

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604858F: Technical Transition Program							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	11.842	2.766	37.558	-	37.558	16.833	59.023	76.140	79.333	Continuing	Continuing
645350: Transition Prioritization	11.842	2.766	37.558	-	37.558	16.833	59.023	76.140	79.333	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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: (1) prototyping 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 from a demonstration program into acquisition programs of record; (3) 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 (4) 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. TTP funding will also provide for the demonstration of systems and technology to enable increasingly responsive, resilient, and affordable architectures via development of hostable payloads, small satellites, interface standards, and government/commercial hosting opportunities. These efforts are in Budget Activity 4, Advanced Component Development and Prototypes, since they involve system specific efforts that help expedite technology transition from the laboratory to operational use.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force				DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE				
3600: Research, Development, Test & Evaluation, Air Force		PE 0604858F: Technical Transition Program				
BA 4: Advanced Component Development & Prototypes (ACD&P)						
B. Program Change Summary (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget		12.260	2.773	-	-	-
Current President's Budget		11.842	2.766	37.558	-	37.558
Total Adjustments		-0.418	-0.007	37.558	-	37.558
• Congressional General Reductions		-	-0.007			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-0.355	-			
• Other Adjustments		-0.063	-	37.558	-	37.558
Change Summary Explanation						
In FY11, Other Adjustments include: -0.063 (Congressional Rescissions)						
Increased Air Force emphasis for energy efficiency initiatives and responsive, resilient space technologies caused increase in FY13 and out funding.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012	FY 2013
Title: Major Thrust 1.				11.842	2.766	-
Description: Technology transition project execution to facilitate long-term acquisition planning and budget development						
FY 2011 Accomplishments:						
Demonstrated technologies supporting persistent wide area air and maritime surveillance to enable defense against threats in the interior of and in the approaches to North America. Continued the demonstration and transition of an advanced optical self-protection system for protection of aircraft from guided projectiles; a multi-intelligence correlation, visualization and analysis software tool for rapid integration of multi-source data into a scalable analysis environment supporting combat zone command and control facilities; a no or low collateral damage counter-electronics capability; a satellite communications capability for simultaneous multiple satellite links and advanced antenna control.						
FY 2012 Plans:						
Complete the demonstration and transition of technologies supporting persistent wide area air and maritime surveillance to enable defense against threats in the interior of and in the approaches to North America.						
FY 2013 Plans:						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force								DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604858F: Technical Transition Program								
C. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013		
Effort completed in FY12.												
Title: Major Thrust 2 Description: Next generation fuel efficient military propulsion system FY 2011 Accomplishments: N/A FY 2012 Plans: N/A FY 2013 Plans: Accomplish an adaptive turbine engine prototype conceptual design. Perform engine configuration definition and component conceptual design. Complete early performance, durability, and operability assessments.								-	-	34.558		
Title: Major Thrust 3 Description: Responsive Resilient Space Technologies FY 2011 Accomplishments: N/A FY 2012 Plans: N/A FY 2013 Plans: Pursue opportunities to mature systems and technologies which enable increasingly responsive, resilient and affordable architectures via hostable payloads, small satellites and government/commercial hosting opportunities.								-	-	3.000		
Accomplishments/Planned Programs Subtotals								11.842	2.766	37.558		
D. Other Program Funding Summary (\$ in Millions)												
	Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
	• N/A: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
E. Acquisition Strategy												
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 MAJCOM can incorporate the technology into their subsequent budget												

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604858F: <i>Technical Transition Program</i>	
<p>submission. The Air Force, through appropriate program offices, will manage the acquisition and development process for the integration and fielding of SAE-approved TTP projects. Each project will have a complete acquisition plan defined and approved as a criterion for subsequent funding.</p> <p>F. Performance Metrics</p> <p>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.</p>		

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0604858F: Technical Transition Program	PROJECT 645350: Transition Prioritization

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604858F: <i>Technical Transition Program</i>	PROJECT 645350: <i>Transition Prioritization</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FY11 Project Funding Award	2	2011	2	2011
FY11 Project Progress Review 1	4	2011	4	2011
FY11 Project Progress Review 2	2	2012	2	2012
FY12 Project Funding Award	2	2012	2	2012
FY12 Project Progress Review 1	4	2012	4	2012
FY12 Project Progress Review 2	2	2013	2	2013
FY13 Project Funding Award	1	2013	1	2013
FY13 Project Progress Review 1	4	2013	4	2013
FY13 Project Funding Award 2	1	2014	1	2014
FY14 Project Funding Award	2	2014	2	2014
FY13 Project Progress Review 2	4	2014	4	2014
FY14 Project Progress Review 1	4	2014	4	2014
FY14 Project Progress Review 2	3	2015	3	2015
FY13 Project Progress Review 3	1	2016	1	2016
FY14 Project Progress Review 3	3	2016	3	2016
FY14 Project Progress Review 4	3	2017	3	2017
FY13 Project Progress Review 4	4	2017	4	2017