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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2015 Air Force **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604635F / <i>Ground Attack Weapons Fuze Development</i>
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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	-	8.657	17.764	-	-	-	-	-	-	-	-	26.421
645312: <i>Hard Target Void Sensing Fuze</i>	-	8.657	17.764	-	-	-	-	-	-	-	-	26.421
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

# The FY 2015 OCO Request will be submitted at a later date.

**Note**

In FY 2015, 645312, Hard Target Void Sensing Fuze, efforts were transferred to PE 0605214F, Ground Attack Weapons Fuze Development, 655313, Hard Target Void Sensing Fuze, in order to properly align the funds in the correct Budget Activity, BA05, which supports Engineering, Manufacturing, and Development (EMD).

**A. Mission Description and Budget Item Justification**

The Hard Target Void Sensing Fuze (HTVSF) is an advanced system designed to provide fuzing and void sensing functions for legacy penetrator weapons to destroy hardened targets protected by multiple layers of soil and/or reinforced concrete. The HTVSF will also provide in-flight cockpit programmability, safing and arming, multi-function (time delay and void sensing) and multi-delay arming. Program Element funding currently supports the Engineering, Manufacturing, and Development (EMD) effort for HTVSF. The program was created to include the whole spectrum of fuze development.

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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>
Previous President's Budget	9.423	21.175	7.808	-	7.808
Current President's Budget	8.657	17.764	-	-	-
Total Adjustments	-0.766	-3.411	-7.808	-	-7.808
• Congressional General Reductions	-0.012	-			
• Congressional Directed Reductions	-	-3.411			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.234	-			
• Other Adjustments	-0.520	-	-7.808	-	-7.808

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**Change Summary Explanation**

FY 2013, Other Adjustment Row: -\$ .520M, Sequestration  
 FY 2014, Congressional Directed Reductions Row: -\$3.411M, Program reduction  
 FY 2015, Other Adjustment Row: -\$7.808M, in FY 2015, 645312, Hard Target Void Sensing Fuze, efforts were transferred to PE 0605214F, Ground Attack Weapons Fuze Development, 655313, Hard Target Void Sensing Fuze, in order to properly align the funds in the correct Budget Activity, BA05, which supports Engineering, Manufacturing, and Development (EMD).

<b><u>C. Accomplishments/Planned Programs (\$ in Millions)</u></b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
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<b><i>Title:</i></b> HTVSF Development  <b><i>Description:</i></b> Conduct HTVSF Engineering, Manufacturing, and Development (EMD) effort.  <b><i>FY 2013 Accomplishments:</i></b> Continued EMD program effort to develop a joint use Air Force/Navy item to interface with legacy penetrator weapons to provide a capability to survive a 5K - 15K psi penetration environment and detonate in a specific void inside the target or at a specific delay time programmed into the fuze.  <b><i>FY 2014 Plans:</i></b> Continue EMD program effort to develop a joint use Air Force/Navy item to interface with legacy penetrator weapons to provide a capability to survive a 5K - 15K psi penetration environment and detonate in a specific void inside the target or at a specific delay time programmed into the fuze.  <b><i>FY 2015 Plans:</i></b> N/A	3.549	6.839	-
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<b><i>Title:</i></b> Test Support  <b><i>Description:</i></b> Build "hard" targets and execute sled/flight test range events.  <b><i>FY 2013 Accomplishments:</i></b> Conducted Sled, Flight and Integration tests at Government facilities. These facilities included Eglin Air Force Base, Holloman Air Force Base, White Sands Missile Range, and Naval Weapons Station China Lake.  <b><i>FY 2014 Plans:</i></b> Conduct HTVSF BLU 109/113 sled and flight developmental test program to include AFOTEC clearance, range support/development, weapon recovery and target demolition.  <b><i>FY 2015 Plans:</i></b>	4.603	10.435	-
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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
N/A			
<b>Title:</b> External Support	0.505	0.490	-
<b>Description:</b> Provide specialized expertise in manufacturing, testing and safety support for the HTVSF EMD program. Contracted for munitions-specific expertise to ensure testing can be meaningfully evaluated.			
<b>FY 2013 Accomplishments:</b> Provided specialized expertise in manufacturing, testing and safety support for the HTVSF EMD program.			
<b>FY 2014 Plans:</b> Provide expertise in manufacturing, testing, management and analysis support, and safety support for BLU 109/113 flight developmental testing.			
<b>FY 2015 Plans:</b> N/A			
<b>Accomplishments/Planned Programs Subtotals</b>	8.657	17.764	-

<b>D. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• RDTE: BA05: PE 0605214F: <i>Ground Attack Weapons Fuze Development</i>	-	-	5.332	-	5.332	3.622	0.954	-	-	-	9.908
• PAAF: BA01: Line Item # 356120: <i>Fuzes</i>	-	19.280	38.500	-	38.500	39.512	41.616	41.616	-	-	-

**Remarks**

- PAAF dollars in War Reserve Materiel (WRM; Fuzes) fund initial procurement of 475/475/1250/1400/1400 units. FY14 - FY18.
- Navy PE 050120 to fund 50/225/225 units FY 2014/FY 2015/FY 2016.

**E. Acquisition Strategy**  
 EMD Awarded to Alliant TechSystems Operations LLC  
 Estimated Contract completion date: 24 May 2014  
 Fixed Price Incentive Firm  
 Estimated Contract Length - 37 months

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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 2015 Air Force

Date: March 2014

Appropriation/Budget Activity  
3600 / 4

R-1 Program Element (Number/Name)  
PE 0604635F / Ground Attack Weapons  
Fuze Development

Project (Number/Name)  
645312 / Hard Target Void Sensing Fuze



# HTVSF Schedule

*War-Winning Capabilities...On Time, On Cost*

