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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army	Date: February 2015
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Appropriation/Budget Activity	R-1 Program Element (Number/Name)											
2040: <i>Research, Development, Test & Evaluation, Army I BA 7: Operational Systems Development</i>	PE 0203744A / <i>Aircraft Modifications/Product Improvement Programs</i>											
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	-	227.333	-	-	-	-	-	-	-	-	Continuing	Continuing
430: <i>Impr Cargo Helicopter</i>	-	18.616	-	-	-	-	-	-	-	-	Continuing	Continuing
504: <i>Black Hawk Recapitalization/Modernization</i>	-	94.527	-	-	-	-	-	-	-	-	Continuing	Continuing
D17: <i>Apache Block III</i>	-	112.419	-	-	-	-	-	-	-	-	-	112.419
D18: <i>Fixed Wing Aircraft</i>	-	1.771	-	-	-	-	-	-	-	-	-	1.771

A. Mission Description and Budget Item Justification

Prior to FY 2015, this PE funded budget requests for aviation development of modifications and improvements for the Improved Cargo Helicopter, the UH-60L Black Hawk Recapitalization/Modernization, Apache Block III, and Fixed Wing Aircraft.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	239.696	264.887	256.677	-	256.677
Current President's Budget	227.333	-	-	-	-
Total Adjustments	-12.363	-264.887	-256.677	-	-256.677
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-12.363	-264.887	-256.677	-	-256.677

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) 430 / Impr Cargo Helicopter			
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
430: Impr Cargo Helicopter	-	18.616	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note PE 273744 Project Number 430 was realigned starting in FY 15 to new PE 0607137A Project Number ES4.												
A. Mission Description and Budget Item Justification The CH-47 Chinook is the only heavy lift helicopter for the Army and is an essential element of the current Army Aviation master plan. This program funds improvements to the CH-47F System that include: T55-GA-714A engine control and component upgrades to increase power to support emerging 6K/95 requirements, continued development and testing of the Advanced Chinook Rotor Blades (ACRB) which will provide increased lift in high/hot conditions and reduce O&S costs. Production of the ACRB will begin in FY 2017. Funding also initiates advanced flight control and drive train component improvements to improve aircraft performance. Development of requirements specifications, studies and risk reduction prototyping are also part of this effort.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: 714 Engine Component Improvement Program Description: Included in the Engine Component Improvement Program are improvements that address improved performance, reduced maintenance burden for better maintainability for the Soldier, improved safety, and increased reliability leading to reduced O&S costs. Improvements include improved component designs/updates and electronic control unit software. FY 2014 Accomplishments: Included in the Engine Component Improvement Program are improvements that address increased maintainability, improved safety, and increased reliability leading to reduced O&S costs. Improvements include component design/updates and related component design and improved electronic control unit software.									9.685	-	-	
Title: Airframe Component Improvement Program Description: Included in the Airframe Component Improvement Program are the continued development and flight testing of the Advanced Chinook Rotor Blade (ACRB) and development of advanced flight control and drive train components. The ACIP will also assess potential improvements to the fuel system and structural modifications for improved aircraft performance, aircraft weight reduction, and reduction of O&S costs. FY 2014 Accomplishments: Included in these efforts are development and testing of the Advanced Chinook Rotor Blade (ACRB) that will result in significant performance improvements such as providing approximately 1,975 lbs of additional lift, improving erosion protection, and reducing									8.931	-	-	

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) 430 / Impr Cargo Helicopter				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
O&S costs. Funding continues airframe weight reductions and component development of advanced flight controls, drive train, rotor system, and fuel system to increase aircraft performance, reduce aircraft weight, and reduce O&S costs.												
Accomplishments/Planned Programs Subtotals										18.616	-	-
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	
• AA0252: CH-47 CARGO HELICOPTER MODS	91.064	-	-	-	-	-	-	-	-	Continuing	Continuing	
• A05105: CH-47 SLEP (Including Adv Proc)	639.021	-	-	-	-	-	-	-	-	Continuing	Continuing	
• A05008: CH-47 CARGO HELICOPTER NEW BUILD	290.005	-	-	-	-	-	-	-	-	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
The CH-47F program replaces one for one, the aging CH-47D aircraft by FY2020, incorporates a new machined airframe, and includes a new Common Avionics Architecture System (CAAS) cockpit with digital communication/navigation capability allowing improved interoperability on the digital battlefield. The CH-47F program includes recapitalization of key dynamic components, bringing them to a near zero time.												
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 0203744A / Aircraft Modifications/ Product Improvement Programs						Project (Number/Name) 430 / Impr Cargo Helicopter			
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
714 Engine Component Improvement Program	SS/CPFF	Honeywell : Phoenix, AZ	10.521	6.403		-		-		-		-	Continuing	Continuing	Continuing
Airframe Component Improvement Program	SS/CPFF	Boeing : Ridley Park PA	105.261	12.213		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			115.782	18.616		-		-		-		-	-	-	-
			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			115.782	18.616		-		-		-		-	-	-	-
Remarks															

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PE 0203744A: Aircraft Modifications/Product Improvement
Army

R-1 Line #174

R-1 Program Element (Number/Name)
PE 0203744A / Aircraft Modifications/
Product Improvement Programs

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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 0203744A / Aircraft Modifications/ Product Improvement Programs	Project (Number/Name) 430 / Impr Cargo Helicopter	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Full Rate Production	2	2005	2	2020

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) 504 / Black Hawk Recapitalization/ Modernization			
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
504: Black Hawk Recapitalization/Modernization	-	94.527	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The H-60L Digital BLACK HAWK, now designated as UH-60V, is designed to update the existing H-60L analog architecture to a digital infrastructure enabling the upgraded aircraft to have a similar Pilot-Vehicle Interface (PVI) to the H-60M. The program will address current capability gaps and meet operational requirements by employing an evolutionary acquisition approach to leverage mature technologies that have been successfully integrated on other military aircraft. The program will reduce obsolescence and increase commonality and interoperability by installing a digital cockpit, bussing and upgrading the communication/identification suite, improving navigation guidance, and integrating Aircraft Survivability Equipment (ASE), digital moving map, and Joint Variable Message Format (JVMF) messaging.

This line has been moved to the new PE 677135 starting in FY15 and out.

The Improved Turbine Engine Program (ITEP) develops, tests, and qualifies the next generation turboshaft engine. The Improved Turbine Engine (ITE) replaces the existing T700 engine design originated in the 1970's and meets the operational requirement of 6K/95. The ITE will fit inside the existing engine bays of the Black Hawk and Apache Helicopters and provides a significant power enhancement of up to fifty percent (total of 3,000 shaft horsepower) with increased fuel efficiency. Additional benefits include improved design life, enhanced reliability, lower maintenance cost and restored capability lost due to aircraft weight growth, without increasing the logistics footprint. The program consists of system engineering and program management,detailed design engineering, design assurance, hardware manufacturing and testing, component and module level development and testing, system level testing and qualification, as well as integration into the airframe.

FY 2014 ITEP (\$79.880M) funds system engineering/program management, continuing component testing, and initial airframe integration efforts. All funding for ITEP for FY 2015 and beyond is located in Project Element (PE) 0203744A - Project EB1. FY 2014 UH-60V (\$17.3M) funded within PE 0203744A. Funds required for systems engineering/program management and preliminary hardware and software development leading to up to program readiness for preliminary design review

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

	FY 2014	FY 2015	FY 2016
Title: ITEP	94.527	-	-
Description: Improved Turbine Engine Program (ITEP) - a multi-platform turbine engine improvement required across existing Army aircraft to fill the capability gaps for Army Aviation Operations.			
FY 2014 Accomplishments:			

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) 504 / Black Hawk Recapitalization/ Modernization				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Systems Engineering/Program Management requirements. Continue preparation for Milestone entry, development of contractor requirements package, initial airframe integration efforts and continued engine component testing.												
Accomplishments/Planned Programs Subtotals										94.527	-	-
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	
• N/A: N/A	-	-	-	-	-	-	-	-	-	-	-	
Remarks												
Due to UH-60V RDTE funding being moved to another line (PE 0607136 Project ES3) no other program funding is dependent on this PE line.												
D. Acquisition Strategy												
The UH-60V program plans to leverage a Government-owned Government-operated (GOGO) facility to design, integrate and build 3 production representative aircraft. The GOGO facility uses a cost plus vehicle and will conduct full and open competition for the selection of the avionics solution provider.												
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 0203744A / Aircraft Modifications/ Product Improvement Programs						Project (Number/Name) 504 / Black Hawk Recapitalization/ Modernization			
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
ITEP SEPM - Organic	Various	PMO : Huntsville, AL	3.707	3.400	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
ITEP SEPM - Contractor	Various	TBD : TBD	2.131	2.400	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
ITEP SEPM - OGA	Various	PMO : Huntsville, AL	4.430	9.300	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
UH-60V Digital - Organic	TBD	Various : Various	0.983	-		-		-		-		-	-	0.983	-
UH-60V Digital - Contractor	TBD	Various : Various	0.243	-		-		-		-		-	-	0.243	-
Subtotal			11.494	15.100		-		-		-		-	-	-	-
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
UH-60V Digital Development Engineering	C/CPFF	AMRDEC PIF : Redstone Arsenal	7.014	14.647	Jul 2014	-		-		-		-	Continuing	Continuing	Continuing
ITEP Air Vehicle Integration	SS/IDIQ	Various : Various	0.000	15.000	Sep 2014	-		-		-		-	-	15.000	-
Subtotal			7.014	29.647		-		-		-		-	-	-	-
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
ITEP Other OGA - AoA Development Support	Various	AMSAA : Huntsville, AL	1.328	-		-		-		-		-	Continuing	Continuing	Continuing
UH-60V Digital	Various	Huntsville, AL : Huntsville, AL	12.160	-		-		-		-		-	-	12.160	-
Subtotal			13.488	-		-		-		-		-	-	-	-

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) 504 / Black Hawk Recapitalization/ Modernization					
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
AATD/AATE Testing Support	Various	Various : Various	12.700	49.780	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			12.700	49.780		-		-		-		-	-	-	-
			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			44.696	94.527	-		-		-		-	-	-	-	
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 0203744A / Aircraft Modifications/
Product Improvement Programs

Project (Number/Name)

504 / *Black Hawk Recapitalization/Modernization*[illegible]

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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 0203744A / Aircraft Modifications/ Product Improvement Programs	Project (Number/Name) 504 / Black Hawk Recapitalization/ Modernization

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Improved Turbine Engine Program Systems Engineering/Program Management	1	2012	4	2014

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) D17 / Apache Block III			
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
D17: Apache Block III	-	112.419	-	-	-	-	-	-	-	-	-	112.419
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note												
For FY 2014 and prior, all funding for AH-64E was contained in PE 0203744A – Aircraft Modifications/Product Improvement Programs, Project 504. FY 2015 funding has 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.												
Funds will also provide for the development, integration and testing of the Modernized Rocket Launcher (MRL) with digital launcher electronics.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Product Development									97.106	-	-	
Description: Funding is provided for the following efforts by Boeing, Longbow Limited Liability (LBL), and Lockheed Martin.												
FY 2014 Accomplishments:												
Development, Integration & Testing work associated with the planned remanufacture and new build of Apache aircraft in the AH-64E Lot 4-6 configuration (joint interoperability, crashworthy fuel tank kits, embedded diagnostics, communications, mission processor, and navigation upgrades) and to enhance operational capabilities. Risk reduction for Lot 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.												
Title: Support Costs									2.376	-	-	

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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 0203744A / Aircraft Modifications/ Product Improvement Programs			Project (Number/Name) D17 / Apache Block III				

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Description: Funding is provided for the following effort. FY 2014 Accomplishments: GFE supporting Apache AH-64E tests.			
Title: Test and Evaluation Description: Funding is provided for Development Testing and Evaluation and Operational Test and Evaluation. FY 2014 Accomplishments: Development, Test & Evaluation, Operational Testing. Government test oversight, test ranges, flight hour costs for MRL testing.	7.780	-	-
Title: Management Services Description: Funding is provided for the following effort. FY 2014 Accomplishments: Payroll, TDY, Support Contractors, Matrix Support.	5.157	-	-
Accomplishments/Planned Programs Subtotals	112.419	-	-

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
• AA6605: AH-64 MODS	48.487	-	-	-	-	-	-	-	-	-	48.487
• A05111: AH-64 APACHE BLOCK IIIA REMAN	752.600	-	-	-	-	-	-	-	-	-	752.600
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.											

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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 0203744A / Aircraft Modifications/ Product Improvement Programs	Project (Number/Name) D17 / Apache Block III
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 0203744A / Aircraft Modifications/ Product Improvement Programs						Project (Number/Name) D17 / Apache Block III			
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	1.272	5.157		-		-		-		-	-	6.429	-
Management Services (In-House, Travel, etc.)	MIPR	PEO Missiles & Space, Matrix Support, AMCOM Express, SETA : Huntsville, AL	0.811	0.811		-		-		-		-	-	1.622	-
Subtotal			2.083	5.968		-		-		-		-	-	8.051	-
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	214.700	83.246	Dec 2013	-		-		-		-	-	297.946	-
Longbow Limited Liability (LBL) Contracts	SS/CPIF	Longbow Limited Liability (LBL) Contracts : Orlando, FL and Baltimore, MD	16.182	6.000		-		-		-		-	-	22.182	-
Lockheed Martin	SS/CPIF	Lockheed Martin Contracts : Orlando, FL	0.470	-		-		-		-		-	-	0.470	-
Modernized Rocket Launcher Development - USG	MIPR	Various USG Activities : Various	6.860	6.598		-		-		-		-	-	13.458	-
Boeing - MRL Platform SW and Integration	SS/CPIF	Boeing Company : Mesa, AZ	0.760	0.451		-		-		-		-	-	1.211	-
Subtotal			238.972	96.295		-		-		-		-	-	335.267	-

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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 0203744A / Aircraft Modifications/ Product Improvement Programs					Project (Number/Name) D17 / Apache Block III				
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 Activities : Various	21.653	2.376		-		-		-		-	-	24.029	-
Subtotal			21.653	2.376		-		-		-		-	-	24.029	-
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 Activities : Various	28.355	5.940		-		-		-		-	-	34.295	-
MRL Weapon Integration Lab, LFT, Qual Test, & Test Working Group	MIPR	AMRDEC : Huntsville, AL, Yuma Proving Grounds, AZ	0.230	1.840		-		-		-		-	-	2.070	-
Subtotal			28.585	7.780		-		-		-		-	-	36.365	-
			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			291.293	112.419		-		-		-		-	-	403.712	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																				Date: February 2015									
Appropriation/Budget Activity										R-1 Program Element (Number/Name)										Project (Number/Name)									
2040 / 7										PE 0203744A / Aircraft Modifications/ Product Improvement Programs										D17 / Apache Block III									
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
NRE Contracts - Boeing	NRE Contracts - Boeing																												
NRE Contracts - Longbow Limited Liability	NRE Contracts - LB Limited Liability																												
(1) MRL PDR	1 PDR																												
(2) MRL Prototypes & CDR					2 Prototypes & CDR																								
(3) Follow-On Test & Eval I					3 FOT&E I																								
MRL Design																													
Force Develop Test & Evaluation (FDTE III)													FDTE III																
(4) Follow-On Test & Eval II																	4 FOT&E II												
MRL Integration and Test																													

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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 0203744A / Aircraft Modifications/ Product Improvement Programs	Project (Number/Name) D17 / Apache Block III	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NRE Contracts - Boeing	1	2011	4	2017
NRE Contracts - Longbow Limited Liability	1	2011	4	2017
MRL PDR	3	2014	3	2014
MRL Prototypes & CDR	4	2014	1	2015
Follow-On Test & Eval I	4	2014	4	2014
MRL Design	3	2013	4	2014
Force Develop Test & Evaluation (FDTE III)	1	2017	2	2017
Follow-On Test & Eval II	2	2017	2	2017
MRL Integration and Test	2	2015	4	2015

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Exhibit R-5, RDT&E Termination Liability: PB 2016 Army								Date: February 2015	
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203744A / Aircraft Modifications/ Product Improvement Programs			Project (Number/Name) D17 / Apache Block III	
Cost (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Program Termination Liability	-	112.419	-	-	-	-	-	-	

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) D18 / Fixed Wing Aircraft			
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
D18: Fixed Wing Aircraft	-	1.771	-	-	-	-	-	-	-	-	-	1.771
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note In FY 2015 funding moves to Program Element 607138.												
A. Mission Description and Budget Item Justification The budget line provides for non-recurring engineering (NRE), development of supplemental type certificates and associated developmental testing, integration of all Army fixed wing aircraft to provide Communication, Navigation and Surveillance (CNS), Aircraft Survivability Equipment (ASE), and Department of Defense (DoD) mandated safety equipment to meet current and evolving international and Army standards.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Title: Non-recurring Engineering										1.723	-	-
Description: Non-recurring engineering efforts provide improved performance to Army fixed wing aircraft for communication, navigation, and surveillance equipment.												
FY 2014 Accomplishments: Non-recurring engineering efforts provide improved performance to Army fixed wing aircraft for communication, navigation, and surveillance equipment.												
Title: Program Management										0.048	-	-
Description: Program Management of PM FW												
FY 2014 Accomplishments: Program Management of PM FW												
Accomplishments/Planned Programs Subtotals										1.771	-	-
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	
• A11300: Utility Fixed Wing Aircraft	18.052	-	-	-	-	-	-	-	-	-	18.052	
• AA0270: Utility/ Cargo Airplane Mods	11.500	-	-	-	-	-	-	-	-	-	11.500	

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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 0203744A / Aircraft Modifications/ Product Improvement Programs				Project (Number/Name) D18 / Fixed Wing Aircraft			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2016</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Complete</u>	<u>Total Cost</u>
Remarks											
D. Acquisition Strategy											
The Army Fixed Wing acquisition and modernization strategy leverages commercial derivative aircraft through the use of supplemental type certificates (STC) and associated testing and includes modernization for civil and tactical upgrades of military unique equipment and integration of Intelligence, Surveillance and Reconnaissance (ISR) Mission Equipment Packages (MEP). Cockpit modernization upgrades include items such as dual Flight Management Systems, Terrain Area Warning Systems, transponder, Mode S/5 transponders, satellite communications, Traffic Alert and Collision Avoidance II, Flight Data Recorders, Cockpit Voice Recorders, communication radios, military Global Positioning System (GPS), Wide Area Augmentation System/Localizer Performance with Vertical Guidance, Automatic Dependence Surveillance Broadcast (ADS-B) Out, M-code GPS, Blue Force Tracker, and Smart books. ISR MEP upgrades include integration of multi-intelligence systems.											
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				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 7				PE 0203744A / Aircraft Modifications/ Product Improvement Programs				D18 / Fixed Wing Aircraft							
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
Program Management Support	Various	PM Fixed Wing : Redstone Arsenal, AL	0.053	0.048	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			0.053	0.048		-		-		-		-	-	-	-
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
Fixed Wing Non-recurring Engineering	Various	Various : Various	0.829	1.723		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			0.829	1.723		-		-		-		-	-	-	-
			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			0.882	1.771		-		-		-		-	-	-	-
Remarks															

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PE 0203744A: Aircraft Modifications/Product Improvement...
Army

R-1 Line #174

Appropriation/Budget Activity
2040 / 7

R-1 Program Element (Number/Name)
PE 0203744A / Aircraft Modifications/
Product Improvement Programs

Project (Number/Name)
D18 / *Fixed Wing Aircraft*

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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 0203744A / Aircraft Modifications/ Product Improvement Programs	Project (Number/Name) D18 / Fixed Wing Aircraft

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FW Non-recurring Engineering	1	2013	1	2015