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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603859F I <i>Pollution Prevention - Dem/Val</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	0.965	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.965
644852: <i>Pollution Prevention</i>	-	0.965	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.965
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.

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	0.998	0.000	0.000	0.000	0.000
Current President's Budget	0.965	0.000	0.000	0.000	0.000
Total Adjustments	-0.033	0.000	0.000	0.000	0.000
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.033	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Title: Low Observable Laser De-coating System	0.300	0.000	0.000

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>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.</p> <p>FY 2015 Accomplishments: Demonstrated ability to successfully remove low-observable coatings.</p> <p>FY 2016 Plans: N/A</p> <p>FY 2017 Plans: N/A</p>				
<p>Title: Hexavalent Chromium Replacement RDT&E</p> <p>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.</p> <p>FY 2015 Accomplishments: Demonstrated and validated alternative solutions for specific weapon system processes.</p> <p>FY 2016 Plans: N/A</p> <p>FY 2017 Plans: N/A</p>		0.300	0.000	0.000
<p>Title: Cadmium Replacement RDT&E</p> <p>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.</p> <p>FY 2015 Accomplishments: Demonstrated and validated alternative solutions for Cadmium plated connectors.</p> <p>FY 2016 Plans: N/A</p> <p>FY 2017 Plans:</p>		0.300	0.000	0.000

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
N/A				
Title: 2015 Emerging Environmental Issues		0.065	0.000	0.000
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 2015 Accomplishments: Addressed emerging environmental issues, reduced negative impact on aircraft availability.				
FY 2016 Plans: N/A				
FY 2017 Plans: N/A				
Accomplishments/Planned Programs Subtotals		0.965	0.000	0.000
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-3, RDT&E Project Cost Analysis: PB 2017 Air Force												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 4				PE 0603859F / Pollution Prevention - Dem/Val				644852 / Pollution Prevention							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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	-	0.945	Nov 2014	0.000		0.000		0.000		0.000	0.000	0.945	-
Subtotal			-	0.945		0.000		0.000		0.000		0.000	0.000	0.945	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
			-	-		-		-		-		-	-	-	-
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
			-	-		-		-		-		-	-	-	-
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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	-	0.020		0.000		0.000		0.000		0.000	0.000	0.020	-
Subtotal			-	0.020		0.000		0.000		0.000		0.000	0.000	0.020	-
Project Cost Totals			-	0.965		0.000		0.000		0.000		0.000	0.000	0.965	-
Remarks															

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
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
Test Report	1	2015	4	2015
Demonstration	1	2015	4	2015
Final Report	1	2015	4	2015