apache Product Improvement Program	-	-	86.099	69.862	-	69.862	66.131	54.577	31.383	32.917	-	340.969

A. Mission Description and Budget Item Justification

B. Program Change Summary (\$ in Millions)	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016 Base</u>	<u>FY 2016 OCO</u>	<u>FY 2016 Total</u>
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	86.099	69.862	-	69.862
Total Adjustments	-	86.099	69.862	-	69.862
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	86.099	69.862	-	69.862

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0607135A / Apache Product Improvement Program				Project (Number/Name) ES2 / Apache Product Improvement Program			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
ES2: Apache Product Improvement Program	-	-	86.099	69.862	-	69.862	66.131	54.577	31.383	32.917	-	340.969
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

For FY 2015 and all outyears, all funding for AH-64E was moved from PE 273744, Project D17 to PE 677135, Project ES2.

A. Mission Description and Budget Item Justification

The FY 2016 budget request for Apache AH-64E, previously known as Apache Block III, will fund the non-recurring engineering (NRE), development, and testing work associated with the planned remanufacture and new build of 690 Apache aircraft in the AH-64E configuration (deliveries began in Oct 2011). The AH-64E - program consists of two Major Defense Acquisition Programs (MDAP), AH-64E Remanufacture and AH-64E New Build. This project also addresses obsolescence and reliability challenges and provides increased combat capability to the aircraft. Upgrades include: Unmanned Aircraft System (UAS) Level III-IV Control, Improved Situational Awareness, Upgraded Communications Suite, Improved Drive and Propulsion Systems, Improved Targeting Capability, Increased Computer Processing Capability and Speed, Improved Navigation Systems, and Improved Diagnostics and Maintainability. Upgrades are integrated as incremental block modifications. The program addresses operational shortfalls identified during real-world combat missions and meets Longbow Apache Capability Production Document (CPD) requirements for modernization.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Product Development	FY 2014	FY 2015	FY 2016
Description: Funding is provided for the following efforts by Boeing, Longbow Limited Liability (LBL), and Lockheed Martin	-	75.377	62.628
FY 2015 Plans: Development, Integration & Testing work associated with the planned remanufacture and new build of Apache aircraft in the AH-64E Lot 6 configuration (joint interoperability, crashworthy fuel tank kits, embedded diagnostics, communications, mission processor, and navigation upgrades) and to enhance operational capabilities. Risk reduction for Version 6 CPD capabilities to include cognitive decision aiding, soldier radio waveform, modernized dayside assembly, modernized radio frequency interferometer, maritime targeting, and radar upgrades. Provides NRE for design of the Hydra Launcher Electronics Assembly for development of the MRL.			
FY 2016 Plans:			

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Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607135A / Apache Product Improvement Program	Project (Number/Name) ES2 / Apache Product Improvement Program		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Development, Integration & Testing work associated with the planned remanufacture and new build of Apache aircraft in the AH-64E Capability Version 6 configuration (cognitive decision aiding, soldier radio waveform, modernized dayside assembly, modernized radio frequency interferometer, maritime targeting, and radar upgrades) and to enhance operational capabilities.				
Title: Support Costs Description: Funding is provided for the following effort. FY 2015 Plans: GFE supporting Apache AH-64E tests and government R&D Facilities FY 2016 Plans: GFE supporting Apache AH-64E tests and government R&D Facilities.		-	1.726	1.000
Title: Test and Evaluation Description: Funding is provided for Development Testing and Evaluation and Operational Test and Evaluation. FY 2015 Plans: Funding is provided for Development Testing and Evaluation and Operational Test and Evaluation, Government test oversight, test ranges, flight hour costs for MRL testing. FY 2016 Plans: Funding is provided for Development Testing and Evaluation and Operational Test and Evaluation.		-	3.700	3.295
Title: Management Services Description: Funding is provided for the following effort: Payroll, TDY, Support Contractors, Matrix Support. FY 2015 Plans: Funding is provided for the following effort: Payroll, TDY, Support Contractors, Matrix Support. FY 2016 Plans: Funding is provided for the following effort: Payroll, TDY, Support Contractors, Matrix Support.		-	5.296	2.939
Accomplishments/Planned Programs Subtotals		-	86.099	69.862

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Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0607135A / Apache Product Improvement Program				Project (Number/Name) ES2 / Apache Product Improvement Program			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• AH-64 Mods: AH-64 Mods	48.487	181.869	116.153	-	116.153	133.846	177.919	145.955	134.063	-	938.292
• AH-64 Apache Block IIIA Reman: AH-64 Apache Block IIIA Reman	752.600	873.347	1,378.391	-	1,378.391	1,074.191	1,264.377	1,138.097	1,132.134	-	7,613.137
• AH-64 Apache Block IIIB New Build: AH-64 Apache Block IIIB New Build	142.000	-	-	-	-	-	-	-	-	-	142.000
Remarks											
D. Acquisition Strategy											
The NRE will encompass subsystem integration and will utilize existing test aircraft, incorporate the technical insertions, and initiate appropriate qualification and operational flight-testing.											
In FY14, a contract for Apache AH-64E Lot 3, initiating Full Rate Production, is planned with options for Lot 4 and will continue to a total of 690 remanufactured and new build aircraft.											
Training device concurrency will be maintained with each technical insertion. The EMD effort is managed as Cost Reimbursable. Production efforts will be awarded as Firm Fixed Price (FFP) and include the Advance Procurement requirements.											
In FY13, FY14, and FY15 MRL NRE will encompass US Government (USG) design of the Hydra Launcher Electronics Assembly (LEA), modification of the M261 launcher, launcher fabrication, and launcher testing.											
In FY15-FY18, Apache AH-64E Development & Integration (D&I) Contract.											
Multi-year authority may be requested for the out years.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0607135A / Apache Product Improvement Program						Project (Number/Name) ES2 / Apache Product Improvement Program			
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services (In-House, Travel, etc.)	MIPR	PMO AAH Matrix Support AMCOM Express : Redstone Arsenal, AL	0.000	-		5.296		2.939	Dec 2016	-		2.939	3.480	11.715	-
Subtotal			0.000	-		5.296		2.939		-		2.939	3.480	11.715	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
The Boeing Company	SS/CPIF	Boeing Contracts : Mesa, AZ	0.000	-		54.377	Apr 2015	55.024	Dec 2016	-		55.024	-	109.401	-
Longbow Limited Liability (LBL) Contracts	SS/CPIF	Longbow Limited Liability (LBL) Contracts : Orlando, FL	0.000	-		9.000		7.604	Dec 2016	-		7.604	-	16.604	-
Ground Fire Acquisition Development (GFAD)	SS/CPIF	TBD : TBD	0.000	-		12.000		-		-		-	-	12.000	-
Subtotal			0.000	-		75.377		62.628		-		62.628	-	138.005	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Support Activities	MIPR	Various : Various	0.000	-		1.726		1.000	Dec 2016	-		1.000	1.568	4.294	-
Subtotal			0.000	-		1.726		1.000		-		1.000	1.568	4.294	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army													Date: February 2015		
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Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Assessments, Test Integration Working Group (TWIG), TEMP, etc.	MIPR	Various : Various	0.000	-		3.700		3.295	Dec 2016	-		3.295	3.199	10.194	-
Subtotal			0.000	-		3.700		3.295		-		3.295	3.199	10.194	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		86.099		69.862		-		69.862	8.247	164.208	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army

Date: February 2015

Appropriation/Budget Activity

2040 / 7

R-1 Program Element (Number/Name)

PE 0607135A / Apache Product Improvement Program

Project (Number/Name)	Start Date	End Date	Status	Manager	Budget (USD)	Actual Cost (USD)	Progress (%)	Risk Level	Notes
P001 / Project Alpha	2023-01-15	2023-06-30	Completed	J. Doe	120000	118000	100	Low	Exceeded budget by 2000.
P002 / Project Beta	2023-02-01	2023-08-15	In Progress	A. Smith	85000	75000	88	Medium	Minor delays in procurement.
P003 / Project Gamma	2023-03-10	2023-09-30	On Hold	M. Chen	200000	10000	5	High	Waiting for client requirements.
P004 / Project Delta	2023-04-01	2023-10-31	Planned	S. Kim	150000	0	0	Medium	Initial planning phase.
P005 / Project Epsilon	2023-05-01	2023-11-30	Not Started	L. Garcia	90000	0	0	Low	Awaiting budget approval.

ES2 / Apache Product Improvement Program

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607135A / Apache Product Improvement Program	Project (Number/Name) ES2 / Apache Product Improvement Program

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NRE Contracts - Boeing	1	2011	4	2017