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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force	DATE: April 2013
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APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>					PE 0207590F: <i>Seek Eagle</i>							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	18.599	22.654	24.342	-	24.342	24.422	24.571	24.912	25.360	Continuing	Continuing
674037: <i>SEEK EAGLE Certifications</i>	-	18.599	22.654	24.342	-	24.342	24.422	24.571	24.912	25.360	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 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), low collateral damage warhead (BLU-129), 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 CAF and 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

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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.						
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 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		18.599	22.654	24.342	-	24.342
Current President's Budget		18.599	22.654	24.342	-	24.342
Total Adjustments		0.000	0.000	0.000	-	0.000
• Congressional General Reductions		-	0.000			
• Congressional Directed Reductions		-	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		-	0.000			
• Congressional Directed Transfers		-	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		0.000	0.000			
• Other Adjustments		0.000	0.000	0.000	-	0.000
Change Summary Explanation						
No significant changes.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: F-22A				2.500	2.500	0.500
Description: F-22A Capability Development and Weapons Certification.						
FY 2012 Accomplishments:						
Continued developing organic F-22 engineering capability in remaining four disciplines (flutter, loads, stability and control, and EMC/EMI) by receiving additional contractor deliverables and developing organic computational M&S capabilities. Performed engineering analysis and began wind tunnel and flight test planning to support certification of AIM-120D and MXU-1010 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. Provided capability flight recommendations.						
FY 2013 Plans:						
Continue developing organic F-22 engineering capability in remaining four disciplines by receiving additional contractor deliverables and developing organic computational M&S capabilities. Perform engineering analysis and begin wind tunnel and						

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
flight test planning to support certification of supersonic tank and perform wind tunnel testing of AIM-9X on the F-22 for increment 3.2. Enlist support from the contractor for engineering analysis for increment 3.2 aircraft-stores certification. Continue to provide capability flight recommendations. FY 2014 Plans: Finish certification of external fuel tanks at supersonic speeds and full AIM-120D integration.				
Title: F-35 Description: F-35 Capability Development for SEEK EAGLE begins in FY13, to support Combat Air Force's (CAF's) anticipated requirements after Initial Operational Capability (IOC). FY 2012 Accomplishments: N/A FY 2013 Plans: Begin development of organic F-35 engineering capability in all eight engineering disciplines by receiving contractor data, tools, and technical support. FY 2014 Plans: Continue development of organic F-35 engineering capability in all eight engineering disciplines by receiving contractor data, tools, and technical support.		0.000	3.500	4.900
Title: M&S Capability Description: Modeling and Simulation (M&S) capability development in support of store certification FY 2012 Accomplishments: 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. FY 2013 Plans: Continue development and improvement of M&S capability to support store certification disciplines. Example work includes alpha and beta testing of new Create-AV/Kestrel code base for Stability and Control Discipline progressing from static aircraft to aircraft		2.900	3.000	3.200

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
with moving control surfaces. Other key work includes tools necessary to characterize F-22 and F-35 weapons bay environments including aero-acoustic prediction. FY 2014 Plans: 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.				
Title: Aircraft/Store Capability Analysis Description: Evaluate aircraft/store compatibility through analysis, M&S and flight and ground test. Provide flight recommendations to airworthiness authorities. FY 2012 Accomplishments: Continually provided compatibility flight recommendations as requested by ACC/A8, AAC, AFSOC and other agencies. Extensive F-16/SDB and F-16/AIM-9X ground and flight testing were performed. FY 2013 Plans: Continually provide compatibility flight recommendations as requested by ACC/A8, AAC, AFSOC and other agencies. Extensive F-16/SDB and F-16/AIM-9X flight testing will be performed. FY 2014 Plans: 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.		10.699	11.654	13.742
Title: CWDS Description: Develop Mission Planning Software including Combat Weapon Delivery Software (CWDS). FY 2012 Accomplishments: 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 System (JMPS). Continued transition to the redeveloped CWDS software for alignment with the JMPS roadmap architecture. Continued support of legacy CWDS development for full transition of all MPEs to new JMPS framework has occurred. FY 2013 Plans: Continue support of efforts aimed at improving aircrew interface. Continue support of CWDS requirements for multiple MPEs on two different frameworks: PFPS and JMPS. Continue transition to the redeveloped CWDS software for alignment with the JMPS		2.500	2.000	2.000

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013
roadmap architecture. Continue support of legacy CWDS development until full transition of all MPEs to new JMPS framework has occurred.			
FY 2014 Plans: 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.			
Accomplishments/Planned Programs Subtotals		18.599	22.654
D. Other Program Funding Summary (\$ in Millions)			
Line Item	FY 2012	FY 2013	FY 2014 Base
• None: N/A	0.000	0.000	0.000
			FY 2014 OCO
			FY 2014 Total
			FY 2015
			FY 2016
			FY 2017
			FY 2018
			Cost To Complete
			Total Cost
			Continuing
Remarks			
E. Acquisition Strategy			
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.			
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 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0207590F: Seek Eagle				PROJECT 674037: SEEK EAGLE Certifications					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Organic F-22 Capabilities	C/CPFF	Lockheed Martin:Marietta, GA	-	2.500	Dec 2011	0.500	Dec 2012	0.500		-		0.500	Continuing	Continuing	
Organic F-35 Capabilities	C/CPFF	Lockheed Martin:Marietta, GA	-	0.000		3.000	Dec 2012	4.000	Jan 2014	-		4.000	Continuing	Continuing	
Multiple fighter and weapon capability support	C/CPFF	Lockheed Martin:Marietta, GA	-	0.100	Feb 2012	0.200	Feb 2013	0.000		-		0.000	Continuing	Continuing	
F15 Test Support	C/CPFF	Boeing:St Louis, MO	-	0.075	Jun 2012	0.075	Jun 2013	0.000		-		0.000	Continuing	Continuing	
Enhance Existing and Develop Organic Electro EMI Capabilities	C/CPFF	Applied Research:Baltimore, MD	-	0.200	Apr 2012	0.250	Apr 2013	0.250	Apr 2014	-		0.250	Continuing	Continuing	
Subtotal			0.000	2.875		4.025		4.750		0.000		4.750			
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Mission Support CWDS	C/CPFF	Survice:Ft Walton Beach, FL	-	1.800	Nov 2011	2.000	Nov 2012	0.000		-		0.000	Continuing	Continuing	
Subtotal			0.000	1.800		2.000		0.000		0.000		0.000			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
96th Test Wing	RO	Eglin AFB:Eglin AFB, FL	-	12.024		13.029		15.555		-		15.555	Continuing	Continuing	
AEDC	PO	Arnold Engineering Dev Center:Arnold AFB, TN	-	0.300		1.500		1.000		-		1.000	Continuing	Continuing	
AFFTC	PO	Edwards AFB:Edward AFB, CA	-	0.300		0.800		0.000		-		0.000	Continuing	Continuing	

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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Various	Various	Various:Multiple,	-	1.300		1.300		3.037		-		3.037	Continuing	Continuing	
Subtotal			0.000	13.924		16.629		19.592		0.000		19.592			

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

			All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	18.599	22.654	24.342	0.000	24.342			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force		DATE: April 2013
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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.

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
LJDAM	1	2012	4	2018
JASSM	1	2012	4	2018
SDB	1	2012	4	2018
AIM-9X	1	2012	4	2018
AIM-120	1	2012	4	2018
WCMD	1	2012	4	2018
MALD	1	2012	4	2018
SNIPER	1	2012	4	2018
LITENING	1	2012	4	2018
BRU-57	1	2012	4	2018
BRU-61	1	2012	4	2018
B61 (Mod 12)	1	2012	4	2018
BLU-111	1	2012	4	2018
BLU-117	1	2012	4	2018
BLU-129	1	2012	4	2013
AGM-65L	1	2012	4	2013
AN/ASQ-T50	1	2012	4	2013
BDU-50	1	2012	4	2013