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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 / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	PE 0603801A / Aviation - Adv Dev											
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	-	4.848	-	-	-	-	-	-	-	7.264	-	12.112
B32: <i>Adv Maint Concepts/Eq</i>	-	4.848	-	-	-	-	-	-	-	7.264	-	12.112

A. Mission Description and Budget Item Justification

This PE provides advanced development aviation support of programs that include advanced maintenance concepts and equipment. This program provides for development of rapid battle repair procedures, tools development to speed the return of aircraft to a full mission status, and development of new equipment for aerial recovery of damaged aircraft. Included in this project are: diagnostics/prognostic monitoring systems, Aviation Ground Power Unit (AGPU) redesign and incorporation of AGPU modularity capabilities, Aviation Light Utility Mobile Maintenance Cart (ALUMMC), Aviation Unit Maintenance Shop Set (AVUM SS), Unit Maintenance Aerial Recovery Kit (UMARK) and development support for tools needed to provide maintenance support to modernized/future force aircraft.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	5.015	-	-	-	-
Current President's Budget	4.848	-	-	-	-
Total Adjustments	-0.167	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.167	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603801A / Aviation - Adv Dev				Project (Number/Name) B32 / Adv Maint Concepts/Eq			
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
B32: Adv Maint Concepts/Eq	-	4.848	-	-	-	-	-	-	-	7.264	-	12.112
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note Beginning in FY 2015, funding on this Project was realigned to PE/Project 0605830A/EE5 to reflect the program's development efforts in Budget Activity 05, System Development and Demonstration.												
A. Mission Description and Budget Item Justification This PE provides advanced development aviation support of programs that include advanced maintenance concepts and equipment. This program provides for development of rapid battle repair procedures, tools development to speed the return of aircraft to a full mission status, and development of new equipment for aerial recovery of damaged aircraft. Included in this project are: diagnostics/prognostic monitoring systems, Aviation Ground Power Unit (AGPU) redesign and incorporation of AGPU modularity capabilities, Aviation Light Utility Mobile Maintenance Cart (ALUMMC), Aviation Unit Maintenance Shop Set (AVUM SS), Unit Maintenance Aerial Recovery Kit (UMARK) and development support for tools needed to provide maintenance support to modernized/future force aircraft.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Title: Aviation Ground Power Unit (AGPU) Description: The AGPU provides the capability to meet Army helicopter servicing requirements into the next decade by providing a modular, diagnostic/prognostic monitoring system with external hydraulic, pneumatic, and AC/DC electrical power to all Modernized Force Aircraft. FY 2014 Accomplishments: Completed AGPU Trainer Development, Hydraulic Redesign Phase II.										1.250	-	-
Title: Aviation Light Utility Mobile Maintenance Cart (ALUMMC) Description: ALUMMC will enhance mission performance of current forces by reducing the burden on Army Aviation units currently using TDA and TOE tactical vehicles to support flight line operations and providing a standardized and sustainable vehicle to move personnel and equipment along the flight line. FY 2014 Accomplishments: Completed product evaluation and operational testing, Request For Proposal (RFP), and Milestone C Authority.										0.600	-	-
Title: Aviation Unit Maintenance Shop Set (AVUM SS) Description: The AVUM SS consists of three deployable shelters which provide deployable tool loads required for unit-level aviation maintenance tasks.										1.000	-	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
FY 2014 Accomplishments: Began development of a Modification Work Order to replace current AVUM SS shelter with an ISO compliant shelter which will standardize Aviation Intermediate and Unit Level Maintenance Shop Set shelters, increasing workspace and providing an adaptable platform to accommodate emerging requirements for aviation maintenance tools and procedures. Prepared Statement of Work, contract requirements package, conducted technical review of proposals, and load planning and testing.			
Title: Unit Maintenance Aerial Recovery Kit (UMARK) Description: UMARK provides Aviation Support Company and Aviation Maintenance Company units with the ability to quickly rig for transport crash-damaged non-flyable modernized aircraft or aircraft undergoing maintenance for evacuation.		0.924	-
FY 2014 Accomplishments: Completed ground and flight testing and verification.			
Title: Management Support Services Description: Management Support Services in Support of the Aviation Ground Support Equipment Product Management Office.		0.297	-
FY 2014 Accomplishments: Management Support Services			
Title: RDTE Project Test Support Description: RDTE Project Test Support for the Aviation Ground Support Equipment Product Management Office.		0.250	-
FY 2014 Accomplishments: RDTE Project Test Support.			
Title: Technical Engineering Services Description: Technical Engineering Services in support of Aviation Ground Support Equipment Product Management Office.		0.527	-
FY 2014 Accomplishments: Technical Engineering Services.			
Accomplishments/Planned Programs Subtotals		4.848	-

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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• Aviation Ground Support Equipment: <i>Aviation Ground</i> <i>Support Equipment, SSN AZ3520</i>	45.999	-	-	-	-	-	-	-	-	-	45.999

Remarks

Beginning in FY 2015, funding on this PE was realigned from PE 0603801A to reflect the program's development efforts in Budget Activity 05, System Development and Demonstration.

D. Acquisition Strategy

This project is an aggregate of advanced maintenance concepts related projects. While the detailed acquisition strategy varies from project to project, the general strategy for each individual project is to complete the development effort through Government test (developmental and operational). Program documentation for milestone decision is prepared, as appropriate, concurrently with the development effort.

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 / 4						R-1 Program Element (Number/Name) PE 0603801A / Aviation - Adv Dev				Project (Number/Name) B32 / Adv Maint Concepts/Eq					
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 Support Services	Various	PM AGSE : RSA, AL	1.617	0.297	Jan 2014	-		-		-		-	-	1.914	-
Subtotal			1.617	0.297		-		-		-		-	-	1.914	-
Remarks None															
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
AGPU	Various	RTTC, Redstone Arsenal (RSA), AL; AMRDEC, RSA, AL; Aberdeen Test Center (ATC), : Aberdeen Proving Ground, MD	13.222	1.250	Jun 2014	-		-		-		-	-	14.472	-
ALUMMC	Various	ATTD, Ft. Eustis, VA, Aberdeen Test Center (ATC), : Aberdeen Proving Ground MD	1.460	0.600	Jul 2014	-		-		-		-	-	2.060	-
AVUM SS	Various	AMRDEC, RSA, RTTC, RSA, Aberdeen Test Center (ATC), : Aberdeen Proving Ground, MD	0.000	1.000	Jul 2014	-		-		-		-	-	1.000	-
UMARK	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC), : Aberdeen Proving Ground, MD	6.864	0.924	Feb 2014	-		-		-		-	-	7.788	-
Subtotal			21.546	3.774		-		-		-		-	-	25.320	-

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Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603801A / Aviation - Adv Dev				Project (Number/Name) B32 / Adv Maint Concepts/Eq					

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
Technical Engineering Services	MIPR	AATD, : Ft. Eustis, VA	7.065	0.388	Mar 2014	-		-		-		-	-	7.453	-
Technical Engineering Services	MIPR	AED : Redstone Arsenal, AL	0.060	0.139	Mar 2014	-		-		-		-	-	0.199	-
Subtotal			7.125	0.527		-		-		-		-	-	7.652	-

Remarks None															
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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
RDTE Project Test Support	MIPR	ATC, : Aberdeen Proving Ground, MD	1.866	0.250	Mar 2014	-		-		-		-	-	2.116	-
Subtotal			1.866	0.250		-		-		-		-	-	2.116	-

Remarks None															
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			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			32.154	4.848	-	-	-	-	-	37.002	-

Remarks											
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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army **Date:** February 2015

Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603801A / Aviation - Adv Dev	Project (Number/Name) B32 / Adv Maint Concepts/Eq
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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
Aviation Ground Power Unit (AGPU)	AGPU																											
Aviation Light Utility Mobile Maintenance Cart (ALUMMC)	ALUMMC																											
Aviation Unit Maintenance Shop Set (AVUM SS)					AVUM SS																							
Unit Maintenance Aerial Recovery Kit (UMARK)	UMARK																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603801A / <i>Aviation - Adv Dev</i>	Project (Number/Name) B32 / <i>Adv Maint Concepts/Eq</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Aviation Ground Power Unit (AGPU)	2	2013	4	2014
Aviation Light Utility Mobile Maintenance Cart (ALUMMC)	4	2013	2	2015
Aviation Unit Maintenance Shop Set (AVUM SS)	4	2014	4	2015
Unit Maintenance Aerial Recovery Kit (UMARK)	1	2007	2	2015