Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0603801A: Aviation - Adv Dev

BA 4: Advanced Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	6.879	8.602	5.018	-	5.018	10.041	8.880	7.880	7.000	Continuing	Continuing
B32: Adv Maint Concepts/Eq	-	6.879	8.602	5.018	-	5.018	10.041	8.880	7.880	7.000	Continuing	Continuing

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Not applicable for this item

A. Mission Description and Budget Item Justification

This Program Element provides advanced development aviation support of programs that include advanced maintenance concepts and equipment. The FY 2014 budget request funds Aviation Advanced Development which supports Aviation Ground Support Equipment development prototypes that will enhance the functionality of current and future aircraft by improving the effectiveness of maintenance and servicing operations through validating new maintenance concepts to improve man and machine interfaces, improve aircraft maintenance processes, reduce Operation and Support costs, and insert diagnostics technologies to replace obsolete and unsupportable 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 program are: diagnostics/prognostic monitoring systems, Aircraft Clean System (ACS), Aviation Ground Power Unit (AGPU) equipment familiarization software, redesign and incorporation of AGPU modularity capabilities, Aviation Light Utility Mobile Maintenance Cart (ALUMMC), Aviation Vibration Analyzer (AVA), Aviation Intermediate Maintenance Shop Set (AVIM SS),Battle Damage Assessment & Repair (BDAR), Common Aviation Tool System (CATS), Digital Aircraft Weighing Scales II (DAWS II), Hand Held Fire Extinguisher (HHFE), Family of Aviation Lifting Devices (F-ALD), Flexible Engine Diagnostic System (FEDS), Modernized Maintenance Platform (formerly referred to as Aviation B1/B4 Maintenance Stands), Non-Destructive Test Equipment System (NDTE), Pitot Static Test Set (PSTS), Unit Maintenance Aerial Recovery Kit (UMARK) and development support for tools needed to provide maintenance support to modernized/future force aircraft.

PE 0603801A: Aviation - Adv Dev Army

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^{##} The FY 2014 OCO Request will be submitted at a later date

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

R-1 ITEM NOMENCLATURE
PE 0603801A: Aviation - Adv Dev

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	7.218	8.602	8.426	-	8.426
Current President's Budget	6.879	8.602	5.018	-	5.018
Total Adjustments	-0.339	0.000	-3.408	-	-3.408
 Congressional General Reductions 	-0.011	-			
 Congressional Directed Reductions 	-	-			
Congressional Rescissions	-	-			
Congressional Adds	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.217	-			
 Adjustments to Budget Years 	-	-	-3.408	-	-3.408
Other Adjustments 1	-0.111	-	-	-	-

DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Army APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0603801A: Aviation - Adv Dev B32: Adv Maint Concepts/Eq BA 4: Advanced Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
B32: Adv Maint Concepts/Eq	-	6.879	8.602	5.018	-	5.018	10.041	8.880	7.880	7.000	Continuing	Continuing
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

This Project provides advanced development aviation support of programs that include advanced maintenance concepts and equipment. The FY 2014 budget request funds Aviation Advanced Development which supports Aviation Ground Support Equipment development prototypes that will enhance the functionality of current and future aircraft by improving the effectiveness of maintenance and servicing operations through validating new maintenance concepts to improve man and machine interfaces, improve aircraft maintenance processes, reduce Operation and Support costs, and insert diagnostics technologies to replace obsolete and unsupportable 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 program are: diagnostics/prognostic monitoring systems, Aircraft Clean System (ACS), Aviation Ground Power Unit (AGPU) equipment familiarization software, redesign and incorporation of AGPU modularity capabilities, Aviation Light Utility Mobile Maintenance Cart (ALUMMC), Aviation Vibration Analyzer (AVA), Aviation Intermediate Maintenance Shop Set (AVIM SS), Battle Damage Assessment & Repair (BDAR), Common Aviation Tool System (CATS), Digital Aircraft Weighing Scales II (DAWS II), Hand Held Fire Extinguisher (HHFE), Family of Aviation Lifting Devices (F-ALD), Flexible Engine Diagnostic System (FEDS), Modernized Maintenance Platform (formerly referred to as Aviation B1/B4 maintenance Stands), Non-Destructive Test Equipment System (NDTE), Pitot Static Test Set (PSTS), 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, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Aircraft Cleaning System (ACS)	0.000	0.000	0.500
Description: The ACS will provide aviation maintenance units with a capability to clean external and internal aircraft surfaces and components when in the field and deployed locations.			
FY 2014 Plans: Perform market survey, trade studies, generate Purchase Item Description (PID) and Request For Proposal (RFP), technical review of proposals, source selection, systems performance test demonstration for evaluation, and conduct systems safety evaluation to certify and qualify the ACS for Army aircraft operation.			
Title: Aviation Ground Power Unit (AGPU)	0.000	4.191	1.342

PE 0603801A: Aviation - Adv Dev

Army

UNCLASSIFIED

^{***} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army	DN/BUDGET ACTIVITY Development, Test & Evaluation, Army Ocomponent Development & Prototypes (ACD&P) Component Development & Prototypes (ACD&P)		DATE: April 2013					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)			PROJECT B32: Adv Maint Concepts/Eq					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantit	ties in Each)		FY 2012	FY 2013	FY 2014			
a modular, diagnostic/prognostic monitoring system with external hydraulic Modernized Force Aircraft. FY 2013 Plans: Perform AGPU Hudrolic Module redesign to meet requirements of updated	c, pneumatic, and AC/DC electrical power to all			0				
and prepare test plans for newly integrated capabilities. FY 2014 Plans: Conduct developmental and operational test of newly integrated capabilities.	es.							
Title: Aviation Light Utility Mobile Maintenance Cart (ALUMMC)		0	0.872 0	0.546	0.000			
currently using TDA and TOE tactical vehicles to support flight line operativehicle to move personnel and equipment along the flight line. FY 2012 Accomplishments:	ions and providing a standardized and sustainal		U	U				
FY 2013 Plans: Finalizalize product evaluation and operational test plans.	mpleted testing and down selected ALUMINC.							
Title: Aviation Vibration Analyzer (AVA)			0.000	0.000	0.400			
for both main and tail rotors. Measures, records, and processes vibration	and blade position information to diagnose and							
FY 2014 Plans: Conduct testing on AVA-E prototypes, complete qualification and certificate	tion and obtain airworthiness release.							
Title: Aviation Intermediate Maintenance Shop Set (AVIM SS)			0.000	0.000	0.300			
	Inplishments/Planned Programs (\$ in Millions, Article Quantities in Each) Aion: The AGPU provides the capability to meet Army helicopter servicing requirements into the next decade by property, diagnostic/prognostic monitoring system with external hydraulic, pneumatic, and AC/DC electrical power to all ed Force Aircraft. Plans: AGPU Hudrolic Module redesign to meet requirements of updated CPD, develop and integrate AGPU diagnostic sare test plans for newly integrated capabilities. Plans: developmental and operational test of newly integrated capabilities. ation Light Utility Mobile Maintenance Cart (ALUMMC) Aion: ALUMMC will enhance mission performance of current forces by reducing the burden on Army Aviation units using TDA and TOE tactical vehicles to support flight line operations and providing a standardized and sustainable move personnel and equipment along the flight line. Accomplishments: ad operational test plans, selected site, purchased prototypes, completed testing and down selected ALUMMC. Plans: tee product evaluation and operational test plans. ation Vibration Analyzer (AVA) ion: AVA provides a rugged, portable, and safe means of performing helicopter, one per revolution (1P) maintenanain and tail rotors. Measures, records, and processes vibration and blade position information to diagnose and pment, diagnostic, and corrective information to maintenance personnel to correct faults. Plans: testing on AVA-E prototypes, complete qualification and certification and obtain ainworthiness release.							

PE 0603801A: Aviation - Adv Dev

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		D	ATE: A	oril 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603801A: Aviation - Adv Dev	PROJECT B32: Adv Ma	eT v Maint Concepts/Eq		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quanti	ities in Each)	FY 20	012	FY 2013	FY 2014
Inspection, Engine, Pneudraulic, Composite, Tool Crib, Production Contro Armament & Electrical Shops.	ol/Quality Control, Sheet Metal, Machine Weld a	nd			
FY 2014 Plans: Analyze, identify, and develop hardware to permanently repair the aircraft procedures for repairing the composite structures and have the newly identify.					
Title: Battle Damage Assessment and Repair Kit (BDAR)		(0.000	0.000	0.300
Description: The BDAR is a transportable and expeditious means to ass helicopters in a battlefield environment.	sess combat damage, defer and/or repair Army				
FY 2014 Plans: Analyze, identify, and develop hardware to repair aircraft composite. Dev composite structures.	elop the required hardware procedures for repair	ing the			
Title: Common Aviation Tool System (CATS)		Articles:	0.301	0.000	0.000
Description: CATS is a component of A-SKOT and consists of individua standard tools, foam shadowed drawers and a component listing with pic foreign object damage to aircraft. CATS provides standardized tools, kits flexibility and mobility requirements for repair of rotary wing aircraft during	ture diagrams for ease of inventory and to minimand outfits which meet transformation modularity	ize			
FY 2012 Accomplishments: Completed technical review of proposals, source selection, systems performed conducted systems safety evaluation to certify and qualify the CATS		luation,			
Title: Digital Aircraft Weighing Scales (DAWS) II		Articles:	0.000	0.600	0.000
Description: DAWS II is an electronic/digital weighing scale. It is used to and produces a computerized DD Form 365 outlining results.	o perform weight and balance without leveling the	e aircraft			
FY 2013 Plans: Conduct research into the availability of modern technology, assess the revaluation and operational testing.	need for system modernization, and complete pro	oduct			
Title: Flexible Engine Diagnostics System (FEDS)		2	2.182	0.000	0.000

PE 0603801A: Aviation - Adv Dev

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603801A: Aviation - Adv Dev	PROJ B32: /	IECT Adv Maint Col	ncepts/Eq	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quar	ntities in Each <u>)</u>		FY 2012	FY 2013	FY 2014
		Articles:	0		
Description: FEDS is a Turbo-Shaft Engine Test Stand that verifies flig maintenance. This test stand supports the CH-47, AH-64 and UH-60 as		raft for			
FY 2012 Accomplishments: Completed correction of deficiencies identified during the User and Mai	intainer Assessment (UMA) Phase I.				
Title: Non-Destructive Test Equipment (NDTE)		Articles:	0.000	0.925 0	0.225
Description: NDTE provides Army Aviation Maintenance units with an and structures without complete disassembly or removal of components		onents			
FY 2013 Plans: Begin research and development of Non-Destructive Test Equipment (of modernization and technology advancements.	eddy current, ultrasonic, harmonic bond, and radic	graphy)			
FY 2014 Plans: Continue research and development of Non-Destructive Test Equipmen radiography), purchase samples and conduct testing.	nt (Eddy Current, ultrasonic, harmonic bond and				
Title: Hand Held Fire Extinguisher (HHFE)		Articles:	0.910 0	0.000	0.000
Description: The HHFE is being reviewed to find a replacement for the Wing aircraft.	e Halon 1301 agent currently fielded on Aviation R	otary			
FY 2012 Accomplishments: Completed testing and evaluation on the replacement Halon 1301 extin the selected HALON 1301 extinguisher. Finalized the development of the package.	·				
Title: Unit Maintenance Aerial Recovery Kit (UMARK)		Articles:	1.510 0	1.100 0	0.600
Description: UMARK provides Aviation Support Company and Aviation for transport crash-damaged non-flyable modernized aircraft or aircraft		uickly rig			

PE 0603801A: Aviation - Adv Dev

Army

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE:	April 2013				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603801A: Aviation - Adv Dev	PROJ B32: A	ECT Adv Maint Co	ncepts/Eq				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantiti	complishments/Planned Programs (\$ in Millions, Article Quantities in Each)							
FY 2012 Accomplishments: Completed ground development and flight testing for the recovery of crash	damaged aircraft.							
FY 2013 Plans: Continue ground and flight testing verification								
FY 2014 Plans: Finalize UMARK Test Data Package, procedures, and manuals.								
Title: Management Support Services	Δr	ticles:	0.520	0.400	0.258			
Description: Management Support Services in Support of the Aviation Gro								
FY 2012 Accomplishments: Management Support Services								
FY 2013 Plans: Management Support Services.								
FY 2014 Plans: Management Support Services								
Title: RDTE Project Test Support	Ar	ticles:	0.384	0.430	0.300			
Description: RDTE Project Test Support for the Aviation Ground Support								
FY 2012 Accomplishments: RDTE Project Test Support								
FY 2013 Plans: RDTE Project Test Support.								
FY 2014 Plans: RDTE Project Test Support								
Title: Technical Engineering Services	Λν	ticles:	0.200	0.410	0.793			
	AI		U	U				

PE 0603801A: Aviation - Adv Dev Army

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 4: Advanced Component Development & Prototypes (ACD&P)

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0603801A: Aviation - Adv Dev
B32: Adv Maint Concepts/Eq

27 1. Navanosa Somponent Severepment a Fretetypes (Nessar)			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Description: Technical Engineering Services in support of Aviation Ground Support Equipment Product Management Office.			
FY 2012 Accomplishments: Technical Engineering Services.			
FY 2013 Plans: Technical Engineering Services.			
FY 2014 Plans: Technical Engineering Services.			
Accomplishments/Planned Programs Subtotals	6.879	8.602	5.018

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

		-	FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	<u>Base</u>	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
Aviation Ground Support	114.517	82.511	65.397		65.397	56.445	57.984	51.088	59.779	Continuing	Continuing

Equipment: Aviation Ground Support Equipment, SSN AZ3520

Remarks

Army

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

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

PE 0603801A: Aviation - Adv Dev

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PROJECT PE 0603801A: Aviation - Adv Dev B32: Adv Maint Concepts/Eq

BA 4: Advanced Component Development & Prototypes (ACD&P)

Management Servic	Cost Category Item & Type Activity & Location Y			FY 2	2012	FY	2013	FY 2 Ba		FY 2		FY 2014 Total			
Cost Category Item	Method	J	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Management Support Services	Various	PM AGSE:RSA, AL	0.629	0.520	Mar 2012	0.400	Feb 2013	0.258	Jan 2014	-		0.258	Continuing	Continuing	Continuing
		Subtotal	0.629	0.520		0.400		0.258		0.000		0.258			

Remarks

None

Product Developme	ent (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ise	FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
ACS	Various	AATD, Ft. Eustis, VA, Aberdeen Test Center (ATC),:Aberdeen Proving Ground MD.	0.000	-		-		0.500	Jan 2014	-		0.500	Continuing	Continuing	Continuing
AGPU	Various	RTTC, Redstone Arsenal (RSA), AL; AMRDEC, RSA, AL; Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD	11.351	-		4.191	Feb 2013	1.342	Mar 2014	-		1.342	0.000	16.884	0.000
ALUMMC	Various	ATTD, Ft. Eustis, VA, Aberdeen Test Center (ATC),:Aberdeen Proving Ground MD	0.000	0.872	Mar 2012	0.546	Jan 2013	-		-		-	0.000	1.418	0.000
AVA	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground	0.000	-		-		0.400	Jan 2014	-		0.400	0.000	0.400	0.000

PE 0603801A: Aviation - Adv Dev Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

PROJECT PE 0603801A: Aviation - Adv Dev

B32: Adv Maint Concepts/Eq

Product Developme	nt (\$ in M	illions)		FY:	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
AVIM SS	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen, MD	0.000	-		-		0.300	Feb 2014	-		0.300	Continuing	Continuing	Continuing
BDAR	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD	0.656	-		-		0.300	Jan 2014	-		0.300	Continuing	Continuing	Continuing
CATS (A-SKOT)	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD.	0.475	0.301	May 2012	-		-		-		-	0.000	0.776	0.000
FEDS	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD	9.005	2.182	Jun 2012	-		-		-		-	0.000	11.187	0.000
DAWS II	Various	AMRDEC (RSA), AL, Aberdeen Test Center:Aberdeen Proving Ground	0.000	-		0.600	Feb 2013	-		-		-	0.000	0.600	0.000
HHFE	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD	5.687	0.910	Apr 2012	-		-		-		-	0.000	6.597	0.000
NDTE	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD.	0.404	-		0.925	Feb 2013	0.225	Mar 2014	-		0.225	Continuing	Continuing	Continuing

PE 0603801A: Aviation - Adv Dev Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0603801A: Aviation - Adv Dev

B32: Adv Maint Concepts/Eq

DATE: April 2013

BA 4: Advanced Component Development & Prototypes (ACD&P)

roduct Development (\$ in Millions)			FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
UMARK	Various	AMRDEC, (RSA), AL, Aberdeen Test Center (ATC),:Aberdeen Proving Ground, MD	3.820	1.510	Jul 2012	1.100	Jan 2013	0.600	Feb 2014	-		0.600	Continuing	Continuing	Continuing
		Subtotal	31.398	5.775		7.362		3.667		0.000		3.667			

Support (\$ in Million	Support (\$ in Millions)		FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Technical Engineering Services	RO	AATD,:Ft. Eustis, VA	6.776	0.200	Jun 2012	0.410	Jan 2013	0.437	Feb 2014	-		0.437	Continuing	Continuing	Continuing
Technical Engineering Services	RO	AED:Redstone Arsenal, AL	0.000	-		-		0.356	Jan 2014	-		0.356	Continuing	Continuing	Continuing
		Subtotal	6.776	0.200		0.410		0.793		0.000		0.793			

Remarks

None

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
RDTE Project Test Support	MIPR	ATC,:Aberdeen Proving Ground, MD	1.234	0.384	Jun 2012	0.430	Feb 2013	0.300	Jan 2014	-		0.300	Continuing	Continuing	Continuing
		Subtotal	1.234	0.384		0.430		0.300		0.000		0.300			

Remarks

None

PE 0603801A: Aviation - Adv Dev Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2014 Arm	у					DATE	: April 20	13	
APPROPRIATION/BUDGET ACTIVITY	_		R-1 ITEM NOM			PROJE				
2040: Research, Development, Test & Evaluation, BA 4: Advanced Component Development & Proto	•	CD (D)	PE 0603801A: A	Aviation - Adv Dev		B32: <i>Ad</i>	v Maint (Concepts/L	Ξq	
DA 4. Advanced Component Development & Proto	hypes (At	JD&P)								
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2	-	FY 2014 Total	Cost To	Total Cost	Target Value of Contract

8.602

5.018

0.000

Remarks

Project Cost Totals

40.037

6.879

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5.018

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603801A: Aviation - Adv Dev

PROJECT

B32: Adv Maint Concepts/Eq

		FY	2012	2		FY	2013	3		FY	2014		FY 2015			FY 2016			FY 2017					F	Y 2	018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	2 3	. 4	1	1	2	3	4
Aircraft Cleaning System (ACS)									'																	,			
Aviation Ground Power Unit (AGPU)																													
Aviation Ground Power Unit (AGPU) Next Generation																													
Aviation Light Utility Mobile Maintenance Cart																													
Aviaiton Vibration Analyzer (AVA)																													-
Family Aviation Lifting Device																													
Battle Damage Assessment and Repair Kit																													
Aviation Intermediate Maintenance Shop Set (AVIM SS)																													
Comman Aviation Tool System (CATS) - (Aviation Sets, Kits, Outfits and Tools)																													
Digital Flexible Engine Diagnostic System																													
Non-Destructive Test Equipment																													
Pitot Static Test Set (PSTS)																													

DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

2040: Research, Development, Test & Evaluation, Army PE 0603801A: Aviation - Adv Dev B32: Adv Maint Concepts/Eq

BA 4: Advanced Component Development & Prototypes (ACD&P)

Schedule Details

	St	art	Ei	nd
Events	Quarter	Year	Quarter	Year
Aircraft Cleaning System (ACS)	2	2014	4	2015
Aviation Ground Power Unit (AGPU)	3	2013	4	2014
Aviation Ground Power Unit (AGPU) Next Generation	3	2015	4	2016
Aviation Light Utility Mobile Maintenance Cart	2	2012	3	2014
Aviaiton Vibration Analyzer (AVA)	2	2014	4	2014
Family Aviation Lifting Device	2	2015	4	2016
Battle Damage Assessment and Repair Kit	2	2014	4	2015
Aviation Intermediate Maintenance Shop Set (AVIM SS)	2	2014	4	2015
Comman Aviation Tool System (CATS) - (Aviation Sets, Kits, Outfits and Tools)	3	2012	1	2013
Digital Flexible Engine Diagnostic System	3	2016	4	2017
Non-Destructive Test Equipment	2	2013	4	2015
Pitot Static Test Set (PSTS)	2	2015	4	2016