PE NUMBER: 0207590F PE TITLE: Seek Eagle

	- The Louis Lagio										
	Exhibit R-2, RDT&E Budget Item Justification										9
	BUDGET ACTIVITY PE NUMBER AND TITLE 07 Operational System Development 0207590F Seek Eagle										
	Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
	Total Program Element (PE) Cost	22.663	21.586	22.071	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
4037	SEEK EAGLE Certifications	22,663	21.586	22.071	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

(U) 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 program recommends about 1000 aircraft/store combinations for flight each year with analysis and testing, in support of certification, 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). 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 weapons programs (and all new variants) including, but not limited to: Small Diameter Bomb (SDB) I/II, Laser Joint Direct Attack Munitions (LJDAM), Joint Air-to-Surface Standoff Missile (JASSM), AIM-9X, AIM-120 (Advanced Medium Range Air-to-Air Missile, AMRAAM), Miniature Air-Launched Decoy (MALD), BRU-57 (Smart Bomb Rack), low collateral damage warheads for Precision Guided Munitions (PGMs), Sniper Targeting Pod with video data link, LITENING Targeting Pod with video data link, GBU-51, GBU-54, Airborne Instrumentation System (AIS) pods, and many other inventory stores on inventory aircraft. SEEK EAGLE funds are also budgeted to continue developing F-22 engineering models/data and to provide follow-on technical support from Lockheed Martin. SEEK EAGLE funds are used to obtain non-inventory stores for post-integration certification requirements.

The RDT&E Budget Activity is 07, Operational System Development, because the program supports fielded systems.

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	Exhibit R-2, RDT&E Bo	DATE				
DI ID	GET ACTIVITY	PE NUMBER AND TITLE		May	2009	
	Operational System Development	0207590F Seek Eagle				
(U)	B. Program Change Summary (\$ in Millions)					
(U) (U) (U) (U)	Previous President's Budget Current PBR/President's Budget Total Adjustments Congressional Program Reductions Congressional Rescissions Congressional Increases		FY 2008 22.823 22.663 -0.160	FY 2009 21.645 21.586 -0.059	FY 2010 24.521 22.071	
(U)	Reprogrammings SBIR/STTR Transfer Significant Program Changes: FY10 \$2.450M reduction due to higher priorities.		-0.160			
		R-1 Line Item No. 158 Page-2 of 7		Exhibit F	R-2 (PE 0207590F)	

Exhibit R-2a, RDT&E Project Justification										May 200)9
BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT NUMBER AND TITLE 07 Operational System Development 0207590F Seek Eagle 4037 SEEK EAGLE Certification							ations				
	Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
4037	SEEK EAGLE Certifications	22.663	21.586	22.071	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

Project 4037

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 program recommends about 1000 aircraft/store combinations for flight each year with analysis and testing, in support of certification, 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). 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 weapons programs (and all new variants) including, but not limited to: Small Diameter Bomb (SDB) I/II, Laser Joint Direct Attack Munitions (LJDAM), Joint Air-to-Surface Standoff Missile (JASSM), AIM-9X, AIM-120 (Advanced Medium Range Air-to-Air Missile, AMRAAM), Miniature Air-Launched Decoy (MALD), BRU-57 (Smart Bomb Rack), low collateral damage warheads for Precision Guided Munitions (PGMs), Sniper Targeting Pod with video data link, LITENING Targeting Pod with video data link, GBU-51, GBU-54, Airborne Instrumentation System (AIS) pods, and many other inventory stores on inventory aircraft. SEEK EAGLE funds are also budgeted to continue developing F-22 engineering models/data and to provide follow-on technical support from Lockheed Martin. SEEK EAGLE funds are used to obtain non-inventory stores for post-integration certification requirements.

The RDT&E Budget Activity is 07, Operational System Development, because the program supports fielded systems.

(U)	B. Accomplishments/Planned Program (\$ in Millions)	FY 2008	FY 2009	FY 2010
(U)	Continue development of F-22A data and engineering models to use for follow-on F-22A weapons certification and	3.500	1.800	4.200
	follow-on technical support from the contractor.			
(U)	Develop mission planning software including CWDS	3.300	3.500	3.500
(U)	Continue/complete various technology/ process improvement projects such as store separation prediction capabilities	2.700	2.900	2.900
	using Applied Computational Fluid Dynamics (ACFD).			
(U)	Conduct various aircraft-store certifications on USAF fighter, bomber, and USA aircraft.	13.163	13.386	11.471
(U)	Total Cost	22.663	21.586	22.071
	Conduct various aircraft-store certifications on USAF fighter, bomber, and USA aircraft.			

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Exhibit R-2a (PE 0207590F

DATE Exhibit R-2a, RDT&E Project Justification May 2009 PROJECT NUMBER AND TITLE PE NUMBER AND TITLE BUDGET ACTIVITY 0207590F Seek Eagle 07 Operational System Development **4037 SEEK EAGLE Certifications** (U) C. Other Program Funding Summary (\$ in Millions) Cost to Total Cost FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 Actual **Estimate Estimate Estimate Estimate Estimate Estimate Estimate** (U) None

(U) D. 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.

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Page-4 of 7 Exhibit R-2a (PE 0207590F) Project 4037

BUI	Exhibit R-3, RDT&E Project Cost Analysis May 2009 PER NUMBER AND TITLE PROJECT NUMBER AND TITLE												
										EEK EAGLE Certifications			
	Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2008 Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U)	Product Development Lockheed Martin Subtotal Product Development Remarks:	C/CPFF	Marietta, GA	5.200 5.200	1.919 1.919		1.500 1.500		1.500 1.500		Continuing Continuing	TBD TBD	0.000
(U)	Support Mission Support Subtotal Support Remarks:	PO/REO	Eglin AFB, FL	16.054 16.054	1.956 1.956		3.500 3.500		3.500 3.500		Continuing Continuing	TBD TBD	0.000
(U)	Test & Evaluation 46th Test Wing AEDC	PO/REO PO/REO	Eglin AFB, FL Arnold Engineering	175.957 20.541	12.632 0.100		12.950 0.691		13.417 1.000		Continuing Continuing	TBD TBD	
	Various	PO/REO/M IPR	Dev Center TN Multiple other for T&E Support	83.320	6.056		2.945		2.654		Continuing	TBD	
(U)	Subtotal Test & Evaluation Remarks: <u>Management</u>			279.818	18.788		16.586		17.071		Continuing	TBD	0.000
(T.F.	Subtotal Management Remarks:			0.000	0.000		0.000		0.000		0.000	0.000 0.000	0.000
(U)	Total Cost			301.072	22.663		21.586		22.071		Continuing	TBD	0.0

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Project 4037

Exhibit R-3 (PE 0207590F)

Exhibit R-4, RDT&E Schedule F	Profile	May 2009
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
07 Operational System Development	0207590F Seek Eagle	4037 SEEK EAGLE Certifications

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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Project 4037

Exhibit R-4a, RI	DATE Ma	y 2009				
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207590F Seek Eagle		PROJECT NUMBER AND TITLE 4037 SEEK EAGLE Certifications			
(U) Schedule Profile	FY 2008	FY 2009	FY 2010			
(U) JDAM	1-4Q	1-4Q	1-4Q			
(U) JASSM	1-4Q	1-4Q	1-4Q			
(U) SDB	1-4Q	1-4Q	1-4Q			
(U) AIM-9X	1-4Q	1-4Q	1-4Q			
(U) AIM-120	1-4Q	1-4Q	1-4Q			
(U) WCMD	1-4Q	1-4Q	1-4Q			
(U) MALD	1-4Q	1-4Q	1-4Q			
(U) SNIPER VDL	1-4Q	1-4Q	1-4Q			
(U) LITENING GEN 4	1-4Q	1-4Q	1-4Q			

Note: 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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