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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force	Date: February 2015
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Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>					PE 0603859F I <i>Pollution Prevention - Dem/Val</i>							
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	-	0.953	0.998	-	-	-	-	-	-	-	Continuing	Continuing
644852: <i>Pollution Prevention</i>	-	0.953	0.998	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY2016, Project Number 644852 Pollution Prevention was terminated.

A. Mission Description and Budget Item Justification

This project funds 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 efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016 Base</u>	<u>FY 2016 OCO</u>	<u>FY 2016 Total</u>
Previous President's Budget	0.953	1.798	1.750	-	1.750
Current President's Budget	0.953	0.998	-	-	-
Total Adjustments	-	-0.800	-1.750	-	-1.750
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-0.800			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-1.750	-	-1.750

Change Summary Explanation

FY2016 program termination due to higher Air Force priorities.

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
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 2014 Accomplishments: 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. FY 2016 Plans: N/A		0.350	0.300	-
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 2014 Accomplishments: 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. FY 2016 Plans: N/A		0.295	0.300	-
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 2014 Accomplishments: Focus on repair operations and Cadmium plated fasteners for substitution. FY 2015 Plans:		0.295	0.300	-

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Demonstrate and validate alternative solutions for Cadmium plated connectors.				
FY 2016 Plans: N/A				
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 2014 Accomplishments: Address emerging environmental issues, reduce negative impact on aircraft availability. FY 2015 Plans: N/A FY 2016 Plans: N/A		0.013	-	-
Title: 2015 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 2014 Accomplishments: N/A FY 2015 Plans: Address emerging environmental issues, reduce negative impact on aircraft availability. FY 2016 Plans: N/A		-	0.098	-
Accomplishments/Planned Programs Subtotals		0.953	0.998	-
D. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				

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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-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603859F / Pollution Prevention - Dem/Val				Project (Number/Name) 644852 / Pollution Prevention							
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
Air Force Research Lab	Various	Various : Various,	-	0.924		0.998		-		-		-	Continuing	Continuing	TBD
Subtotal			-	0.924		0.998		-		-		-	-	-	-
Support (\$ 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
Air Force Research Lab	Various	Various : Various	-	-		-		-		-		-	Continuing	Continuing	TBD
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ 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
Air Force Research Lab	Various	Various : Various	-	-		-		-		-		-	Continuing	Continuing	TBD
Subtotal			-	-		-		-		-		-	-	-	-
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
Air Force Research Lab	Various	Various : Various,	-	0.029		-		-		-		-	Continuing	Continuing	TBD
Subtotal			-	0.029		-		-		-		-	-	-	-
			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			-	0.953		0.998		-		-		-	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 4		R-1 Program Element (Number/Name) PE 0603859F / <i>Pollution Prevention - Dem/Val</i>		Project (Number/Name) 644852 / <i>Pollution Prevention</i>	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Requirements ID																												
Potential Alternatives																												
Test Plan																												
Testing																												
Test Report																												
Demonstration																												
Final Report																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603859F / <i>Pollution Prevention - Dem/Val</i>	Project (Number/Name) 644852 / <i>Pollution Prevention</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Requirements ID	1	2015	4	2015
Potential Alternatives	1	2015	4	2015
Test Plan	1	2015	4	2015
Testing	1	2014	4	2016
Test Report	1	2014	4	2016
Demonstration	1	2014	4	2018
Final Report	1	2019	1	2019