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 0203752A *I Aircraft Engine Component 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	-	0.309	0.381	0.364	-	0.364	0.325	0.145	0.148	0.146	Continuing	Continuing
106: *A/C Compon Improv Prog*	-	0.309	0.381	0.364	-	0.364	0.325	0.145	0.148	0.146	Continuing	Continuing

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 are also addressed under this Program Element.

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	0.315	0.381	0.366	-	0.366
Current President's Budget	0.309	0.381	0.364	-	0.364
Total Adjustments	-0.006	-	-0.002	-	-0.002
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.006	-			
• Adjustments to Budget Years	-	-	-0.002	-	-0.002

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 0203752A / *Aircraft Engine Component Improvement Program*	Project (Number/Name) 106 / *A/C Compon Improv Prog*	

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
106: *A/C Compon Improv Prog*	-	0.309	0.381	0.364	-	0.364	0.325	0.145	0.148	0.146	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 are also addressed under this Program Element (PE).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: T700 Engine ***Description:*** T700 funding is used to address flight safety and readiness problems that arise in the field. This includes programs to improving durability and reliability while reducing cost of ownership. ***FY 2016 Plans:*** Will fund effort to update engine drawings to add the latest CSI requirements.	-	-	0.050
Title: GTCP36 Auxiliary Power Unit (APU) ***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 2015 Plans:*** Address service revealed deficiencies that affect safe operation of the GTCP 36 APU. ***FY 2016 Plans:*** Will continue to address service revealed deficiencies that affect safe operation of the GTCP 36 APU.	-	0.015	0.008
Title: T62 Auxiliary Power Unit (APU) ***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 2015 Plans:***	-	0.016	0.008

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 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Continue to address service revealed deficiencies affecting safe operation of US Army APUs. ***FY 2016 Plans:*** Will continue to address service revealed deficiencies affecting safe operation of US Army APUs.			
Title: UAV Engine ***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 Accomplishments:*** Researched improvements to address service related deficiencies to improve safety and reduce O&S costs. ***FY 2015 Plans:*** Continue to research improvements to address service related deficiencies to improve safety and reduce O&S costs. ***FY 2016 Plans:*** Will continue to research improvements to address service related deficiencies to improve safety and reduce O&S costs.	0.220	0.250	0.200
Title: In-House Support ***Description:*** In-house support for the Component Improvement Program (CIP) engineers. Contracting support for CIP contracts. ***FY 2014 Accomplishments:*** Provided in-house support for the CIP engineers and contracting support for CIP contracts. ***FY 2015 Plans:*** Provide in-house support for the CIP engineers and contracting support for CIP contracts. ***FY 2016 Plans:*** Will continue to provide in-house support for the CIP engineers and contracting support for CIP contracts.	0.089	0.100	0.098
Accomplishments/Planned Programs Subtotals	0.309	0.381	0.364

C. Other Program Funding Summary ($ in Millions)

N/A

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 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

C. Other Program Funding Summary ($ in Millions)

Remarks

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 2016 Army			Date: February 2015
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*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
In-house Engineering	WR	AMRDEC : Redstone Arsenal, AL	2.494	0.089	Jan 2014	0.100	Oct 2014	0.098	Oct 2015	-		0.098	Continuing	Continuing	Continuing
		Subtotal	2.494	0.089		0.100		0.098		-		0.098	-	-	-

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T700 Engine	SS/IDIQ	GE-Air : Lynn, MA	61.642	-		-		0.050	Mar 2016	-		0.050	Continuing	Continuing	Continuing
T55 Engine	SS/IDIQ	Honeywell : Phoenix, AZ	30.161	-		-		-		-		-	Continuing	Continuing	Continuing
T62 Auxiliary Power Unit (APU)	C/IDIQ	Redstone Technical Center Redstone Arsenal, AL : ATEC	0.050	-		-		-		-		-	-	0.050	-
APU's	SS/IDIQ	Air Force : Kelly AFB, TX	13.647	-		-		-		-		-	Continuing	Continuing	-
UAV Engine	Various	ARL-Vehicle Technology Directorate : TBD	0.137	0.220	Jun 2014	0.250	Apr 2015	0.200	Apr 2016	-		0.200	Continuing	Continuing	-
APU's	SS/IDIQ	Air Force : Hill AFB, UT	2.319	-		0.031	Apr 2015	0.016	Apr 2016	-		0.016	Continuing	Continuing	Continuing
		Subtotal	107.956	0.220		0.281		0.266		-		0.266	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 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	-		-		-		-		-	-	-	-

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 0203752A / *Aircraft Engine Component Improvement Program*	Project (Number/Name) 106 / *A/C Compon Improv Prog*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks Not Applicable															
		Project Cost Totals	110.500	0.309		0.381		0.364		-		0.364	-	-	-

Remarks

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 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

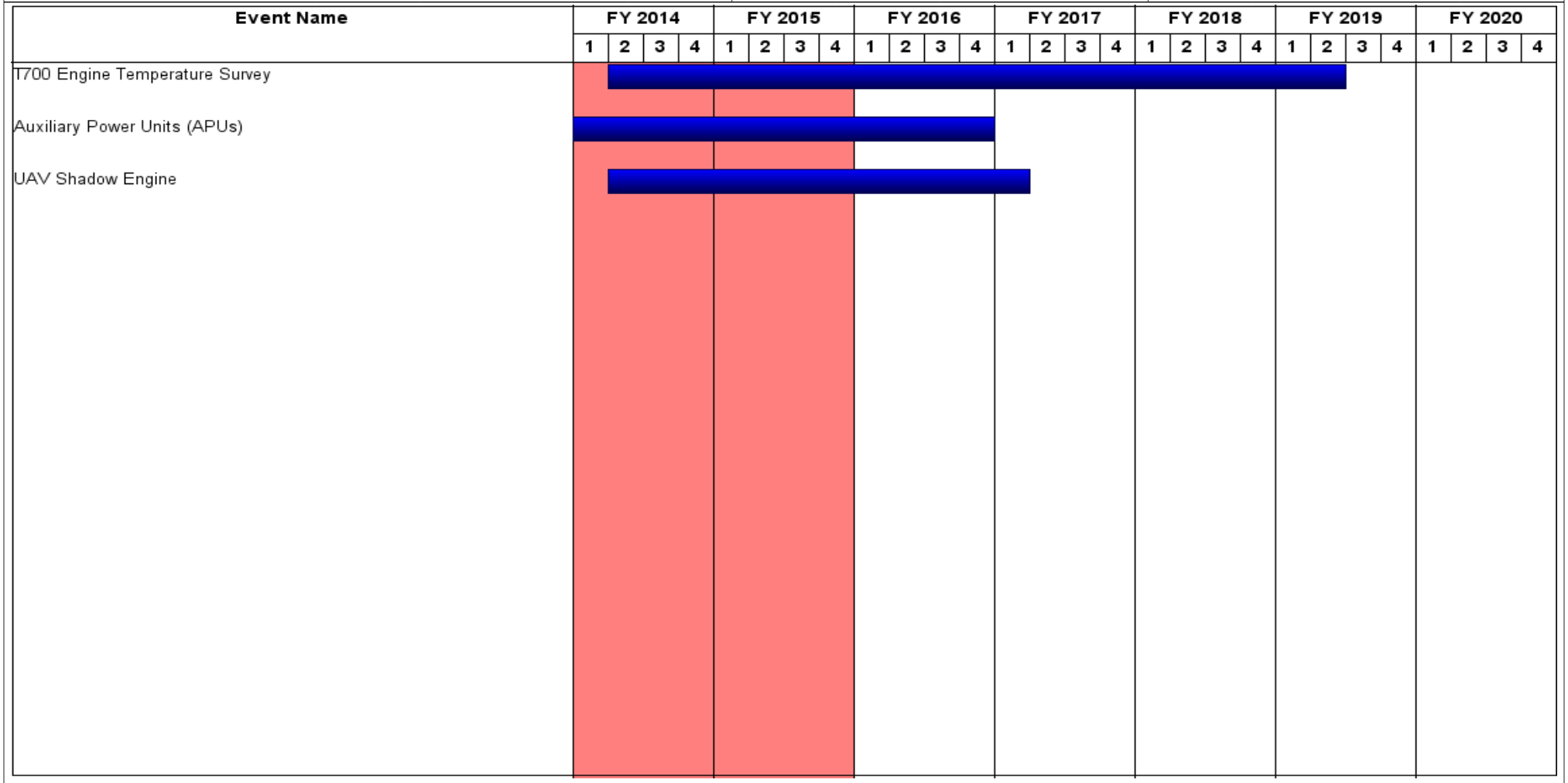

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0203752A / *Aircraft Engine Component Improvement Program*	**Project (Number/Name)** 106 / *A/C Compon Improv Prog*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
T700 Engine Temperature Survey	2	2014	2	2019
Auxiliary Power Units (APUs)	1	2014	4	2016
UAV Shadow Engine	2	2014	1	2017