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PE NUMBER: 0604858F
 PE TITLE: Technology Transition Program.

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0604858F Technology Transition Program.
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5350 Transition Prioritization	0.000	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000	0.000

(U) A. Mission Description and Budget Item Justification

The Technology Transition Program Element (TTPE) provides funding to demonstrate and evaluate technologies to enable or accelerate their transition to acquisition programs of record and operational use. It addresses the gap that exists between when a technology is first demonstrated and when it can be successfully acquired as an operational capability. This gap is often referred to as the technology transition "valley of death." TTPE bridges that gap by funding promising concepts for a period of one to two years, allowing technology integration and demonstration to continue beyond the laboratory. It allows acquisition program managers (the capability developers and providers) and warfighters (the capability recipients and 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 ("try before you buy"). TTPE includes research and development funds for the following transition activities: (1) prototyping (both full-scale and sub-scale to include competitions) of promising, high-priority concepts and technologies in an operational environment to lower acquisition risk by raising the technology readiness level; (2) performing pre-acquisition systems engineering to facilitate transition of concepts and technologies from a demonstration program (e.g., Advanced Technology Demonstrations (ATDs), Joint Capability Technology Demonstrations (JCTDs)) into acquisition programs of record; (3) assessing external 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 enterprise architecture; and (4) capturing data through information technology tools and databases to help formulate technology transition acquisition strategies and gather proposals for technology and prototype development that have the potential for application to the performance of the military missions of the Department of Defense. This program supports the national industrial base, engineering design teams and maintains the intellectual capital of government and industry.

TTPE is specifically designed to deal with technology transition opportunities throughout the fiscal year as they arise, resulting in a prioritized distribution of TTPE funding over the course of the entire execution year. Although analogous to major investment programs, the TTPE process allows the AF flexibility to transition innovative concepts and initiatives to the warfighter annually in a manner that coincides with development of the President's Budget. Candidate projects will receive TTPE approval and funds based on identified and demonstrated operational impact, cost savings, project development, production, lifecycle costs, project risk and cost of delay. The TTPE will nominate projects to the AF Service Acquisition Executive (SAE) for final approval. Potential sources of projects include, but are not limited to Joint Expeditionary Force Experiments (JEFX), Joint Experimentation, ATDs, JCTDs, Defense Advanced Research Projects Agency, Science and Technology, and Independent R&D efforts. This effort is Budget Activity 4, Advanced Component Development and Prototypes (ACDP), since it involves system specific efforts that help expedite technology transition from the laboratory to operational use.

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(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget			
(U) Current PBR/President's Budget	0.000	0.000	9.611
(U) Total Adjustments	0.000	0.000	
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0604858F Technology Transition Program.	PROJECT NUMBER AND TITLE 5350 Transition Prioritization
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
5350 Transition Prioritization	0.000	0.000	9.611	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

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TTPE is specifically designed to deal with technology transition opportunities throughout the fiscal year as they arise, resulting in a prioritized distribution of TTPE funding over the course of the entire execution year. Although analogous to major investment programs, the TTPE process allows the AF flexibility to transition innovative concepts and initiatives to the warfighter annually in a manner that coincides with development of the President's Budget. Candidate projects will receive TTPE approval and funds based on identified and demonstrated operational impact, cost savings, project development, production, lifecycle costs, project risk and cost of delay. The TTPE will nominate projects to the AF Service Acquisition Executive (SAE) for final approval. Potential sources of projects include, but are not limited to Joint Expeditionary Force Experiments (JEFX), Joint Experimentation, ATDs, JCTDs, Defense Advanced Research Projects Agency, Science and Technology, and Independent R&D efforts. This effort is Budget Activity 4, Advanced Component Development and Prototypes (ACDP), since it involves system specific efforts that help expedite technology transition from the laboratory to operational use.

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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Planned program will select and execute specific technology transition projects based on identified and demonstrated operational impact, cost savings, project development, production, lifecycle costs, project risk and cost of delay. Each project will be approved by the AF Service Acquisition Executive (SAE) prior to award. This strategy allows the AF to maintain momentum on technology transition opportunities throughout the fiscal year and in a manner that facilitates long-term acquisition planning and budget development.	0.000	0.000	9.611

(U) Total Cost	0.000	0.000	9.611
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(U) <u>C. Other Program Funding Summary (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							

(U) PE 0604337F, Requirements Analysis and Maturation

(U) **D. Acquisition Strategy**
 TTPE enables a more effective and prioritized transition of technologies to the warfighter. It allows more accurate cost estimating and comprehensive systems integration to occur through the use of prototypes and user assessments until the sponsoring MAJCOM can incorporate the technology into their subsequent budget submission. The AF, through appropriate program offices, will manage the acquisition and development process for the integration and fielding of SAE-approved TTPE projects. Each project will have a complete acquisition plan defined and approved as a criterion for project selection and subsequent funding. The Air Staff and AF corporate structure will complete an Operations and Acquisition Review to ensure project affordability and appropriateness within the overall AF program. In order to rapidly transition warfighting capabilities, the TTPE process nominates projects directly to the AF SAE for final approval.

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Exhibit R-3, RDT&E Project Cost Analysis

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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
Subtotal Product Development			0.000	0.000		0.000		9.611		0.000	9.611	0.000
Remarks:												
(U) <u>Support</u>												
TBD - Pending Contract Award											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Test & Evaluation</u>												
TBD - Pending Contract Award											0.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Management</u>												
TBD - Pending Contract Award											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	0.000		0.000		9.611		0.000	9.611	0.000
TBD												

Exhibit R-4, RDT&E Schedule Profile

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Technology Transition Program – PE 0604858F

Fiscal Year	FY09				FY10			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
FY10 Technology Transition Project Selection and Prioritization								
FY10 Project Funding Award								
FY10 Project Progress Review								

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Exhibit R-4a, RDT&E Schedule Detail

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PROJECT NUMBER AND TITLE

5350 Transition Prioritization

(U) Schedule Profile

FY 2008

FY 2009

FY 2010

(U) FY10 Project Funding Award

1Q

(U) Project Progress Review

2Q

(U) Project Progress Review

4Q

(U) FY11 Technology Transition Project Selection and Prioritization

1-4Q

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