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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603859F I Pollution Prevention - Dem/Val							
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	-	0.956	0.953	1.798	-	1.798	1.750	1.153	1.177	1.197	Continuing	Continuing
644852: Pollution Prevention	-	0.956	0.953	1.798	-	1.798	1.750	1.153	1.177	1.197	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

Funds will be used to target R&D activities that demonstrate and prototype alternative weapon system manufacturing, remanufacturing, and maintenance materials and processes that reduce or eliminate hazardous chemicals, materials and waste streams through cost-effective programs and practices, while improving energy efficiency and reducing greenhouse gas emissions. Upon proof of the new process or materials, the resulting product can be transitioned to depot maintenance processes, which results in reduced maintenance costs, reduced depot flow time, and increases asset availability. Specifically, funds target pollution prevention technologies that reduce or eliminate chromium, cadmium, and nickel, as well as reduce or eliminate Hazardous Air Pollutants (HAPS), Volatile Organic Compounds (VOCs), and Class I and II Ozone Depleting Substances (ODS), global warmers and biochemical oxygen demand (BOD) and to increase the use of renewable and alternative fuels.

This effort is in Budget Activity 04, Advanced Component Development and Prototypes, because the emphasis is on proving component and subsystem maturity prior to integration in major and complex systems and may involve risk reduction initiatives.

B. Program Change Summary (\$ in Millions)	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015 Base</u>	<u>FY 2015 OCO</u>	<u>FY 2015 Total</u>
Previous President's Budget	2.054	0.953	2.488	-	2.488
Current President's Budget	0.956	0.953	1.798	-	1.798
Total Adjustments	-1.098	-	-0.690	-	-0.690
• Congressional General Reductions	-0.001	-			
• Congressional Directed Reductions	-1.000	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.097	-	-0.690	-	-0.690

Change Summary Explanation

FY13: Congressional reduction of \$1M due to forward financing.

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Title: Aircraft Laser Depainting System Prevention Description: Develop and demonstrate weapon system robotic laser depainting for both Air Logistics Complexes (ALC) and Contract Logistic Support (CLS) platforms. Supports AF Environmental Management System (EMS) #2 ranked AF-wide significant aspect. Critical element of AF response to 2009-2013 OSHA violations at three ALCs. FY 2013 Accomplishments: Completed final validation tests requested by aircraft program offices and materials experts. Technology transitioned to OO-ALC F-16 and C-130 production lines. FY 2014 Plans: No FY14 funding requested. FY 2015 Plans: No FY15 funding requested.		0.310	-	-
Title: Low Observable Laser De-coating System Description: Investigations and demonstrations to adapt the ALC-deployed whole aircraft laser depainting system to remove low-observable coatings used on B-2, F-22, F-35 aircraft and other low observable applications. FY 2013 Accomplishments: N/A FY 2014 Plans: Transition effort from Strategic Environmental Research and Development Program (SERDP). Qualify lasers against technical requirements to remove low-observable coatings from weapon systems. FY 2015 Plans: Demonstrate ability to successfully remove low-observable coatings.		-	0.350	0.457
Title: Hexavalent Chromium Replacement RDT&E Description: Effort to reduce hexavalent chromium in weapon system paints, coatings, sealants, adhesives, and plating. Supports AF Environmental Management System (EMS) #1 ranked AF-wide significant aspect. Critical element of AF response to 2009-2013 OSHA violations at three ALCs. FY 2013 Accomplishments:		0.323	0.295	0.660

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Conducted lab and beach testing for for aircraft outer moldline applications. Based upon test results, developing implementation plan for field evaluation testing. Promising candidates will move forward for evaluation of weapon systems' specific processes. FY 2014 Plans: Investigate technical requirements across multiple weapon systems; identify technically feasible hexavalent chromium alternatives. FY 2015 Plans: Demonstrate and validate alternative solutions for specific weapon system processes.				
Title: Cadmium Replacement RDT&E Description: Effort to reduce cadmium in weapon system coatings and plating. Supports AF Environmental Management System (EMS) #1 ranked AF-wide significant aspect. Critical element of AF response to 2009-2013 OSHA violations at three ALCs. FY 2013 Accomplishments: Conducted initial testing. Based upon initial testing, eliminated non-promising candidates. Promising candidates will move forward for evaluation of weapon systems' specific processes. FY 2014 Plans: Focus on repair operations and Cadmium plated fasteners for substitution. FY 2015 Plans: Demonstrate and validate alternative solutions for Cadmium plated connectors.		0.323	0.295	0.660
Title: 2014 Emerging Environmental Issues Description: Investigations and demonstrations to resolve significant environmental aspects; P2 dem/val of technologies to address high-priority weapon system environmental issues and increase aircraft availability. FY 2013 Accomplishments: N/A. FY 2014 Plans: Address emerging environmental issues, reduce negative impact on aircraft availability. FY 2015 Plans: No FY15 funding requested.		-	0.013	-
Title: 2015 Emerging Environmental Issues		-	-	0.021

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Description: Investigations and demonstrations to resolve significant environmental aspects; P2 dem/val of technologies to address high-priority weapon system environmental issues and increase aircraft availability. FY 2013 Accomplishments: N/A. FY 2014 Plans: N/A. FY 2015 Plans: Address emerging environmental issues, reduce negative impact on aircraft availability.				
Accomplishments/Planned Programs Subtotals		0.956	0.953	1.798
D. Other Program Funding Summary (\$ in Millions) N/A Remarks E. Acquisition Strategy Pollution Prevention activities are level of effort and use time and materials support contracts. F. Performance Metrics 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&E Schedule Profile: PB 2015 Air Force							Date: March 2014	
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603859F / Pollution Prevention - Dem/ Val			Project (Number/Name) 644852 / Pollution Prevention	
		POLLUTION PREVENTION DEM/VAL						
		NOTIONAL SCHEDULE FOR CONTINUOUS CYCLE						
	FY12	FY13	FY14	FY15	FY16	FY17	FY18	CONTINUING
REQUIREMENTS ID								
POTENTIAL ALTERNATIVES								
TEST PLAN								
TESTING								
TEST REPORT								
DEMONSTRATION								
FINAL REPORT								