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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 7: Operational

PE 0203752A I Aircraft Engine Component Improvement Program

Systems Development

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	0.349	0.259	0.145	-	0.145	0.148	0.146	0.000	0.000	0.000	1.047
106: A/C Compon Improv Prog	-	0.349	0.259	0.145	-	0.145	0.148	0.146	0.000	0.000	0.000	1.047

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.364	0.259	0.145	-	0.145
Current President's Budget	0.349	0.259	0.145	-	0.145
Total Adjustments	-0.015	0.000	0.000	-	0.000
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-0.015	-			
SBIR/STTR Transfer	-	-			

Change Summary Explanation

Fiscal Year (FY) 16 decrease of \$0.015M reflects adjustment to actual funding.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army								Date: May 2017				
Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0203752A I Aircraft Engine Component Improvement Program				Project (Number/Name) 106 I A/C Compon Improv Prog				
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
106: A/C Compon Improv Prog	-	0.349	0.259	0.145	-	0.145	0.148	0.146	0.000	0.000	0.000	1.047
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 2016	FY 2017	FY 2018
Title: T700 Engine	0.050	0.039	-
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 Accomplishments: Updated engine drawings to add the latest CSI requirements.			
FY 2017 Plans: Update engine drawings to add the latest CSI requirements.			
Title: UAV Engine	0.201	0.130	0.085
Description: UAV Gray Eagle Engine Investigation at U.S. Army Research Laboratory (ARL) Vehicle Technology Directorate (VTD) at Aberdeen Proving Ground, MD. Provide research to support airworthiness, reliability and performance improvements of UAV engines. 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 2016 Accomplishments: Continued to research improvements to address service related deficiencies to improve safety and reduce O&S costs.			
FY 2017 Plans: Continue to research improvements to address service related deficiencies to improve safety and reduce O&S costs.			
FY 2018 Plans:			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army	Date: May 2017			
,	,	Project (Number/Name)		
2040 / 7	PE 0203752A I Aircraft Engine Component	106 <i>I A/C (</i>	Compon Improv Prog	
	Improvement Program			

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Will continue to research improvements to address service related deficiencies to improve safety and reduce O&S Costs.			
Title: In-House Support	0.098	0.090	0.060
Description: In-house support for the CIP engineers. Contracting support for CIP contracts.			
FY 2016 Accomplishments: Provided in-house support for the CIP engineers and contracting support for CIP contracts.			
FY 2017 Plans: Continue to provide in-house support for the CIP engineers and contracting support for CIP contracts.			
FY 2018 Plans: Will continue to provide in-house engineering support for engine CIP programs.			
Accomplishments/Planned Programs Subtotals	0.349	0.259	0.145

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

N/A

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