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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0604858F I Tech Transition 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	-	82.278	48.636	59.004	-	59.004	78.153	156.434	504.780	668.134	Continuing	Continuing
645350: Transition Prioritization	-	82.278	48.636	59.004	-	59.004	78.153	156.434	504.780	668.134	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

## A. Mission Description and Budget Item Justification

The Technology Transition Program (TTP) provides funding to mature and demonstrate technologies to enable or accelerate their transition to legacy or acquisition programs of record. It addresses the gap that exists between when a technology is first demonstrated and when it can be successfully acquired as an operational capability. TTP bridges that gap by funding promising system and subsystem concepts for technology integration and demonstration to continue beyond the laboratory. It allows acquisition program managers (the developers and providers) and warfighters (the end users) to integrate, prototype, and demonstrate candidate technologies and assess them in an operational environment. As a result, the warfighters can assess the capability first-hand and accurately fund the follow-on acquisition program during the next budgeting cycle. TTP includes research and development funds for the following transition activities: prototyping of promising, high-priority concepts and technologies in an operational environment to lower acquisition risk by raising the technology readiness level; performing pre-acquisition systems engineering to facilitate transition from a demonstration program into acquisition programs of record; assessing interface requirements of candidate concepts, technologies, and demonstration projects to better understand true engineering costs resulting from insertion of new technologies into the Air Force architecture; and capturing data through information technology tools and databases to help formulate strategies and gather proposals for development that have the potential to perform Department of Defense (DoD) missions. The program provides funding to mature adaptive turbine engine technologies for next generation propulsion systems. The program will leverage adaptive turbine engine science and technology demonstrations to develop a multi-platform common adaptive engine built around a commercially derived core. It will enable multiple high confidence engine acquisition programs through the common engine architecture, and accomplishment of early risk reduction and early competition prior to an acquisition program. This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

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B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	37.558	13.636	59.741	-	59.741
Current President's Budget	82.278	48.636	59.004	-	59.004
Total Adjustments	44.720	35.000	-0.737	-	-0.737
• Congressional General Reductions	-0.121	-			
• Congressional Directed Reductions	-3.000	-			
• Congressional Rescissions	-	-			
• Congressional Adds	57.000	35.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.982	-			
• Other Adjustments	-8.177	-	-0.737	-	-0.737
Congressional Add Details (\$ in Millions, and Includes General Reductions)				FY 2013	FY 2014
Project: 645350: Transition Prioritization					
Congressional Add: Alternative Energy Research				33.501	35.000
Congressional Add: Coal to Liquid Fuel				18.109	-
Congressional Add Subtotals for Project: 645350				51.610	35.000
Congressional Add Totals for all Projects				51.610	35.000
Change Summary Explanation					
FY13 reductions in Other Adjustments was due to Sequestration.					
FY13 Congressional Directed Reduction was a transfer to Operationally Responsive Space.					
In FY13, Congressional Adds (\$37M for Alternative Energy Research and \$20M for Coal-to-Liquid fuel only for lower emission research) were tech adjusted from the Support Systems Development Program, 0708012F, to TTP to better align research efforts.					
In FY14, Congressional Add of \$25M was appropriated to Tech Transition PE for Alternate Energy Research. Congressional Add of \$10M for Alternate Energy Research was tech adjusted from the Support Systems Development Program, 0708012F, to TTP to better align research efforts.					
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014
Title: Propulsion Technology Transition				30.668	13.636
					59.004

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>
<b>Description:</b> Next generation fuel efficient military propulsion system.  <b>FY 2013 Accomplishments:</b> Accomplished an adaptive turbine engine prototype conceptual design. Performed engine configuration definition and component conceptual design. Completed early performance, durability, and operability assessments.  <b>FY 2014 Plans:</b> Complete component risk reduction and core engine preliminary design. Continue preliminary engine design activities, as well as weapons systems integration, common core studies, and material manufacturing readiness activities.  <b>FY 2015 Plans:</b> Complete preliminary design reviews of engine concepts to mature adaptive engine technologies and manufacturing readiness. Purchase materials and hardware to support adaptive engine component rig tests and future adaptive engine core tests.			
<b>Accomplishments/Planned Programs Subtotals</b>		30.668	13.636
		<b>FY 2013</b>	<b>FY 2014</b>
<b>Congressional Add:</b> Alternative Energy Research		33.501	35.000
<b>FY 2013 Accomplishments:</b> Conducted congressionally directed effort.			
<b>FY 2014 Plans:</b> Conduct congressionally directed effort.			
<b>Congressional Add:</b> Coal to Liquid Fuel		18.109	-
<b>FY 2013 Accomplishments:</b> Conducted congressionally directed effort.			
<b>Congressional Adds Subtotals</b>		51.610	35.000
<b>D. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>Remarks</b>			
<b>E. Acquisition Strategy</b>			
Technology Transition Program (TTP) enables a more effective and prioritized transition of technologies to the warfighter. It allows more accurate cost estimating and more comprehensive systems integration to occur through the use of prototypes and user assessments until the sponsoring major command can incorporate the technology into their subsequent budget submission. The Air Force, through appropriate program offices, will manage the acquisition and development process for the integration and fielding of Service Acquisition Executive approved TTP projects.			

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<b>F. Performance Metrics</b> Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.		

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Exhibit R-4, RDT&amp;E Schedule Profile: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity

3600 / 4

R-1 Program Element (Number/Name)

PE 0604858F / Tech Transition Program

Project (Number/Name)

645350 / Transition Prioritization

## Technology Transition Program - PE 0604858F

	FY13				FY14				FY15				FY16				FY17				FY18				FY19			
Fiscal Year	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Technology Transition																												
Propulsion Technology Transition																												