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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				PE 0604796F: <i>Alternative Fuels</i>							
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	23.259	-	-	-	-	-	-	-	-	Continuing	Continuing
645287: <i>Assured Fuels</i>	23.259	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Alternative Fuels program manages the certification of current and future alternative fuels for operational use in all legacy and future weapons systems, applicable support equipment, and fuel delivery and storage infrastructure. The alternative fuel types being evaluated and certified include various synthetic fuels, bio-mass derived fuels, and fuel blend technologies. This effort includes complete system evaluations, studies and analysis, subsystem and system-level testing, safety, environmental analysis, fuel stock purchase, fuel storage and transport and other USAF certification costs. Scope of activities include interaction with all USAF weapon system single managers to accomplish complete certification activities for applicable weapon systems. Initiative supports USAF assured fuels effort to decrease US dependence on foreign oil and secure additional fuel-types on which to conduct world-wide operations.

This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), 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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	24.064	-	-	-	-
Current President's Budget	23.259	-	-	-	-
Total Adjustments	-0.805	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.682	-			
• Other Adjustments	-0.123	-	-	-	-

Change Summary Explanation

FY2011 adjustments Congressional General Reductions \$0.123 and Small Business Innovative Research(SBIR) Reduction \$0.682

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Assured Fuels	23.259	-	-

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
<p>Description: Certify AF weapon systems (including appropriate support equipment and base-level fuel delivery and storage infrastructure) to operate using any number of alternative fuel stocks.</p> <p>FY 2011 Accomplishments: Continuing Efforts: Laboratory and flight test support for certification activities on seven USAF platforms, ground support equipment and infrastructure using biomass-derived Hydro-processed Renewable Jet (HRJ) and Alcohol-to-Jet (ATJ) fuel blends. Disposition of certification requirements for all USAF Commercial Derivative Aircraft (CDA) using the HRJ fuel blend will be accomplished. Evaluation of infrastructure, toxicology, ESOH, and fire suppression effectiveness of the HRJ blend will be completed. Acquisition of supplemental quantities of HRJ fuels is also planned (as required). MIL-HDBK-510 will be revised and published.</p> <p>An F-16 Field Service Evaluations (FSEs) using the HRJ blend is being conducted to verify extended operational use durability.</p> <p>Transportation and storage of fuel for test locations will be accomplished including associated management and support costs.</p> <p>Phase I of the ATJ pathway is underway and includes the purchase of approximately 11K gallons of RDT&E fuel stocks and a feasibility demonstration of an A-10 Weapon System (flight test, materials, engine, sub-systems, etc).</p>			
Accomplishments/Planned Programs Subtotals	23.259	-	-

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	Funding may be executed internally within the Agile Combat Support Directorate (ASC/WN) via full and open competition or released to other organizations for alternative fuel certification projects for which they are the Office of Primary Responsibility (OPR). OPRs will determine the most appropriate contract vehicle.
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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 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 0604796F: Alternative Fuels	PROJECT 645287: Assured Fuels

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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 0604796F: Alternative Fuels	PROJECT 645287: Assured Fuels

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Exhibit R-4, RDT&E Schedule Profile: 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 0604796F: <i>Alternative Fuels</i>	PROJECT 645287: <i>Assured Fuels</i>

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Exhibit R-4A, RDT&E Schedule Details: 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 0604796F: *Alternative Fuels*

PROJECT

645287: *Assured Fuels*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Certification Efforts	1	2011	4	2012
Flight Tests	1	2011	4	2012
Engine Tests	1	2011	4	2012