PE NUMBER: 0207590F PE TITLE: Seek Eagle

Exhibit R-2, RDT&E Budget Item Justification							DATE	February	2004
BUDGET ACTIVITY 07 Operational System Developmen	t			PE NUMBER AND 0207590F See					
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cos	t 16.080	19.421	23.159	21.152	18.319	21.712	22.047	0.000	0.000
4037 SEEK EAGLE Certifications	16.080	19.421	23.159	21.152	18.319	21.712	22.047	0.000	0.000

(U) A. Mission Description and Budget Item Justification

The Air Force has a variety of combat aircraft and numerous stores (munitions, missiles, fuel tanks, electronic countermeasures pods, etc.). Aircraft carry these stores in countless different loading combinations determined by operational scenarios, missions, and tactics. Loading configurations change as operational plans and tactics change, and as new aircraft and stores are developed and produced. Before operational use, the Air Force must certify these configurations for safe loading, carriage, and separation (jettison and normal release), and must verify ballistics accuracy under the user-certified carriage and employment parameters. The Air Force SEEK EAGLE program completes these certifications through any combination of ground and flight testing, wind tunnel testing, modeling and simulation, and engineering analysis. Over 700 aircraft-store combinations exist to be certified, with new ones added on a regular basis. Depending upon the complexity, certification takes from months to years. The SEEK EAGLE program is also responsible for insertion of new and emerging technologies into the SEEK EAGLE process and providing resources for sustainment of a viable Air Force aircraft-store certification capability. Electronic Technical Orders are developed through the Combat Weapons Delivery Software (CWDS), creating cost savings by eliminating paper technical orders. SEEK EAGLE funds are currently budgeted to support certification for new weapons programs including Wind Corrected Munitions Dispenser (WCMD), Joint Direct Attack Munition (JDAM), Joint Air to Surface Standoff Missile (JASSM), Joint Standoff Weapon (JSOW), AIM-9X, AIM-120 C5 (AMRAAM), and many other inventory stores on inventory aircraft. Planning and budgeting estimations are in progress for future certifications of weapons on F/A-22 and the Joint Strike Fighter (JSF).

The RDT&E Budget Activity is 7, Operational System Development, because the program supports fielded systems.

(U) B. Program Change Summary (\$ in Millions)

ı		<u>FY 2003</u>	<u>FY 2004</u>	FY 2005
ı	(U) Previous President's Budget	16.792	19.587	23.220
ı	(U) Current PBR/President's Budget	16.080	19.421	23.159
ı	(U) Total Adjustments	-0.712	-0.166	
ı	(U) Congressional Program Reductions			
ı	Congressional Rescissions		-0.166	
ı	Congressional Increases			
ı	Reprogrammings	-0.226		
ı	SBIR/STTR Transfer	-0.486		
ı	(U) Significant Program Changes:			

R-1 Shopping List - Item No. 153-2 of 153-7

	Exhibit R-2a, RDT&E Project Justification							DATE	February	2004
					PROJECT NUME 4037 SEEK E		cations			
	Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
4037	SEEK EAGLE Certifications	16.080	19.421	23.159	21.152	18.319	21.712	22.047	0.000	0.000
	Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The Air Force has a variety of combat aircraft and numerous stores (munitions, missiles, fuel tanks, electronic countermeasures pods, etc.). Aircraft carry these stores in countless different loading combinations determined by operational scenarios, missions, and tactics. Loading configurations change as operational plans and tactics change, and as new aircraft and stores are developed and produced. Before operational use, the Air Force must certify these configurations for safe loading, carriage, and separation (jettison and normal release), and must verify ballistics accuracy under the user-certified carriage and employment parameters. The Air Force SEEK EAGLE program completes these certifications through any combination of ground and flight testing, wind tunnel testing, modeling and simulation, and engineering analysis. Over 700 aircraft-store combinations exist to be certified, with new ones added on a regular basis. Depending upon the complexity, certification takes from months to years. The SEEK EAGLE program is also responsible for insertion of new and emerging technologies into the SEEK EAGLE process and providing resources for sustainment of a viable Air Force aircraft-store certification capability. Electronic Technical Orders are developed through the Combat Weapons Delivery Software (CWDS), creating cost savings by eliminating paper technical orders. SEEK EAGLE funds are currently budgeted to support certification for new weapons programs including Wind Corrected Munitions Dispenser (WCMD), Joint Direct Attack Munition (JDAM), Joint Air to Surface Standoff Missile (JASSM), Joint Standoff Weapon (JSOW), AIM-9X, AIM-120 C5 (AMRAAM), and many other inventory stores on inventory aircraft. Planning and budgeting estimations are in progress for future certifications of weapons on F/A-22 and the Joint Strike Fighter (JSF).

The RDT&E Budget Activity is 7, Operational System Development, because the program supports fielded systems.

(U)	B. Accomplishments/Planned Program (\$ in Millions)	FY 2003	FY 2004	FY 2005				
(U)	Accomplishments/Planned Program	0.000	0.000	0.000				
(U)	Continue development of F/A-22 data and engineering models to use for follow-on F/A-22 weapons certification	0.500	1.000	2.000				
(U)	Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS	2.850	3.300	3.300				
(U)	Continue/complete various technology process improvement projects and aircraft load/separation prediction	2.661	2.768	2.950				
l	capabilities using ACFD (Applied Computational Fluid Dynamics)							
(U)	Conduct various aircraft-store certifications on USAF fighter and bomber aircraft	10.069	12.353	14.909				
(U)	Total Cost	16.080	19.421	23.159				
(U)	C. Other Program Funding Summary (\$ in Millions)							
	<u>FY 2003</u> <u>FY 2004</u> <u>FY 2005</u> <u>FY 2006</u> <u>FY 2007</u>	<u>FY 2008</u> <u>FY 2009</u>	Cost to	Total Cost				
l	Actual Estimate Estimate Estimate Estimate	Estimate Estimate	Complete	Total Cost				
(U)	AF RDT&E							
(U)	Other APPN							
Pr	Project 4037 R-1 Shopping List - Item No. 153-3 of 153-7 Exhibit R-2a (PE 0207590F)							

	Exhibit R-2a, RDT&E Project Justification							DATE	February 2	004
	· - · · · · · · · · · · · · · · · · · ·				PROJECT NUME 4037 SEEK E	BER AND TITLE AGLE Certific	ations			
(U)	C. Other Program Funding Sumn	nary (\$ in Million	<u>ıs)</u>							
(U)	Proc of Ammunition, AF*									
(U)	- JDAM (PE 0207327F)	0.297	0.143	0.000	0.000	0.103	0.000	0.000	Continuing	TBD
(U)	- WCMD (PE 0207600F)	0.000	0.133	0.000	0.000	0.096	0.000	0.000	Continuing	TBD
(U)	Missile Procurement, AF*									
(U)	- JSOW (PE 0207324F)	0.000	0.964	0.000	0.958	0.000	0.000	0.000	Continuing	TBD
(U)	- AIM-120 C5 (AMRAAM) (PE 0207163F)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
(U)	- AIM-9X (PE 0207161F)	1.751	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
(U)	- JASSM (PE 0207325F)	3.735	1.433	2.837	0.000	2.842	0.000	0.000	Continuing	TBD
	* Note: The SEEK EAGLE procurement dollars shown above are appropriated in each weapon's P-1 line.									

(U) <u>D. Acquisition Strategy</u>

Budget authorization for procurement funds are given directly to the weapon system program offices, who then procure the required certification test articles through the weapon production contract.

Project 4037 R-1 Shopping List - Item No. 153-4 of 153-7 Exhibit R-2a (PE 0207590F)

E	xhibit R-3, F	RDT&E Project Cos	t Analysis						DATE	Fahrua		\ <u> </u>
BUDGET ACTIVITY 07 Operational System Development	,	•	PE NUMBE 0207590	R AND T					CT NUMBE	Februa R AND TIT AGLE Cer	LE	
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Meth & Type	nod Performing Activity & Location	Total Prior to FY 2003 Cost	<u>FY</u> 2003 <u>Cost</u>	FY 2003 Award Date	<u>FY</u> 2004 <u>Cost</u>	FY 2004 Award Date	<u>FY</u> 2005 <u>Cost</u>	FY 2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development Lockheed Martin Leigh Aerosystems Subtotal Product Development Remarks:	C/CPFF FFP	Marietta, GA Carlsbad, CA	5.045 0.943 5.988	0.500 0.000 0.500		1.000 0.000 1.000		2.000 0.000 2.000		0.000	15.648 0.943 16.591	0.000
(U) <u>Support</u> Mission Support Subtotal Support Remarks:	PO/REO	Eglin AFB, FL	11.154 11.154	0.700 0.700		0.800 0.800		0.900 0.900		Continuing Continuing	TBD TBD	0.000
(U) Test & Evaluation 46th Test Wing AEDC Various Subtotal Test & Evaluation Remarks:	PO/REO PO/REO PO/REO	Eglin AFB, FL Eglin AFB, FL Eglin AFB, FL	117.348 16.857 59.868 194.073	8.871 0.909 5.100 14.880		10.921 1.100 5.600 17.621		12.159 1.500 6.600 20.259	C	Continuing Continuing Continuing	TBD TBD TBD TBD	0.000
(U) Management Subtotal Management Remarks:			0.000	0.000		0.000		0.000		0.000	0.000	
(U) Total Cost			211.215	16.080		19.421		23.159	C	Continuing	TBD	0.000
Project 4037		R-1 Shopping List -	Item No. 153-5	5 of 153-7						Exhibit R	-3 (PE 02	:07590F)

Exhibit R-4, RD	T&E Schedule Profile	February 2004
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207590F Seek Eagle	 NUMBER AND TITLE EK 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.

Project 4037

R-1 Shopping List - Item No. 153-6 of 153-7

Exhibit R-4 (PE 0207590F)

Exhibit R-4a, RDT&	DATE Febru	ary 2004	
BUDGET ACTIVITY 07 Operational System Development			ITLE ertifications
(U) Schedule Profile	FY 2003	FY 2004	FY 2005
(U) JDAM	1-4Q	1-4Q	
(U) WCMD		1-4Q	
(U) AIM-9X (Sidewinder)	1-4Q		
(U) JSOW		1-4Q	
(U) JASSM	1-4Q	1-4Q	1-4Q
Note: The SEEK EAGLE program does not execute in accordance v goes through the SEEK EAGLE process by the designated user prio		ft-store configuration request	ed by the user

Project 4037 R-1 Shopping List - Item No. 153-7 of 153-7

Exhibit R-4a (PE 0207590F)