

## UNCLASSIFIED

## RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0207590F Seek Eagle

PROJECT

4037

COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4037 SEEK EAGLE Certifications	22,093	19,294	17,833	17,273	21,403	24,091	22,279	19,417	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

(U) **A. Mission Description**

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-22 and the Joint Strike Fighter (JSF).

(U) **FY 2000 (\$ in Thousands)**

(U) \$1,645	Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification
(U) \$2,835	Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS
(U) \$2,124	Continue/complete various technology improvement projects and aircraft load/separation prediction capabilities using Applied Computational Fluid Dynamics (ACFD)
(U) \$15,489	Conduct various aircraft-store certifications on USAF fighter and bomber aircraft
(U) \$22,093	Total

Note: The following net transaction is not reflected in the FY00 program total: BTR=-103K. This transaction is reflected in other sections of the R-Docs where an FY00 total is shown.

Project 4037

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Exhibit R-2 (PE 0207590F)

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<p>(U) <b><u>A. Mission Description Continued</u></b></p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">(U) \$1,600</td> <td>Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification</td> </tr> <tr> <td>(U) \$2,971</td> <td>Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS</td> </tr> <tr> <td>(U) \$2,442</td> <td>Continue/complete various technology improvement projects and aircraft load/separation prediction capabilities using ACFD</td> </tr> <tr> <td>(U) \$12,281</td> <td>Conduct various aircraft-store certifications on USAF fighter and bomber aircraft</td> </tr> <tr> <td>(U) \$19,294</td> <td>Total</td> </tr> </table> <p>Note: The following net transactions are not reflected in the FY01 program total: BTR=-293K and SBIR=-717K. These transactions are not reflected in other sections of the R-Docs where an FY01 total is shown.</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">(U) \$1,655</td> <td>Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification</td> </tr> <tr> <td>(U) \$3,108</td> <td>Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS</td> </tr> <tr> <td>(U) \$2,551</td> <td>Continue/complete various technology improvement projects and aircraft load/separation prediction capabilities using ACFD</td> </tr> <tr> <td>(U) \$10,519</td> <td>Conduct various aircraft-store certifications on USAF fighter and bomber aircraft</td> </tr> <tr> <td>(U) \$17,833</td> <td>Total</td> </tr> </table> <p>(U) <b><u>B. Budget Activity Justification</u></b></p> <p>The RDT&amp;E Budget Activity is 7, Operational Systems Development, because the program supports fielded systems.</p> <p>(U) <b><u>C. Program Change Summary (\$ in Thousands)</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 55%;"></th> <th style="width: 10%; text-align: center;"><u>FY 2000</u></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 10%; text-align: center;"><u>FY 2002</u></th> <th style="width: 15%; text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2001 PBR)</td> <td style="text-align: center;">22,851</td> <td style="text-align: center;">19,472</td> <td style="text-align: center;">17,799</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">23,133</td> <td style="text-align: center;">19,472</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    a. 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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE <b>June 2001</b>			
BUDGET ACTIVITY <b>07 - Operational System Development</b>				PE NUMBER AND TITLE <b>0207590F Seek Eagle</b>			PROJECT <b>4037</b>			
<b>(U) C. Program Change Summary (\$ in Thousands) Continued</b>										
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>						
(U) Current Budget Submit/FY 2002 PBR	22,093	19,294	17,833	TBD						
<b>(U) Significant Program Changes:</b>										
NONE										
<b>(U) D. Other Program Funding Summary (\$ in Thousands)</b>										
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E										
(U) Other APPN										
(U) Proc of Ammunition, AF*										
(U) - P-1 Line JDAM	0	0	147	302	145	0	0	105	Continuing	970
(U) - P-1 Line WCMD	0	0	0	0	135	0	0	97	Continuing	4,146
(U) Missile Procurement, AF*								0		
(U) - P-1 Line JSOW	1,150	0	1,032	0	1,010	0	1,013	0	Continuing	22,763
(U) - P-1 Line AIM-120 C5	0	607	0	0	0	0	0	0	Continuing	15,137
(U) (AMRAAM)										
(U) - P-1 Line AIM-9X,	0	2,892	5,378	1,760	0	0	0	0	Continuing	TBD
(U) (Sidewinder)										
(U) - P-1 Line JASSM	0	0	744	3,754	1,501	3,003	0	2,998	Continuing	12,000
* Note: The SEEK EAGLE procurement dollars shown above are appropriated in each weapon's P-1 line.										
<b>(U) E. Acquisition Strategy</b>										
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.										
<b>(U) F. Schedule Profile</b>										
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>							

Project 4037

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Exhibit R-2 (PE 0207590F)

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## RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0207590F Seek Eagle

PROJECT

4037

(U) **F. Schedule Profile Continued**

<u>FY 2000</u>				<u>FY 2001</u>				<u>FY 2002</u>			
1	2	3	4	1	2	3	4	1	2	3	4
(U) JDAM								X	X	X	X
(U) AIM-120 C5 (AMRAAM)				*	*	*	X				
(U) AIM-9X (Sidewinder)				*	*	*	X	X	X	X	X
(U) JSOW	*	*	*	*				X	X	X	X
(U) JASSM								X	X	X	X

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.

\* = Completed Event

X = Planned hardware buy in support of upcoming certification activities.

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE June 2001			
BUDGET ACTIVITY					PE NUMBER AND TITLE				PROJECT	
<b>07 - Operational System Development</b>					<b>0207590F Seek Eagle</b>				<b>4037</b>	
(U) <b><u>A. Project Cost Breakdown (\$ in Thousands)</u></b>										
						<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>		
(U)	Process Sustainment					2,124	2,442	2,551		
(U)	F-22 Data & Engineering Models					1,645	1,600	1,655		
(U)	Engineering Analysis					4,000	4,200	4,400		
(U)	Flight Testing					8,236	6,506	4,194		
(U)	Wind Tunnel Testing					2,428	700	1,000		
(U)	Other					2,835	2,971	3,108		
(U)	- Ballistic/ Safe Escape Analysis									
(U)	- Tech Order/P.C. Floppy Disk									
(U)	- Loading Process Development/Verification									
(U)	Mission Support					825	875	925		
(U)	Total					22,093	19,294	17,833		
(U) <b><u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u></b>										
(U) <b><u>Performing Organizations:</u></b>										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
Lockheed Martin	C/CPFF	Jul 98	15,648	15,648	1,900	1,645	1,600	1,655	8,848	15,648
Leigh Aerosystems	FFP	Jan 00	943	943	943	0	0	0	0	943
<u>Support and Management Organizations</u>										
Mission Support	PO/REO	Continuous	N/A	N/A	9,067	825	875	925	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
46th Test Wing	PO/REO	Continuous	N/A	N/A	89,777	8,510	9,158	8,404	Continuing	TBD
AEDC	PO/REO	Continuous	N/A	N/A	13,738	2,428	700	1,000	Continuing	TBD
Various	PO/REO	Continuous	N/A	N/A	38,392	8,685	6,961	5,849	Continuing	TBD

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Exhibit R-3 (PE 0207590F)

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE June 2001	
BUDGET ACTIVITY		PE NUMBER AND TITLE				PROJECT
07 - Operational System Development		0207590F Seek Eagle				4037
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>
<u>Subtotals</u>						<u>Total</u>
Subtotal Product Development		2,843	1,645	1,600	1,655	16,591
Subtotal Support and Management		9,067	825	875	925	TBD
Subtotal Test and Evaluation		141,907	19,623	16,819	15,253	TBD
Total Project		153,817	22,093	19,294	17,833	TBD

Project 4037

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Exhibit R-3 (PE 0207590F)

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