

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2024 Air Force **Date:** March 2023

|  |   |
|--|---|
| <b>Appropriation/Budget Activity</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i> | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> |
|--|---|

| COST (\$ in Millions)                    | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|--|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| Total Program Element                    | -           | 30.484  | 32.853  | 33.478       | 0.000       | 33.478        | 34.924  | 35.798  | 36.530  | 37.852  | Continuing       | Continuing |
| 674037: <i>SEEK EAGLE Certifications</i> | -           | 30.484  | 32.853  | 33.478       | 0.000       | 33.478        | 34.924  | 35.798  | 36.530  | 37.852  | Continuing       | Continuing |
| Quantity of RDT&E Articles               | -           | -       | -       | -            | -           | -             | -       | -       | -       | -       |                  |            |

**A. Mission Description and Budget Item Justification**

The Air Force SEEK EAGLE Office (AFSEO) is designated by the Assistant Secretary of the Air Force (Acquisition, Technology, and Logistics) as the center of expertise for aircraft-store compatibility activities and as the primary source of technical analysis and test support, as well as the central data repository, for the SEEK EAGLE process. The SEEK EAGLE process is a rigorous analysis of many factors to assure the safe and acceptable carriage and release (employment and jettison), safe escape, and ballistics accuracy of all stores on Air Force and foreign military sales aircraft. Thus, the AFSEO's mission is to ensure that every aircraft type is capable of employing the weapons and stores needed to meet Combatant Commander requirements, directly supporting the Secretary of the Air Force's (SECAF) Operational Imperatives (OI), and Cross-cutting Operational Enablers (COE).

The Air Force operates a variety of combat and other aircraft that carry numerous and varied stores: bombs, missiles, rockets, fuel tanks, cargo pods, targeting pods, electronic countermeasures pods, etc. Stores are carried in many different loading combinations determined by operational and training scenarios, missions, tactics, and weapon development programs. Additionally, aircraft-store configuration (carriage and employment) requirements change as operational plans and tactics are updated and/or as new stores are developed and fielded. Aircraft program managers must provide SEEK EAGLE certifications for all aircraft-store configurations within their user-established carriage and employment parameters before they may be used for operations, test, or training. The AFSEO completes flight clearance and certification recommendations through any combination of engineering analysis, wind tunnel testing, modeling and simulation, and ground/flight test and evaluation. The SEEK EAGLE process encompasses eight engineering disciplines: Fit and Function, Flutter, Aircraft and Store Structural Integrity, Stability and Control, Electromagnetic Compatibility/Interference (EMC/EMI), Separations, Ballistics, and Safe Escape.

In support of certification, the AFSEO recommends approximately 1000 aircraft-store combinations for flight each year through engineering analysis and testing. The AFSEO certification portfolio includes the Next Generation Air Dominance (NGAD) Family of Systems and B-21, as well as the following Mission Design Series aircraft: A-10, B-1, B-2, B-52, F-15C/D/E/EX, F-16, QF-16, F-22, F-35, KC-135, WC-130, MC-130H, HH-60W, MH-139A, MQ-9, T-7A, AT-6, and more. Integrated solutions for combat delivery mission planning problems are developed and provided to combat forces via Combat Weapons Delivery Software (CWDS) and Joint Safe Escape Analysis Solution (JSEAS) software. The SEEK EAGLE Office also works in coordination with the Air Force Safety Center to provide Hazards of Electromagnetic Radiation to Ordnance (HERO) analysis and certification recommendations for ordnance systems containing electro-explosive devices. Additionally, the AFSEO is responsible for incorporating new and emerging technologies into the SEEK EAGLE process to make certification more efficient in support of rapid acquisition timelines, as well as resourcing for the sustainment of a viable Air Force aircraft-store certification capability.

**UNCLASSIFIED**

|  |                         |
|--|-------------------------|
| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2024 Air Force | <b>Date:</b> March 2023 |
|--|-------------------------|

|  |   |
|--|---|
| <b>Appropriation/Budget Activity</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i> | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> |
|--|---|

SEEK EAGLE funds are budgeted to support certification testing and analysis for new and inventory stores including, but not limited to: Small Diameter Bomb (SDB) I and II, Laser Joint Direct Attack Munitions (LJDAM), Joint Air-to-Surface Standoff Missile (JASSM), Long-Range Anti-Ship Missile (LRASM), Advanced Medium Range Air-to-Air Missile (AMRAAM), Miniature Air-Launched Decoy (MALD), BRU-57 (Smart Bomb Rack), BRU-61 (SDB Bomb Rack), Advanced Precision Kill Weapon System (APKWS), Sniper Targeting Pod with video data link, LITENING Targeting Pod with video data link, B61-12 nuclear free-fall weapon, penetrator warhead upgrades, practice bombs, electronic warfare pods, reconnaissance pods, and aircraft instrumentation pods. SEEK EAGLE funds also support certification of other inventory stores on Combat Air Forces (CAF) and Special Operations Command (SOCOM) aircraft. In addition, these funds further support capability development and weapons certification efforts required by Air Combat Command (ACC) to achieve Full Operational Capability (FOC) for the F-35A. Many of these weapons certification efforts are directly involved in SECAF OI-3, Moving Target Engagement, and all of them contribute to COE-1, Munitions. Additionally, many of the pods and other stores these funds support contribute directly to COE-2, Electromagnetic Spectrum.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY22 0.00 was expended for civilian pay expenses in this program element, and in FY23 0.00 is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

| <b>B. Program Change Summary (\$ in Millions)</b> | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024 Base</b> | <b>FY 2024 OCO</b> | <b>FY 2024 Total</b> |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget                       | 30.539         | 32.853         | 34.084              | 0.000              | 34.084               |
| Current President's Budget                        | 30.484         | 32.853         | 33.478              | 0.000              | 33.478               |
| Total Adjustments                                 | -0.055         | 0.000          | -0.606              | 0.000              | -0.606               |
| • Congressional General Reductions                | 0.000          | 0.000          |                     |                    |                      |
| • Congressional Directed Reductions               | 0.000          | 0.000          |                     |                    |                      |
| • Congressional Rescissions                       | 0.000          | 0.000          |                     |                    |                      |
| • Congressional Adds                              | 0.000          | 0.000          |                     |                    |                      |
| • Congressional Directed Transfers                | 0.000          | 0.000          |                     |                    |                      |
| • Reprogrammings                                  | 0.000          | 0.000          |                     |                    |                      |
| • SBIR/STTR Transfer                              | -0.055         | 0.000          |                     |                    |                      |
| • Other Adjustments                               | 0.000          | 0.000          | -0.606              | 0.000              | -0.606               |

**Change Summary Explanation**

No significant changes

| <b>C. Accomplishments/Planned Programs (\$ in Millions)</b> | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024</b> |
|---|----------------|----------------|----------------|
| <b>Title:</b> Aircraft-Store Certification                  | 1.659          | 2.610          | 2.423          |

**UNCLASSIFIED**

|  |  |   |                |                |
|--|--|---|----------------|----------------|
| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2024 Air Force   |  | <b>Date:</b> March 2023   |                |                |
| <b>Appropriation/Budget Activity</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>   |  | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> |                |                |
| <b>C. Accomplishments/Planned Programs (\$ in Millions)</b>  |  | <b>FY 2022</b>  | <b>FY 2023</b> | <b>FY 2024</b> |
| <p><b>Description:</b> Evaluates aircraft-store compatibility through analysis of ground and flight test data. Funds direct labor for SEEK EAGLE certifications. Supports procurement of test assets, such as instrumented weapons, and includes end-to-end tracking of MAJCOM requirements from user request to tech data fielding and operational flight program (OFP) updates. Provides certification recommendations to airworthiness authorities.</p> <p><b>FY 2023 Plans:</b><br/>Provide for USAF Air-to-Air and Air-to-Ground Munitions certification efforts such as towed decoys, ECM pods, chaff/flare countermeasures certification efforts, Airborne Instrumentation Systems pods, fuel tanks, and travel pods certification efforts. Continue CWDS upgrade support.</p> <p><b>FY 2024 Plans:</b><br/>Continue to provide for USAF Air-to-Air and Air-to-Ground Munitions certification efforts such as towed decoys, ECM pods, chaff/flare countermeasures certification efforts, Airborne Instrumentation Systems pods, fuel tanks, and travel pods certification efforts. Continue CWDS upgrade support.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>Funding decreased due to balancing thrust areas; decrease is minimal.</p> |  |   |                |                |
| <p><b>Title:</b> Operations Baseline and Mission Support</p> <p><b>Description:</b> Supports the ability to rapidly meet emerging warfighter needs for global operations and other ongoing world-wide operations through sustainment of a viable Air Force aircraft-store certification capability.</p> <p><b>FY 2023 Plans:</b><br/>Support increased Air Force munition and aircraft capability requirements that drive infrastructure and resource capacity needs within the SEEK EAGLE enterprise.</p> <p><b>FY 2024 Plans:</b><br/>Continue to support increased Air Force munition and aircraft capability requirements that drive infrastructure and resource capacity needs within the SEEK EAGLE enterprise.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>Funding increased due to inflation adjustment.</p>   |  | 21.270  | 21.604         | 22.063         |
| <p><b>Title:</b> Advanced Capability Development</p> <p><b>Description:</b> Provides resources to increase the Air Force SEEK EAGLE OFFICE (AFSEO) organic capabilities, to support advanced weapons such as hypersonic weapons and other classified weapons programs, as well as investing in the development</p>   |  | 5.035   | 2.584          | 2.986          |

**UNCLASSIFIED**

|  |  |   |                |                |
|--|--|---|----------------|----------------|
| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2024 Air Force   |  | <b>Date:</b> March 2023   |                |                |
| <b>Appropriation/Budget Activity</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>   |  | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> |                |                |
| <b>C. Accomplishments/Planned Programs (\$ in Millions)</b>  |  | <b>FY 2022</b>  | <b>FY 2023</b> | <b>FY 2024</b> |
| <p>of advanced modeling and analytical tools to make the SEEK EAGLE certification process more efficient in support of rapid acquisition timelines. These resources include, but are not limited to: artificial intelligence, modeling and simulation enhancements, wind tunnel model development, automated tool enhancements, information technology enhancements, and facility improvements.</p> <p><b>FY 2023 Plans:</b><br/>Continue development of the F-35 wind tunnel model, and continue supporting investments in other advanced modeling and simulation, automated tool and information technology enhancements.</p> <p><b>FY 2024 Plans:</b><br/>Commence F-15EX wind tunnel model development, continue development of the F-35 wind tunnel model, and support investments in other advanced modeling and simulation, automated tool and information technology enhancements.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>Funding increased because of automated tools and information technology enhancements.</p> |  |   |                |                |
| <p><b>Title:</b> Tools, Equipment, and Capability Sustainment</p> <p><b>Description:</b> Supports development and sustainment of state-of-the-art engineering and business tools to support the SEEK EAGLE enterprise. Funding resources are required for operational management of existing information and technology infrastructure, hardware, software, and equipment.</p> <p><b>FY 2023 Plans:</b><br/>Support development and sustainment of state-of-the-art engineering and business tools to support SEEK EAGLE enterprise.</p> <p><b>FY 2024 Plans:</b><br/>Continue to support development and sustainment of state-of-the-art engineering and business tools to support SEEK EAGLE enterprise.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>Funding decreased due to balancing thrust areas; decrease is minimal.</p>   |  | 2.520   | 6.055          | 6.006          |
| <b>Accomplishments/Planned Programs Subtotals</b>  |  | 30.484  | 32.853         | 33.478         |
| <b>D. Other Program Funding Summary (\$ in Millions)</b>   |  |   |                |                |
| N/A  |  |   |                |                |
| <b>Remarks</b>   |  |   |                |                |

**UNCLASSIFIED**

|  |   |                         |
|--|---|-------------------------|
| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2024 Air Force   |   | <b>Date:</b> March 2023 |
| <b>Appropriation/Budget Activity</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i> | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> |                         |

**E. Acquisition Strategy**

The SEEK EAGLE program is not an acquisition program in itself; instead it supports other acquisition programs, for both aircraft and weapons or other stores. For initial aircraft-weapons integration, the aircraft or weapon program office is responsible for budgeting and providing the test assets to the Air Force SEEK EAGLE Office (AFSEO) for the store certification requirements. For post-integration certification requirements, AFSEO funds are used to obtain the non-inventory test assets. In addition to the above highlights, budgeting responsibilities for AFSEO are delineated in Air Force Instruction 63-101/20-101, paragraph 5.4.22.1.3, dated 30 June 2020.

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force** **Date:** March 2023

|  |   |   |
|--|---|---|
| <b>Appropriation/Budget Activity</b><br>3600 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> | <b>Project (Number/Name)</b><br>674037 / <i>SEEK EAGLE Certifications</i> |
|--|---|---|

| <b>Product Development (\$ in Millions)</b>            |                        |                                  |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|--|------------------------|----------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                                     | Contract Method & Type | Performing Activity & Location   | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| Advanced Data Analytics - Artificial Intelligence (AI) | SS/FP                  | TAMR : Cambridge, MA             | -           | 2.307   | Apr 2022   | 1.875   | Mar 2023   | -            |            | -           |            | -             | Continuing       | Continuing | -                        |
| AFSEO Mission and Planning Support (SEMATS)            | C/CPFF                 | ERC : Ft. Walton Beach, FL       | -           | 13.188  | Oct 2021   | 13.460  | Oct 2022   | 13.999       | Nov 2023   | -           |            | 13.999        | Continuing       | Continuing | -                        |
| F-35 Capabilities                                      | C/CPFF                 | Lockheed Martin : Marietta, GA   | -           | 0.305   | Nov 2021   | 0.100   | Nov 2022   | 0.195        | Jan 2024   | -           |            | 0.195         | Continuing       | Continuing | -                        |
| Multiple Fighter and Weapon Capability Support         | C/CPFF                 | Multiple : Multiple              | -           | 0.041   | Mar 2022   | 0.064   | Mar 2023   | 0.031        | Mar 2024   | -           |            | 0.031         | Continuing       | Continuing | -                        |
| F-16 Aero Sustainment                                  | C/CPFF                 | Lockheed Martin : Fort Worth, TX | -           | 0.155   | May 2022   | 0.163   | Feb 2023   | 0.167        | Oct 2023   | -           |            | 0.167         | Continuing       | Continuing | -                        |
| <b>Subtotal</b>  |                        |                                  | -           | 15.996  |            | 15.662  |            | 14.392       |            | -           |            | 14.392        | Continuing       | Continuing | N/A                      |

| <b>Test and Evaluation (\$ in Millions)</b>            |                        |   |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|--|------------------------|---|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                                     | Contract Method & Type | Performing Activity & Location                  | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| Flight Tests and Aircraft/Store Compatibility Analysis | PO                     | 96th Test Wing : Eglin AFB, FL                  | -           | 11.250  | Oct 2021   | 14.225  | Oct 2022   | 15.984       | Oct 2023   | -           |            | 15.984        | Continuing       | Continuing | -                        |
| Wind Tunnel Model/Design and Testing                   | PO                     | Arnold Engineering Dev Complex : Arnold AFB, TN | -           | 2.532   | Jan 2022   | 2.384   | Jan 2023   | 1.742        | Jan 2024   | -           |            | 1.742         | Continuing       | Continuing | -                        |
| <b>Subtotal</b>  |                        |   | -           | 13.782  |            | 16.609  |            | 17.726       |            | -           |            | 17.726        | Continuing       | Continuing | N/A                      |

| <b>Management Services (\$ in Millions)</b> |                        |                                |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                          | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| A&AS Support (TMAS)                         | C/CPFF                 | AFTC : Eglin AFB, FL           | -           | 0.105   | Oct 2021   | 0.107   | Oct 2022   | 0.111        | Oct 2023   | -           |            | 0.111         | Continuing       | Continuing | -                        |
| Management Support                          | Various                | Various : Various, FL          | -           | 0.601   | Oct 2021   | 0.475   | Oct 2022   | 1.249        | Oct 2023   | -           |            | 1.249         | Continuing       | Continuing | -                        |



**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force** **Date:** March 2023

|  |   |   |
|--|---|---|
| <b>Appropriation/Budget Activity</b><br>3600 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> | <b>Project (Number/Name)</b><br>674037 / <i>SEEK EAGLE Certifications</i> |
|--|---|---|

| FY 2022 |   |   |   | FY 2023 |   |   |   | FY 2024 |   |   |   | FY 2025 |   |   |   | FY 2026 |   |   |   | FY 2027 |   |   |   | FY 2028 |   |   |   |
|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
| 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 |

|  |  |
|--|--|
| <b>SEEK EAGLE</b>                            |  |
| Aircraft-Store Certification                 |  |
| Operations Baseline and Mission Support      |  |
| Advanced Capability Development              |  |
| Tools, Equipment, and Capability Sustainment |  |

**UNCLASSIFIED**

**Exhibit R-4A, RDT&E Schedule Details:** PB 2024 Air Force **Date:** March 2023

|  |   |   |
|--|---|---|
| <b>Appropriation/Budget Activity</b><br>3600 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0207590F / <i>Seek Eagle</i> | <b>Project (Number/Name)</b><br>674037 / <i>SEEK EAGLE Certifications</i> |
|--|---|---|

Schedule Details

| Events by Sub Project                        | Start   |      | End     |      |
|--|---------|------|---------|------|
|  | Quarter | Year | Quarter | Year |
| <b>SEEK EAGLE</b>                            |         |      |         |      |
| Aircraft-Store Certification                 | 1       | 2022 | 4       | 2028 |
| Operations Baseline and Mission Support      | 1       | 2022 | 4       | 2028 |
| Advanced Capability Development              | 1       | 2022 | 4       | 2028 |
| Tools, Equipment, and Capability Sustainment | 1       | 2022 | 4       | 2028 |

**Note**

Note: The SEEK EAGLE program supports both production stores on production aircraft and the planning for future acquisition program milestones without an anticipated end date. Current warfighter requirements trigger the SEEK EAGLE process for requested aircraft-store configurations, and work is completed in accordance with designated user priorities established through the SEEK EAGLE Prioritization List process.