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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0207590F I Seek Eagle							
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	-	20.451	22.386	23.844	-	23.844	24.014	24.379	24.860	25.327	Continuing	Continuing
674037: SEEK EAGLE Certifications	-	20.451	22.386	23.844	-	23.844	24.014	24.379	24.860	25.327	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**

The Air Force operates a variety of combat aircraft that carry numerous and varied stores (munitions, missiles, fuel tanks, targeting pods, range pods, electronic countermeasures pods, etc.). Stores are carried in countless different loading combinations determined by operational and training scenarios, missions, tactics, and weapon development programs. Aircraft stores combinations change as operational plans and tactics change and as new stores are developed and fielded. Before operational, training, or test use, the Air Force must certify these configurations for safe loading, carriage, and separation (jettison and normal release), as well as verify ballistics accuracy under the user-certified carriage and employment parameters. The Air Force SEEK EAGLE program completes certification recommendations and recommended flight clearances through any combination of engineering analysis, wind tunnel testing, modeling and simulation, and ground/flight test and evaluation. The SEEK EAGLE effort encompasses eight disciplines: Fit and Function, Flutter, Loads, Stability and Control, Electromagnetic Compatibility/Interference (EMC/EMI), Separations, Ballistics, and Safe Escape.

In support of certification, the program recommends about 1000 aircraft/store combinations for flight each year with analysis and testing, requiring from weeks to years depending on the complexity. Integrated solutions for combat aircrew weapon delivery planning problems are developed and provided to combat forces via Combat Weapons Delivery Software (CWDS) and Joint Safe Escape Analysis Solution (JSEAS). SEEK EAGLE works in coordination with the Air Force Safety Center to provide Hazards of Electromagnetic Radiation to Ordnance (HERO) analysis and certification recommendations of ordnance systems containing electro-explosive devices. The program is also responsible for inserting new and emerging technologies into the SEEK EAGLE process as well as providing resources for the sustainment of a viable Air Force aircraft/store certification capability.

SEEK EAGLE funds are currently budgeted to support certification testing and analysis for new and inventory stores including, but not limited to: Small Diameter Bomb I & II (SDB), Laser Joint Direct Attack Munitions (LJDAM), Joint Air-to-Surface Standoff Missile (JASSM), Air Intercept Missile (AIM-9X), Advanced Medium Range Air-to-Air Missile (AIM-120D), Miniature Air-Launched Decoy (MALD), BRU-57 (Smart Bomb Rack), BRU-61 (SDB Bomb Rack), Wind Corrected Munitions Dispenser (WCMD), Sniper Targeting Pod with video data link, LITENING Targeting Pod with video data link, laser guided bombs, F-22 supersonic tank, B61 (Mod 12), penetrator warhead upgrades (BLU-111/BLU-117), practice bomb and aircraft instrumentation pod modifications. SEEK EAGLE funds are also used to support certification of other inventory stores on Combat Air Forces (CAF) and Special Operations Command (SOCOM) aircraft, assist the F-35 JPO with subject matter expertise in the System Development and Demonstration phase (e.g., development of organic store certifications capability to support F-35 in the Production, Sustainment, and Follow-on Development phases), sustain organic F-22 store certifications capability, and to obtain non-inventory stores and store data for post-integration certification requirements.

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This program is in Budget Activity 7, Operational System Development. These budget activities include development efforts to upgrade systems currently fielded or which have approval for full rate production and anticipate production funding in the current or subsequent year.						
B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		22.654	24.342	24.422	-	24.422
Current President's Budget		20.451	22.386	23.844	-	23.844
Total Adjustments		-2.203	-1.956	-0.578	-	-0.578
• Congressional General Reductions		-0.030	-			
• Congressional Directed Reductions		-	-1.956			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-0.296	-			
• Other Adjustments		-1.877	-	-0.578	-	-0.578
Change Summary Explanation						
FY 2013, Other Adjustments: -\$1.877M, Sequestration						
FY 2014, Congressional Directed Reduction: -\$1.956M, Program decrease						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014	FY 2015
Title: F-22A				2.000	0.500	-
Description: F-22A Capability Development and Weapons Certification.						
FY 2013 Accomplishments:						
Continued developing organic F-22 engineering capability in remaining four disciplines by receiving additional contractor deliverables and developing organic computational Modeling and Simulation (M&S) capabilities. Performed engineering analysis and began wind tunnel and flight test planning to support certification of supersonic tank and performed wind tunnel testing of AIM-9X on the F-22 for increment 3.2. Enlisted support from the contractor for engineering analysis for increment 3.2 aircraft-stores certification. Continued to provide capability flight recommendations.						
FY 2014 Plans:						
Finish certification of external fuel tanks at supersonic speeds and full AIM-120D integration.						
FY 2015 Plans:						

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
Support F-22 weapon certification requirements now part of Aircraft/Store Compatibility Analysis				
<b>Title:</b> F-35 <b>Description:</b> F-35 Capability Development for SEEK EAGLE began in FY13, to support Combat Air Force's (CAF's) anticipated requirements after Initial Operational Capability (IOC).  <b>FY 2013 Accomplishments:</b> Began development of organic F-35 engineering capability in all eight engineering disciplines by receiving contractor data, tools, and technical support.  <b>FY 2014 Plans:</b> Continue development of organic F-35 engineering capability in all eight engineering disciplines by receiving contractor data, tools, and technical support.  <b>FY 2015 Plans:</b> Continue development of organic F-35 engineering capability in all eight engineering disciplines by receiving contractor data, tools, and technical support.		2.500	4.900	4.700
<b>Title:</b> M&S Capability <b>Description:</b> Modeling and Simulation (M&S) capability development in support of store certification  <b>FY 2013 Accomplishments:</b> Continued development and improvement of M&S capability to support store certification disciplines. Example work included alpha and beta testing of new Create-AV/Kestrel code base for Stability and Control Discipline progressing from static aircraft to aircraft with moving control surfaces. Other key work included tools necessary to characterize F-22 and F-35 weapons bay environments including aero-acoustic prediction.  <b>FY 2014 Plans:</b> Continue development and improvement of M&S capability to support store certification disciplines. Other key work includes tools necessary to characterize F-22 and F-35 weapons bay environments including aero-acoustic prediction.  <b>FY 2015 Plans:</b> Continue development and improvement of M&S capability to support store certification disciplines. Other key work includes tools necessary to characterize F-22 and F-35 weapons bay environments including aero-acoustic prediction.		3.000	2.222	3.000
<b>Title:</b> Aircraft/Store Compatibility Analysis		11.247	13.742	14.442

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<p><b>Description:</b> Evaluate aircraft/store compatibility through analysis, M&amp;S and flight and ground test. Provide flight recommendations to airworthiness authorities.</p> <p><b>FY 2013 Accomplishments:</b> Continually provided compatibility flight recommendations as requested by ACC/A8, LCMC, AFSOC and other agencies. Extensive F-16/SDB and F-16/AIM-9X flight testing was performed.</p> <p><b>FY 2014 Plans:</b> Continually provide compatibility flight recommendations as requested by ACC/A8, LCMC, AFSOC and other agencies. Extensive F-16/SDB and F-16/AIM-9X flight testing will be performed.</p> <p><b>FY 2015 Plans:</b> Continually provide compatibility flight recommendations as requested by ACC/A8, LCMC, AFSOC and other agencies. Extensive SDB II and B-61 (MOD 12) flight testing will be performed.</p>				
<p><b>Title:</b> Combat Weapon Delivery Software (CWDS)</p> <p><b>Description:</b> Developed Mission Planning Software including Combat Weapon Delivery Software (CWDS).</p> <p><b>FY 2013 Accomplishments:</b> Continued support of efforts aimed at improving aircrew interface. Continued support of CWDS requirements for multiple Mission Planning Environments (MPEs) on two different frameworks: Portable Flight Planning Software (PFPS) and Joint Mission Planning Software (JMPS). Continued transition to the redeveloped CWDS software for alignment with the JMPS roadmap architecture. Continued support of legacy CWDS development while full transition of MPEs to new JMPS framework was occurring.</p> <p><b>FY 2014 Plans:</b> Continue support of efforts aimed at improving aircrew interface. Continue support of CWDS requirements for multiple MPEs on the JMPS framework. Continue transition to the redeveloped CWDS software for alignment with the JMPS roadmap architecture. Continue support of legacy CWDS development until full transition of all MPEs to new JMPS framework has occurred.</p> <p><b>FY 2015 Plans:</b> Continue support of efforts aimed at improving aircrew interface. Continue support of CWDS requirements for multiple MPEs on the JMPS framework. Continue transition to the redeveloped CWDS software for alignment with the JMPS roadmap architecture. Continue support of legacy CWDS development until full transition of all MPEs to new JMPS framework has occurred.</p>		1.704	1.022	1.702
<b>Accomplishments/Planned Programs Subtotals</b>		20.451	22.386	23.844

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<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>
• None: N/A	-	-	-	-	-	-	-	-	-	-	-
<b>Remarks</b>											
<b>E. Acquisition Strategy</b> The SEEK EAGLE program does not execute in accordance with established acquisition program milestones. For initial aircraft-weapons integration, the aircraft or weapon program office is responsible for budgeting and providing the test assets to AFSEO for the store certification requirements. For post integration certification requirements, AFSEO funds are used to obtain the non-inventory test assets.											
<b>F. Performance Metrics</b> 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 / 7	R-1 Program Element (Number/Name) PE 0207590F / <i>Seek Eagle</i>	Project (Number/Name) 674037 / <i>SEEK EAGLE Certifications</i>

**The SEEK EAGLE program does not execute in accordance with established acquisition program milestones. Each aircraft/store configuration requested by the user goes through the SEEK EAGLE process by the designated user priority.**