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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 0607139A I Improved Turbine Engine 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	-	-	49.328	51.164	-	51.164	99.728	169.765	171.555	178.608	-	720.148
ES6: Improved Turbine Engine Program	-	-	49.328	51.164	-	51.164	99.728	169.765	171.555	178.608	-	720.148

Note

For Fiscal Year (FY) 2014 and prior, all funding for ITEP was contained in Program Element (PE) 0203744A – Aircraft Modifications/Product Improvement Programs, Project 504. FY 2015 funding has moved from PE 0203744A, Project EB1 to PE 0607139A, Project ES6.

A. Mission Description and Budget Item Justification

A. Mission Description and Budget Item Justification: The Improved Turbine Engine Program (ITEP) develops, tests, qualifies, and integrates the next generation turboshaft engine on the Blackhawk and Apache aircraft. The Improved Turbine Engine (ITE) replaces the existing T700 engine design originated in the 1970's and meets the operational requirement of 6K/95. The ITE will fit inside the existing engine bays of the Black Hawk and Apache Helicopters and provides a significant power enhancement of up to fifty percent (total of 3,000 shaft horsepower) with increased fuel efficiency. Additional benefits include improved design life, enhanced reliability, lower maintenance cost and restored capability lost due to aircraft weight growth, without increasing the logistics footprint. The program consists of systems engineering and program management, detailed design engineering, design assurance, hardware manufacturing and testing, component and module level development and testing, system level testing and qualification, as well as integration into the airframe.

FY 2015 funding provides for systems engineering/program management in support of draft and formal Request For Proposal (RFP) release, initial Source Selection Evaluation Board (SSEB) for Preliminary Design Review (PDR) competitive contracts, and platform/engine integration trade studies. FY 2016 funding provides for dual vendor competitive PDR contract awards, initial engine design effort, and continues platform/engine integration trade studies. FY 2017 continues engine design effort and platform/engine integration trade studies. FY 2018 funds the remaining PDR engine design effort, the Engineering Manufacturing and Development (EMD) SSEB for entry into Milestone B (MS B), EMD contract award, and continues platform/engine integration trade studies. FY 2019 continues both the EMD effort and platform/engine integration trade studies, and results in a Critical Design Review (CDR) in FY 2019. FY 2020 continues both the EMD effort and platform/engine integration trade studies. FY 2021 continues the EMD effort, provides for First Engine To Test (FETT), and begins physical airframe integration.

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development		PE 0607139A / Improved Turbine Engine Program			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	49.328	51.164	-	51.164
Total Adjustments	-	49.328	51.164	-	51.164
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	49.328			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	51.164	-	51.164

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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 0607139A / Improved Turbine Engine Program				Project (Number/Name) ES6 / Improved Turbine Engine 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
ES6: Improved Turbine Engine Program	-	-	49.328	51.164	-	51.164	99.728	169.765	171.555	178.608	-	720.148
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

For Fiscal Year (FY) 2014 and prior, all funding for ITEP was contained in Program Element (PE) 0203744A – Aircraft Modifications/Product Improvement Programs, Project 504. FY 2015 funding has moved from PE 0203744A, Project EB1 to PE 0607139A, Project ES6.

A. Mission Description and Budget Item Justification

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: ITEP	-	49.328	51.164
Description: ITEP - a multi-platform turbine engine improvement required across existing Army aircraft to fill the capability gaps for Army Aviation Operations			
FY 2015 Plans:			

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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 0607139A / <i>Improved Turbine Engine Program</i>	Project (Number/Name) ES6 / <i>Improved Turbine Engine Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Systems Engineering/Program Management requirements. Draft and formal RFP release and initial SSEB for dual vendor competitive PDR effort. Funds OEM aircraft trade studies and preliminary integration activities.				
FY 2016 Plans: Systems Engineering/Program Management requirements. Provides for dual vendor competitive PDR contract awards, initial engine design effort, and continues aircraft platform/engine integration trade studies.				
Accomplishments/Planned Programs Subtotals		-	49.328	51.164
C. Other Program Funding Summary (\$ in Millions) N/A				
Remarks For Fiscal Year (FY) 2014 and prior, all funding for ITEP was contained in Program Element (PE) 0203744A – Aircraft Modifications/Product Improvement Programs, Project 504. FY 2015 funding has moved from PE 0203744A, Project EB1 to PE 0607139A, Project ES6.				
D. Acquisition Strategy Full and Open Competition is planned for the ITEP Preliminary Design Review (PDR) contracts. Award Fixed Price Incentive (Firm Target) contracts in FY 2016 to no more than two vendors for PDR.				
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 / 7						R-1 Program Element (Number/Name) PE 0607139A / Improved Turbine Engine Program						Project (Number/Name) ES6 / Improved Turbine Engine Program			
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
ITEP SEPM - Organic	TBD	PMO Huntsville, AL Various : PMO Huntsville, AL Various	0.000	-		7.241		10.696		-		10.696	-	17.937	-
ITEP SEPM - Contractor	TBD	PMO Huntsville, AL Various : PMO Huntsville, AL Various	0.000	-		2.178		2.433		-		2.433	-	4.611	-
ITEP SEPM - OGA	TBD	PMO Huntsville, AL Various : PMO Huntsville, AL Various	0.000	-		5.211		2.335		-		2.335	-	7.546	-
Subtotal			0.000	-		14.630		15.464		-		15.464	-	30.094	-
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
ITEP PDR Contracts	C/FPIF	Various : Various	0.000	-		-		29.800		-		29.800	-	29.800	-
ITEP Air Vehicle Platform Integration	SS/IDIQ	Various : Various	0.000	-		34.698		5.900		-		5.900	-	40.598	-
Subtotal			0.000	-		34.698		35.700		-		35.700	-	70.398	-
			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			0.000	-		49.328		51.164		-		51.164	-	100.492	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army

Date: February 2015

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PE 0607139A / Improved Turbine Engine Program

Project (Number/Name)	Start Date	End Date	Duration (Days)	Team Lead	Status	Progress (%)	Notes
1. Project Alpha	2023-01-15	2023-03-10	55	John Doe	Completed	100	Exceeded expectations
2. Project Beta	2023-02-01	2023-04-15	74	Jane Smith	In Progress	85	Minor delays
3. Project Gamma	2023-03-01	2023-05-20	79	Mike Johnson	On Hold	20	Resource issues
4. Project Delta	2023-04-01	2023-06-10	70	Sarah Lee	Planned	10	Awaiting approval
5. Project Epsilon	2023-05-01	2023-07-15	75	David Kim	Not Started	0	Initial phase

ES6 / Improved Turbine Engine Program

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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 0607139A / Improved Turbine Engine Program	Project (Number/Name) ES6 / Improved Turbine Engine Program

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Improved Turbine Engine Program Systems Engineering/Program Management	1	2015	1	2026
Improved Turbine Engine Program Development Engineering	2	2016	2	2018
Improved Turbine Engine Program Detailed Design (EMD)	3	2018	1	2024