Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army											Date: March 2014	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0203752A *I Aircraft Engine Component Improvement Program*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	-	0.804	0.315	0.381	-	0.381	0.366	0.326	0.146	0.149	Continuing	Continuing
106: *A/C Compon Improv Prog*	-	0.804	0.315	0.381	-	0.381	0.366	0.326	0.146	0.149	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Aircraft Engine Component Improvement Program (CIP) develops, tests, and qualifies improvements to aircraft engine components to correct service-revealed deficiencies, improve flight safety, enhance readiness and reduce operating and support (O&S) costs. In addition, CIP provides the test vehicles for the testing and qualification efforts required as a part of the Army's Critical Safety Item (CSI) program. CIP is included in the RDTE budget vice procurement appropriations in accordance with congressional direction. The majority of CIP funding has been reallocated to PE 273744 beginning in FY07. Non-program specific Auxiliary Power Unit (APU) as well as Unmanned Aerial Vehicle (UAV) safety and readiness issues will continue to be addressed under this Program Element.

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	0.898	0.315	0.387	-	0.387
Current President's Budget	0.804	0.315	0.381	-	0.381
Total Adjustments	-0.094	-	-0.006	-	-0.006
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-0.094	-	-0.006	-	-0.006

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203752A / *Aircraft Engine Component Improvement Program*	Project (Number/Name) 106 / *A/C Compon Improv Prog*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
106: *A/C Compon Improv Prog*	-	0.804	0.315	0.381	-	0.381	0.366	0.326	0.146	0.149	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

Note

The Aircraft Engine Component Improvement Program (CIP) is included in the RDTE budget vice procurement appropriations in accordance with congressional direction. The majority of CIP funding has been reallocated to PE 273744 beginning in FY07.

A. Mission Description and Budget Item Justification

Aircraft Engine Component Improvement Program (CIP) develops, tests, and qualifies improvements to aircraft engine components to correct service-revealed deficiencies, improve flight safety, enhance readiness and reduce operating and support (O&S) costs. In addition, CIP provides the test vehicles for the testing and qualification efforts required as a part of the Army's Critical Safety Item (CSI) program. Non-program specific Auxiliary Power Unit (APU) as well as Unmanned Aerial Vehicle (UAV) safety and readiness issues will continue to be addressed under this Program Element (PE).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: T700 Engine	0.010	0.100	0.120
Articles:	-	-	-
Description: Majority of funding for this program has been reallocated to PE 273744. Previously, this program addressed flight safety and readiness problems that arise in the field by providing timely engineering support, continued the development of the T700-GE-701D, provided engineering support of fielded engines to enhance war fighting capability and improve durability and reliability while reducing cost of ownership. ***FY 2013 Accomplishments:*** Started efforts to perform an instrumented engine test to measure gas generator turbine hardware metal temperatures. Evaluate clean air combustor shield hardware for redesign effort. ***FY 2014 Plans:*** Continue efforts to perform an instrumented engine test to measure gas generator turbine hardware metal temperatures. Continue to evaluate clean air combustor shield hardware for redesign effort. ***FY 2015 Plans:*** Will continue effort to update engine drawings to add the latest CSI requirements.			
Title: T55 Engine	0.600	0.100	0.120

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Articles:	-	-	-
Description: Provide timely support to field users, applying engineering effort to resolve unanticipated flight safety problems revealed in the field. Continue the engineering support of fielded engines to enhance war-fighting capability, improve durability and reliability while reducing CH-47 engine cost of ownership. ***FY 2013 Accomplishments:*** Continued ECU Software Block Update to improve ECU functionality and address field software issues. ***FY 2014 Plans:*** Continuing ECU Software Block Update to improve ECU functionality and address field software issues. ***FY 2015 Plans:*** Will complete ECU Software Block Update to improve ECU functionality and address field software issues.			
Title: GTCP36 Auxiliary Power Unit (APU)	-	0.015	0.015
Articles:	-	-	-
Description: Provide timely responses to technical problems arising in the field during operational use. Review operational and repair reports, perform engineering analysis of failed engines and equipment. Perform investigation and testing as required to isolate/verify reported field problems and service revealed deficiencies (SRDs). ***FY 2014 Plans:*** Formulate correlation factors to published life limits and will address service revealed deficiencies that affect safe operation of the GTCP 36 APU. ***FY 2015 Plans:*** Will address service revealed deficiencies that affect safe operation of the GTCP 36 APU.			
Title: T62 Auxiliary Power Unit (APU)	-	0.020	0.020
Articles:	-	-	-
Description: Provide timely responses to technical problems arising in the field during operational use. Review operational and repair reports, perform engineering analysis of failed engines and equipment. Perform investigation and testing as required to isolate/verify reported field problems and service revealed deficiencies (SRDs). ***FY 2014 Plans:*** Address service revealed deficiencies affecting safe operation of US Army APUs. ***FY 2015 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Will continue to address service revealed deficiencies affecting safe operation of US Army APUs.			
Title: UAV Engine	-	0.020	0.020
Articles:	-	-	-
Description: UAV Shadow Engine Investigation at U.S. Army Research Laboratory (ARL) Cleveland: US Army Vehicle Technology Directorate (VTD) at ARL Cleveland. Provide research to support airworthiness, reliability and performance improvements of the Unmanned Aerial Vehicle (UAV) shadow engine. Investigate and research the technology challenges (i.e. engine performance, engine durability, engine life, and engine modifications) for reliable engine operation using JP-8 fuel and readily available MIL-spec lubricants. ***FY 2014 Plans:*** Research improvements to address service related deficiencies to improve safety and reduce O&S costs. ***FY 2015 Plans:*** Will continue to research improvements to address service related deficiencies to improve safety and reduce O&S costs.			
Title: In-House Support	0.194	0.060	0.086
Articles:	-	-	-
Description: In-house support for the CIP engineers. Contracting support for CIP contracts. ***FY 2013 Accomplishments:*** Provided in-house support for the CIP engineers and contracting support for CIP contracts. ***FY 2014 Plans:*** Provide in-house support for the CIP engineers and contracting support for CIP contracts. ***FY 2015 Plans:*** Will continue to provide in-house support for the CIP engineers and contracting support for CIP contracts.			
Accomplishments/Planned Programs Subtotals	0.804	0.315	0.381

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
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D. Acquisition Strategy

Improved designs will be implemented via Engineering Change Proposal (ECP) and follow-on procurement or modification to a production contract to introduce the improved hardware.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
In-house Engineering	WR	AMRDEC : Redstone Arsenal, AL	2.300	0.194	Jan 2013	0.060	Jan 2014	0.086	Jan 2015	-		0.086	Continuing	Continuing	Continuing
		Subtotal	2.300	0.194		0.060		0.086		-		0.086	-	-	-

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T700 Engine	SS/IDIQ	GE-Air : Lynn, MA	61.632	0.010	Jan 2013	0.100	Jan 2014	0.120	Jan 2015	-		0.120	Continuing	Continuing	Continuing
T55 Engine	SS/IDIQ	Honeywell : Phoenix, AZ	29.561	0.600	Jan 2013	0.100	Jan 2014	0.120	Jan 2015	-		0.120	Continuing	Continuing	Continuing
APU's	SS/IDIQ	Air Force : Kelly AFB, TX	13.647	-		0.015	Oct 2013	0.015	Oct 2014	-		0.015	Continuing	Continuing	-
UAV Engine	Various	ARL-Vehicle Technology Directorate : TBD	0.137	-		0.020	Jan 2014	0.020	Jan 2015	-		0.020	Continuing	Continuing	-
APU's	SS/IDIQ	Air Force : Hill AFB, UT	2.319	-		0.020	Oct 2013	0.020	Oct 2014	-		0.020	Continuing	Continuing	Continuing
		Subtotal	107.296	0.610		0.255		0.295		-		0.295	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T-62T-2B Vibration Test	Various	Redstone Technical Text Center : Redstone Arsenal, AL	0.050	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	0.050	-		-		-		-		-	-	-	-

Remarks

Not Applicable

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
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	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	109.646	0.804		0.315		0.381		-		0.381	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

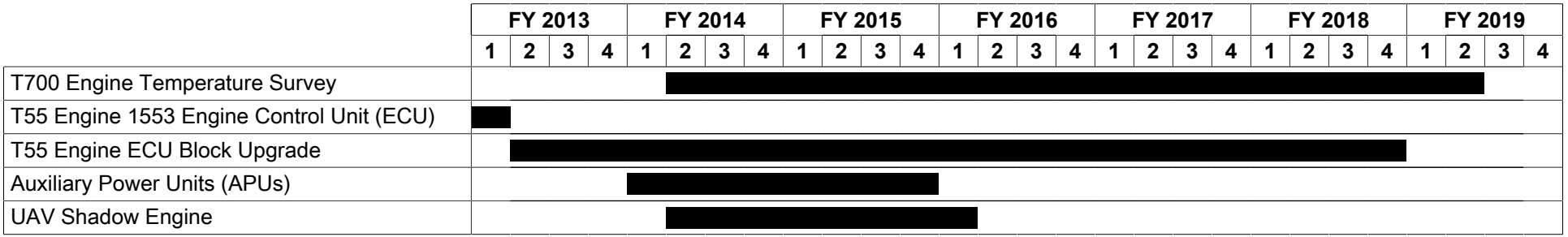

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
T700 Engine Temperature Survey	2	2014	2	2019
T55 Engine 1553 Engine Control Unit (ECU)	2	2012	1	2013
T55 Engine ECU Block Upgrade	2	2013	4	2018
Auxiliary Power Units (APUs)	1	2014	4	2015
UAV Shadow Engine	2	2014	1	2016