

UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | | | | | | | | DATE February 2002 | | |
|--|----------------------------|-------------------|---------------------|--|---------------------|---------------------|---------------------------|-----------------------|---------------------|------------|
| BUDGET ACTIVITY 07 - Operational System Development | | | | PE NUMBER AND TITLE 0207590F Seek Eagle | | | | PROJECT 4037 | | |
| COST (\$ in Thousands) | | FY 2001 Actual | 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 | 18,284 | 17,654 | 16,972 | 20,965 | 23,577 | 21,737 | 18,846 | Continuing | TBD |
| | Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <p>(U) <u>A. Mission Description</u></p> <p>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).</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$1,000 Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification</p> <p>(U) \$2,971 Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS</p> <p>(U) \$2,442 Continue/complete various technology improvement projects and aircraft load/separation prediction capabilities using ACFD</p> <p>(U) \$11,871 Conduct various aircraft-store certifications on USAF fighter and bomber aircraft</p> <p>(U) \$18,284 Total</p> | | | | | | | | | | |
| Project 4037 | | | Page 1 of 6 Pages | | | | Exhibit R-2 (PE 0207590F) | | | |

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|--|---|-----------------------|----------------|---------------------------|
| BUDGET ACTIVITY | PE NUMBER AND TITLE | PROJECT | | |
| 07 - Operational System Development | 0207590F Seek Eagle | 4037 | | |
| (U) <u>A. Mission Description Continued</u> | | | | |
| (U) <u>FY 2002 (\$ in Thousands)</u> | | | | |
| (U) \$1,000 | Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification | | | |
| (U) \$2,963 | Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS | | | |
| (U) \$2,559 | Continue/complete various technology improvement projects and aircraft load/separation prediction capabilities using ACFD | | | |
| (U) \$11,132 | Conduct various aircraft-store certifications on USAF fighter and bomber aircraft | | | |
| (U) \$17,654 | Total | | | |
| (U) <u>FY 2003 (\$ in Thousands)</u> | | | | |
| (U) \$1,800 | Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification | | | |
| (U) \$3,082 | Conduct various automation projects and automated Technical Orders/mission planning projects using CWDS | | | |
| (U) \$2,661 | Continue/complete various technology improvement projects and aircraft load/separation prediction capabilities using ACFD | | | |
| (U) \$9,429 | Conduct various aircraft-store certifications on USAF fighter and bomber aircraft | | | |
| (U) \$16,972 | Total | | | |
| (U) <u>B. Budget Activity Justification</u> | | | | |
| The RDT&E Budget Activity is 7, Operational Systems Development, because the program supports fielded systems. | | | | |
| (U) <u>C. Program Change Summary (\$ in Thousands)</u> | | | | |
| | <u>FY 2001</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>Total Cost</u> |
| (U) Previous President's Budget | 19,472 | 17,833 | 17,273 | TBD |
| (U) Appropriated Value | 19,472 | 17,833 | | |
| (U) Adjustments to Appropriated Value | | | | |
| a. Congressional/General Reductions | -136 | -179 | | |
| b. Small Business Innovative Research | -717 | | | |
| c. Omnibus or Other Above Threshold Reprogram | | | | |
| d. Below Threshold Reprogram | -293 | | | |
| e. Rescissions | -42 | | | |
| (U) Adjustments to Budget Years Since FY 2002 PBR | | | -301 | |
| (U) Current Budget Submit/FY 2003 PBR | 18,284 | 17,654 | 16,972 | TBD |
| Project 4037 | Page 2 of 6 Pages | | | Exhibit R-2 (PE 0207590F) |

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|---|----------------|-----------------|-----------------|---|-----------------|-----------------|------------------------------|-----------------|-------------------|
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| BUDGET ACTIVITY 07 - Operational System Development | | | | PE NUMBER AND TITLE 0207590F Seek Eagle | | | PROJECT 4037 | | |
| (U) C. Program Change Summary (\$ in Thousands) Continued | | | | | | | | | |
| (U) Significant Program Changes: | | | | | | | | | |
| Funding: FY03 change due to OSD reduction for Nonpay Purchases Inflation and to fund contractor support (-\$0.301M) | | | | | | | | | |
| Schedule: None | | | | | | | | | |
| Technical: None | | | | | | | | | |
| (U) D. Other Program Funding Summary (\$ in Thousands) | | | | | | | | | |
| | <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>Complete</u> | |
| (U) AF RDT&E | | | | | | | | | |
| (U) Other APPN | | | | | | | | | |
| (U) Proc of Ammunition, AF* | | | | | | | | | |
| (U) - P-1 Line JDAM | 0 | 147 | 300 | 144 | 0 | 0 | 103 | Continuing | 965 |
| (U) - P-1 Line WCMD | 0 | 0 | 0 | 134 | 0 | 0 | 96 | Continuing | 4,144 |
| (U) Missile Procurement, AF* | | | | | | | 0 | | |
| (U) - P-1 Line JSOW | 0 | 1,032 | 0 | 999 | 0 | 996 | 0 | Continuing | 22,735 |
| (U) - P-1 Line AIM-120 C5 | 607 | 0 | 0 | 0 | 0 | 0 | 0 | Continuing | 15,137 |
| (U) (AMRAAM) | | | | | | | | | |
| (U) - P-1 Line AIM-9X, | 2,892 | 5,378 | 1,751 | 0 | 0 | 0 | 0 | Continuing | TBD |
| (U) (Sidewinder) | | | | | | | | | |
| (U) - P-1 Line JASSM | 0 | 744 | 3,735 | 1,485 | 2,966 | 0 | 2,939 | Continuing | 11,869 |
| * Note: The SEEK EAGLE procurement dollars shown above are appropriated in each weapon's P-1 line. | | | | | | | | | |
| (U) E. Acquisition Strategy | | | | | | | | | |
| 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. | | | | | | | | | |
| (U) F. Schedule Profile | | | | | | | | | |
| | <u>FY 2001</u> | | | <u>FY 2002</u> | | | <u>FY 2003</u> | | |

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|--|---|----------------|---|---|--|----------------|---|---|---|-----------------------|---|---|--|
| BUDGET ACTIVITY 07 - Operational System Development | | | | | PE NUMBER AND TITLE 0207590F Seek Eagle | | | | | PROJECT 4037 | | | |
| (U) <u>F. Schedule Profile Continued</u> | | | | | | | | | | | | | |
| | | <u>FY 2001</u> | | | | <u>FY 2002</u> | | | | <u>FY 2003</u> | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| (U) JDAM | | | | | * | X | X | X | X | X | X | X | |
| (U) AIM-120 C5 (AMRAAM) | * | * | * | * | | | | | | | | | |
| (U) AIM-9X (Sidewinder) | * | * | * | * | * | X | X | X | X | X | X | X | |
| (U) JSOW | | | | | * | X | X | X | | | | | |
| (U) JASSM | | | | | * | X | X | X | X | X | X | X | |
| <p>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.</p> <p>* = Completed Event</p> <p>X = Planned hardware buy in support of upcoming certification activities.</p> | | | | | | | | | | | | | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | DATE February 2002 | | | |
|---|--|----------------------------|----------------------------|-----------------------|-------------------------------|-----------------------|-----------------------|---------------------------|---------------------------|----------------------|
| BUDGET ACTIVITY | | | | | PE NUMBER AND TITLE | | | PROJECT | | |
| 07 - Operational System Development | | | | | 0207590F Seek Eagle | | | 4037 | | |
| (U) A. Project Cost Breakdown (\$ in Thousands) | | | | | | | | | | |
| | | | | | | <u>FY 2001</u> | | <u>FY 2002</u> | | <u>FY 2003</u> |
| (U) | Process Sustainment | | | | | 2,042 | | 1,504 | | 1,044 |
| (U) | F-22 Data & Engineering Models | | | | | 1,000 | | 1,000 | | 1,800 |
| (U) | Engineering Analysis | | | | | 5,159 | | 5,400 | | 4,800 |
| (U) | Flight Testing | | | | | 6,350 | | 5,487 | | 4,821 |
| (U) | Wind Tunnel Testing | | | | | 0 | | 500 | | 575 |
| (U) | Other | | | | | 2,971 | | 2,963 | | 3,082 |
| (U) | - Ballistic/ Safe Escape Analysis | | | | | | | | | |
| (U) | - Tech Order/P.C. Floppy Disk | | | | | | | | | |
| (U) | - Loading Process Development/Verification | | | | | | | | | |
| (U) | Mission Support | | | | | 762 | | 800 | | 850 |
| (U) | Total | | | | | 18,284 | | 17,654 | | 16,972 |
| (U) B. Budget Acquisition History and Planning Information (\$ in Thousands) | | | | | | | | | | |
| (U) Performing Organizations: | | | | | | | | | | |
| <u>Contractor or Government</u> | <u>Contract Method/Type</u> | <u>Award or Obligation</u> | <u>Performing Activity</u> | <u>Project Office</u> | <u>Total Prior to FY 2001</u> | <u>Budget FY 2001</u> | <u>Budget FY 2002</u> | <u>Budget FY 2003</u> | <u>Budget to Complete</u> | <u>Total Program</u> |
| | <u>Vehicle</u> | <u>Date</u> | <u>EAC</u> | <u>EAC</u> | | | | | | |
| <u>Product Development Organizations</u> | | | | | | | | | | |
| Lockheed Martin | C/CPFF | Jul 98 | 15,648 | 15,648 | 3,545 | 1,000 | 1,000 | 1,800 | 8,303 | 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 | 9,892 | 762 | 800 | 850 | Continuing | TBD |
| <u>Test and Evaluation Organizations</u> | | | | | | | | | | |
| 46th Test Wing | PO/REO | Continuous | N/A | N/A | 98,287 | 9,561 | 9,005 | 8,583 | Continuing | TBD |
| AEDC | PO/REO | Continuous | N/A | N/A | 16,166 | 0 | 500 | 575 | Continuing | TBD |
| Various | PO/REO | Continuous | N/A | N/A | 47,077 | 6,961 | 6,349 | 5,164 | Continuing | TBD |
| Project 4037 | | | | | Page 5 of 6 Pages | | | Exhibit R-3 (PE 0207590F) | | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | DATE February 2002 | |
|--|---------------------------------|----------------------------|----------------|----------------|-----------------------|------------------|
| 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 2001</u> | <u>FY 2001</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>Complete</u> |
| | | | | | | <u>Total</u> |
| | <u>Subtotals</u> | | | | | |
| | Subtotal Product Development | 4,488 | 1,000 | 1,000 | 1,800 | 8,303 |
| | Subtotal Support and Management | 9,892 | 762 | 800 | 850 | TBD |
| | Subtotal Test and Evaluation | 161,530 | 16,522 | 15,854 | 14,322 | TBD |
| | Total Project | 175,910 | 18,284 | 17,654 | 16,972 | TBD |