| Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force | | | | | | | | | | | | Date: March 2024 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appropriation/Budget Activity<br>3620F: *Research, Development, Test & Evaluation, Space Force* / BA 5: *System Development & Demonstration (SDD)* | | | | | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awareness Systems* | | | | | | | |
| **COST ($ in Millions)** | **Prior Years** | **FY 2023** | **FY 2024** | **FY 2025 Base** | **FY 2025 OCO** | **FY 2025 Total** | **FY 2026** | **FY 2027** | **FY 2028** | **FY 2029** | **Cost To Complete** | **Total Cost** |
| Total Program Element | - | 93.914 | 372.827 | 483.605 | 0.000 | 483.605 | 468.666 | 447.323 | 349.612 | 342.017 | 0.000 | 2,557.964 |
| 656565: *Ground Based SDA* | - | 0.000 | 214.739 | 254.562 | 0.000 | 254.562 | 288.296 | 294.242 | 304.856 | 310.869 | 0.000 | 1,667.564 |
| 65A006: *Space Based SDA* | - | 93.914 | 115.636 | 178.100 | 0.000 | 178.100 | 167.595 | 153.081 | 44.756 | 31.148 | 0.000 | 784.230 |
| 65A037: *Ground Based Optical Sensor* | - | 0.000 | 42.452 | 50.943 | 0.000 | 50.943 | 12.775 | 0.000 | 0.000 | 0.000 | 0.000 | 106.170 |

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

Space Domain Awareness (SDA) is one of five core competencies of the Space Force and is the effective identification, characterization, and understanding of any factor, passive or active, associated with the space domain that could affect space operations and thereby impact the security, safety, economy, or environment of our nation. As the foundation for space control, SDA encompasses surveillance of all space objects and activities; detailed surveillance of specific space assets; monitoring space environmental conditions; monitoring cooperative space assets; gathering indications and warning on adversary space operations; and conducting integrated command, control, communications, processing, analysis, dissemination, and archiving activities.

This program element develops new network sensors and improved information integration capabilities across the space surveillance network (SSN) while companion program element 1203940SF fields, upgrades, operationalizes, operates, and maintains Space Force sensors and information integration capabilities within the SSN. Activities funded in this program element (1206425SF) also support efforts such as engineering studies and analyses, architectural engineering studies, trade studies, technology needs forecasting, modernization initiatives, systems engineering, system development, and test & evaluation, and may include prototyping and technology demonstration.

Deep Space Advanced Radar Capability (DARC) is a ground-based, SDA radar system to detect, track, and maintain custody of deep space objects 24/7, through the solar exclusion gap. DARC will augment the SSN as an additional sensor with increased capacity and capability for deep space object custody, providing full global coverage.

The SBSS Follow-On (SBSS FO/SILENTBARKER) program will develop and deliver a system to continue providing space object surveillance from space beyond SBSS Block 10 End-of-Life. The United States Space Force (USSF) and National Reconnaissance Office (NRO) have signed a Memorandum of Agreement partnering SBSS FO with an NRO program based on overlapping requirements. The critical space-based SDA program activity will develop and deliver a system to continue providing space object surveillance. Space Based SDA enables timely detection and custody of on orbit threats in order to protect US High Value Assets in space in support of the National Defense Strategy.

Space Based SDA requirements are based on a Statement of Capabilities and upon the current Space Domain Awareness (SDA) Initial Capabilities Document architectural requirements focused on protecting High Value Assets. Space Based SDA will provide the capability to search, detect, and track objects from a space-based sensor for timely custody and event detection. Surveillance from space augments and overcomes existing ground sensor limitations with timely 24-hour above-

the-weather collection of satellite metric data only possible with a space-based sensor. This data is communicated to operators at the Combined Space Operations Center (CSpOC), National Space Defense Center (NSDC), and other classified users. This program element includes efforts related to Space Based SDA, its integration into the broader space superiority architecture, and analysis and experimentation to ensure space-based space surveillance capabilities against the evolving threat.

Ground Based Optical Sensor System (GBOSS) includes an upgrade to the Ground-based Electro-Optical Deep Space Surveillance (GEODSS) system that enables GEODSS to monitor small, closely-spaced, and advanced threats in low, mid, high, and geostationary orbits. The upgraded system will discover currently undetectable space threats, reduce an adversary's tactical surprise and deliver the data required to support accurate, timely, actionable SDA. This facilitates decision-making within the compressed timelines dictated by the realities of the congested, contested, competitive space domain. The program delivers a combination of performance upgrades to existing GEODSS sites, including advanced data exploitation and rapid data dissemination, and will incorporate coalition data, commercial data and/or new GEODSS sites to provide a global capability to positively ID an adversary committing an orbital attack. The program includes updates to the GEODSS image processing and optical subsystems that will enhance the sensitivity and search rate, and fields new multi-spectral advanced technology sensors supporting extended operations, high-fidelity characterization, enhanced indications and warnings (I&W), and attribution.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Space and Ground Based SDA and Ground Based Optical system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392SF and 1206398SF. For Space Based SDA in PY 0.225M was expended for civilian pay expenses in this program element, and in CY 0.225M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full rate production.

| B. Program Change Summary ($ in Millions) | FY 2023 | FY 2024 | FY 2025 Base | FY 2025 OCO | FY 2025 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 96.940 | 372.827 | 470.054 | 0.000 | 470.054 |
| Current President's Budget | 93.914 | 372.827 | 483.605 | 0.000 | 483.605 |
| Total Adjustments | -3.026 | 0.000 | 13.551 | 0.000 | 13.551 |
| • 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 | -3.026 | 0.000 | | | |
| • Other Adjustments | 0.000 | 0.000 | 13.551 | 0.000 | 13.551 |

**Change Summary Explanation**

FY 2025: -40.118M decrease to Project 65A006, Space Based SDA for higher Space Force priorities.

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>3620F / 5 | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awarenes s Systems* | Project (Number/Name)<br>656565 / *Ground Based SDA* | |

| COST ($ in Millions) | Prior Years | FY 2023 | FY 2024 | FY 2025 Base | FY 2025 OCO | FY 2025 Total | FY 2026 | FY 2027 | FY 2028 | FY 2029 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 656565: *Ground Based SDA* | - | 0.000 | 214.739 | 254.562 | 0.000 | 254.562 | 288.296 | 294.242 | 304.856 | 310.869 | 0.000 | 1,667.564 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

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

Space Domain Awareness (SDA) is one of five core competencies of the Space Force and is the effective identification, characterization, and understanding of any factor, passive or active, associated with the space domain that could affect space operations and thereby impact the security, safety, economy, or environment of our nation. As the foundation for space control, SDA encompasses surveillance of all space objects and activities; detailed surveillance of specific space assets; monitoring space environmental conditions; monitoring cooperative space assets; gathering indications and warning on adversary space operations; and conducting integrated command, control, communications, processing, analysis, dissemination, and archiving activities.

This program element develops new network sensors and improved information integration capabilities across the space surveillance network (SSN) while companion program element 1203940SF fields, upgrades, operationalizes, operates, and maintains Space Force sensors and information integration capabilities within the SSN. Activities funded in this program element (1206425SF) also support efforts such as engineering studies and analyses, architectural engineering studies, trade studies, technology needs forecasting, modernization initiatives, systems engineering, system development, and test & evaluation, and may include prototyping and technology demonstration.

Deep Space Advanced Radar Capability (DARC) is a ground-based, SDA radar system to detect, track, and maintain custody of deep space objects 24/7, through the solar exclusion gap. DARC will augment the SSN as an additional sensor with increased capacity and capability for deep space object custody, providing full global coverage. Funding transferred from program element 1206425SF in budget activity 04 in FY 2024.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver DARC weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392SF and 1206398SF.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| ***Title:*** DARC Site 1 Operational Capability | 0.000 | 174.239 | 154.366 |
| ***Description:*** The DARC Site 1 activity will develop, test, and deliver one DARC site with a current estimated completion date of FY 2026. It will also provide a foundation for up to two more future sites located strategically around the world to provide global deep space radar capability to support SDA. The system will be responsive to regularly scheduled and un-scheduled tasks to locate, identify, characterize deep space objects and report the results to Battle Management Command and Control locations and SSN. | | | |
| ***FY 2024 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>656565 / *Ground Based SDA* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| Continue Site 1 design and development activities including design reviews, hardware purchases, software development and integration, and construction. Continue construction of Site 1 including roads, buildings, utilities, foundation, and installation of all antenna structures. Perform additional site development efforts such as the construction of facility-support and site infrastructure to include backup generator buildings, fuel storage (tank farms), electrical substations for power site distribution, wastewater treatment/septic & leach, non-potable water storage/fire protection distribution (site & buildings), water treatment (potable) and physical security equipment to meet protection level 3 (PL3) requirements. Finalize plans for and begin implementing physical security for Site 1, to include any required equipment such as site perimeter fencing, and standalone fencing for both antenna arrays and site main power station to meet site safety requirements. Begin preparation for and install of fiber optics (COMM) as well as connection to existing and/or new infrastructure such as power grid, backup generators, and main water line. This is not a new start but a transfer of work that was previously funded in program element 1206425SF prior to FY 2024.<br>***FY 2025 Plans:***<br>Continue Site 1 construction, integration, software development and test. Complete the remainder of construction tasks and integration of all DARC subsystems, such as antennas, racks and operations consoles. Continue software development. Complete factory testing and demonstrations, and begin Developmental Test and Evaluation (DT&E).<br><br>Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain and support USINDOPACOM activities. Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, and activities that may leverage commercial and international opportunities.<br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>FY 2025 decreased due to DARC site 1 construction progressing toward completion. | | | |
| ***Title:*** DARC Sites 2 and 3 Operational Capability | 0.000 | 40.500 | 100.196 |
| ***Description:*** The program will develop, test, and deliver DARC sites 2 and 3 with a current estimated completion date of FY 2030. The system will be responsive to regularly scheduled and un-scheduled tasks to locate, identify, characterize deep space objects and report the results to Battle Management Command and Control locations and SSN.<br><br>***FY 2024 Plans:***<br>Begin Site 2 design and development activities including design reviews (Preliminary Design Review/Critical Design Review), hardware purchases, software development and integration, and construction. Initiate various pre-construction activities in preparation for full site construction. Finalize plans for and begin implementing physical security for Site 2, to include any required equipment such as site perimeter fencing, and standalone fencing for both antenna arrays and site main power station to meet site safety requirements. Begin preparation for and install of fiber optics (COMM) as well as connection to existing and/or new infrastructure such as power grid, backup generators, and main water line. Complete purchases for all long-lead facility equipment | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>656565 / *Ground Based SDA* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| for Site 2 as rapidly as possible in order to minimize schedule, these will have been initiated in parallel with completing required Environmental Analysis.<br><br>Begin Site 3, Environmental Impact Assessment (EIA), Federal Aviation Agency (FAA) airspace negotiations and the security posture evaluation.<br>***FY 2025 Plans:***<br>Continue all Site 2 design and development activities, and complete Critical Design Review. Continue pre-construction activities. Prepare for connection of fiber optics (COMM) and infrastructure, such as power grid, backup generators, and main water line. Continue purchases for all Site 2 long-lead facility equipment such that they are initiated in parallel with completing required Environmental Analysis as rapidly as possible to minimize schedule.<br><br>Continue Site 3 Environmental Assessment and begin pre-construction activities.<br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>FY 2025 increased due to ramp up of Sites 2 and 3 activities. | | | |
| **Accomplishments/Planned Programs Subtotals** | 0.000 | 214.739 | 254.562 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

Project utilizes existing DoD engineering and study contracts and activities to conduct science and technology development and data analysis activities. Preliminary/ critical design effort for the technology maturation and prototype commenced in FY 2017. A Broad Agency Announcement (BAA) was used to award seven Integrated System Engineering Team (ISET) contracts which allow for organizations to participate, advise the government, and gain insight into the prototype design and build. In May of 2019, DARC was designated as an MTA under Section 804 of the 2016 National Defense Authorization Act (NDAA). In 2020, DARC was directed to pursue a Rapid Prototyping Middle Tier Acquisition program for Site 1. The DARC Site effort will be executed through two separate contract elements: The Prime System Integrator (PSI) was awarded to Northrop Grumman Inc. via a single, competitive award through the Space Enterprise Consortium (SpEC) Other Transaction Authority (OTA) agreement. The DARC program will combine all three sites under a single program, prepare Sites 2 and 3 for the Major Capability Acquisition (MCA) pathway, and held an MCA Milestone C decision brief in February 2024 to transition Site 1 to MCA for the combined program. The SAE reviewed the draft acquisition strategy and based on compelling need to deliver this capability, waived the requirements in DAFI 63-101, paragraph 4.3.1, to approve the acquisition strategy prior to release of a formal solicitation for Sites 2 and 3.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>656565 / *Ground Based SDA* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DARC System Development Site 1 | C/CPIF | Northrop Grumman : Colorado Springs, CO | - | - | | 147.642 | Nov 2023 | 120.517 | Oct 2024 | - | | 120.517 | Continuing | Continuing | - |
| DARC System Development Site 2/3 | C/TBD | TBD : TBD | - | - | | 40.500 | May 2024 | 100.196 | Nov 2024 | - | | 100.196 | Continuing | Continuing | - |
| DARC Technical Mission Analysis | Various | Various : Various | - | - | | 6.381 | Jan 2024 | 10.302 | Jan 2025 | - | | 10.302 | Continuing | Continuing | - |
| SBIR/STTR | Allot | Not specified. : TBD | - | - | | 7.482 | Oct 2023 | 9.164 | Oct 2024 | - | | 9.164 | Continuing | Continuing | - |
| | | **Subtotal** | - | - | | 202.005 | | 240.179 | | - | | 240.179 | Continuing | Continuing | N/A |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DARC Test Support | Various | Various : Various | - | - | | 1.932 | Feb 2024 | 2.011 | Feb 2025 | - | | 2.011 | Continuing | Continuing | - |
| | | **Subtotal** | - | - | | 1.932 | | 2.011 | | - | | 2.011 | Continuing | Continuing | N/A |

**Management Services ($ in Millions)**

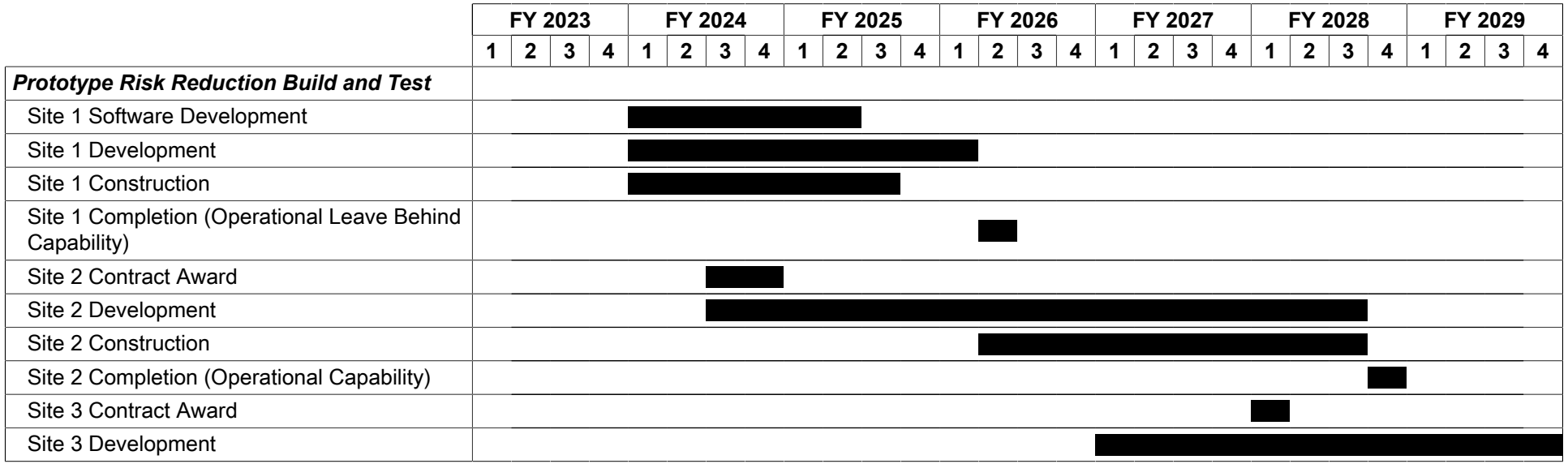
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A&AS | Various | Various : Various | - | - | | 8.347 | Nov 2023 | 9.096 | Nov 2024 | - | | 9.096 | Continuing | Continuing | - |
| FFRDC | RO | MITRE Corp : Colorado Springs, CO | - | - | | 2.355 | Nov 2023 | 3.156 | Nov 2024 | - | | 3.156 | Continuing | Continuing | - |
| Other Support | Various | Various : Colorado Springs, CO | - | - | | 0.100 | Oct 2023 | 0.120 | Oct 2024 | - | | 0.120 | Continuing | Continuing | - |
| | | **Subtotal** | - | - | | 10.802 | | 12.372 | | - | | 12.372 | Continuing | Continuing | N/A |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>3620F / 5 | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awarenes s Systems* | Project (Number/Name)<br>656565 / *Ground Based SDA* | |

| | Prior Years | FY 2023 | | FY 2024 | | FY 2025 Base | | FY 2025 OCO | | FY 2025 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | - | - | | 214.739 | | 254.562 | | - | | 254.562 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>656565 / *Ground Based SDA* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>656565 / *Ground Based SDA* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Prototype Risk Reduction Build and Test*** | | | | |
| Site 1 Software Development | 1 | 2024 | 2 | 2025 |
| Site 1 Development | 1 | 2024 | 1 | 2026 |
| Site 1 Construction | 1 | 2024 | 3 | 2025 |
| Site 1 Completion (Operational Leave Behind Capability) | 2 | 2026 | 2 | 2026 |
| Site 2 Contract Award | 3 | 2024 | 4 | 2024 |
| Site 2 Development | 3 | 2024 | 3 | 2028 |
| Site 2 Construction | 2 | 2026 | 3 | 2028 |
| Site 2 Completion (Operational Capability) | 4 | 2028 | 4 | 2028 |
| Site 3 Contract Award | 1 | 2028 | 1 | 2028 |
| Site 3 Development | 1 | 2027 | 4 | 2029 |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>3620F / 5 | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awarenes s Systems* | Project (Number/Name)<br>65A006 / *Space Based SDA* | |

| COST ($ in Millions) | Prior Years | FY 2023 | FY 2024 | FY 2025 Base | FY 2025 OCO | FY 2025 Total | FY 2026 | FY 2027 | FY 2028 | FY 2029 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 65A006: *Space Based SDA* | - | 93.914 | 115.636 | 178.100 | 0.000 | 178.100 | 167.595 | 153.081 | 44.756 | 31.148 | 0.000 | 784.230 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

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

Space Domain Awareness (SDA) is one of five core competencies of the Space Force and is the effective identification, characterization, and understanding of any factor, passive or active, associated with the space domain that could affect space operations and thereby impact the security, safety, economy, or environment of our nation. As the foundation for space control, SDA encompasses surveillance of all space objects and activities; detailed surveillance of specific space assets; monitoring space environmental conditions; monitoring cooperative space assets; gathering indications and warning on adversary space operations; and conducting integrated command, control, communications, processing, analysis, dissemination, and archiving activities.

This program element develops new network sensors and improved information integration capabilities across the space surveillance network (SSN) while companion program element 1203940SF fields, upgrades, operationalizes, operates, and maintains Space Force sensors and information integration capabilities within the SSN. Activities funded in this program element (1206425SF) also support efforts such as engineering studies and analyses, architectural engineering studies, trade studies, technology needs forecasting, modernization initiatives, systems engineering, system development, and test & evaluation, and may include prototyping and technology demonstration.

Space Based SDA will develop and deliver a system to continue providing space object surveillance from space. The United States Space Force (USSF) and National Reconnaissance Office (NRO) have partnered on the Space Based SDA program to meet overlapping requirements. Space Based SDA enables timely detection and custody of on orbit threats in order to protect US High Value Assets in space in support of the National Defense Strategy.

Space Based SDA requirements are based on a Statement of Capabilities and upon the current Initial Capabilities Document architectural requirements focused on protecting High Value Assets. Space Based SDA will provide the capability to search, detect, and track objects from a space-based sensor for timely custody and event detection. Surveillance from space augments and overcomes existing ground sensor limitations with timely 24-hour above-the-weather collection of satellite metric data only possible with a space-based sensor. This data is communicated to operators at the Combined Space Operations Center (CSpOC), National Space Defense Center (NSDC), and other classified users. This project includes efforts related to Space Based SDA, its integration into the broader space superiority architecture, and analysis and experimentation to ensure space-based space surveillance capabilities against the evolving threat.

This project also evaluates affordable Space-Based SDA replenishment options to provide system resiliency and situational awareness necessary to operate in the contested space domain studies through technical analysis, risk reduction experiments, affordable prototyping, and partnership with Air Force Research Laboratory (AFRL). In addition, this program leverages opportunities for space-based commercial, international partnerships, and hosted payloads to support the SDA mission.

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A006 / *Space Based SDA* |

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Space Based SDA weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392SF and 1206398SF. For Space Based SDA in PY 0.225M was expended for civilian pay expenses in this program element, and in CY 0.225M is forecasted for civilian pay expenses in this program element.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| ***Title:*** Space-Based Space Domain Awareness (SDA) | 93.914 | 115.636 | 178.100 |
| ***Description:*** SDA includes effective identification, characterization, and understanding of any factor, passive or active, associated with the space domain.<br><br>Performs space-based SDA analysis, research, and development for the SILENTBARKER system in partnership with the NRO.<br><br>***FY 2024 Plans:***<br>Provide on-orbit support for SILENTBARKER Baseline in order to meet Initial Operational Capability (IOC). Continue development of SILENTBARKER Expansion increment to meet Full Operational Capability (FOC) for deep-space SDA. Continue implementation of mission data processing and data dissemination efforts supporting SILENTBARKER and other SDA prototyping efforts.<br><br>Continue technology enhancements and prototyping efforts for space-based space domain surveillance against evolving threats, to include: future upgrades, extension and augmentations through analysis, demonstration, and experimentation. Prepare and conduct SDA hosted payload integration on a commercial host for launch in FY 2026. Additionally, FY 2024 funding will continue prototype efforts for SDA Hosted Payload (HP) efforts for a second prototype payload and expanded payload characterization tests. FY 2024 funding supports the launch and experiment operations for the AFRL and SSC partnership prototype programs such as the Oracle-M Defense Deep Space Sentinel (D2S2) satellites, enabling critical low-cost space based experimentation, expanding USSF SDA operations in Cislunar to counteract evolving threat activity. FY 2024 will continue activities for implementation of system resiliency and situational awareness necessary to operate in the contested space domain environment. In addition, FY 2024 will leverage opportunities for SDA space-based commercial, international partnerships, and AFRL partnerships. Activities may include, but are not limited to: studies, technical analysis, risk reduction, pre-acquisition activities, affordable prototyping, integration and test of command and control (C2), resiliency measures, mission partner interfaces, space test/combat range events and office support, etc.<br><br>***FY 2025 Plans:***<br>Continue development of SILENTBARKER Expansion increment to meet Full Operational Capability (FOC) for deep-space SDA. Continue implementation of mission data processing and data dissemination efforts supporting SILENTBARKER and other SDA prototyping efforts. Continue technology enhancements and prototyping efforts for space-based space domain surveillance against evolving threats, to include: future upgrades, extension and augmentations through analysis, studies, demonstration, and experimentation. Prepare and launch first SDA hosted payload (Oculus) on a commercial host. Additionally, FY 2025 | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A006 / *Space Based SDA* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| funding will continue prototype/integration efforts for SDA Hosted Payload (HP) for the second prototype payload and expanded payload characterization tests. Activities will provide affordable gap filler for GEO based SDA. In addition, FY 2025 will leverage opportunities for SDA space-based commercial, international, and AFRL (Air Force Research Laboratory) partnerships. FY 2025 funding supports the launch, on-orbit experimentation, and operations for the AFRL and SSC partnership prototype programs such as the Oracle-Mobility (Oracle-M)/S6 satellites, enabling critical low-cost space-based experimentation, expanding USSF SDA operations in GEO and Cislunar space.<br><br>FY 2025 will continue activities for implementation of system resiliency and situational awareness necessary to operate in the contested space domain environment. Activities may include, but are not limited to: program office support, studies, technical analysis, experimentation integration and test of command and control (C2), resiliency measures, mission partner interfaces, space test/combat range events and office support, etc.<br><br>Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain, leveraging commercial and international opportunities, if appropriate. Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, etc.<br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>FY 2025 increased due to parallel efforts for SILENTBARKER Baseline on-orbit support, SILENTBARKER Expansion continued development and test, and SDA demonstration and experimentation activities including integration and preparations for launch of Oculus Hosted Payload Demo #1 on a commercial spacecraft. | | | |
| **Accomplishments/Planned Programs Subtotals** | 93.914 | 115.636 | 178.100 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

The Acquisition Strategy was approved to minimize the space-based SDA gap post-SBSS Block 10. SILENTBARKER baseline launched in FY 2023. The SBSS FO Materiel Development Decision was approved by the Milestone Decision Authority (MDA) on April 5, 2016. The Acquisition Strategy Panel was completed with the MDA on August 29, 2016. To satisfy the SDA architecture needs, the SBSS FO program requirements combined with an NRO program and were updated in the December 2017 SILENTBARKER Statement of Capabilities. The Space Force is partnered with the NRO on SILENTBARKER space segment and telemetry, tracking, and commanding (TT&C) program segments in order to further National Security Space objectives. Mutual investment for the non-recurring engineering (NRE) cost enables the potential for a larger initial constellation buy and lower unit costs. SILENTBARKER expansion contract was awarded Jun 2021 to extend capabilities past IOC.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A006 / *Space Based SDA* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Space Based SDA Development | MIPR | Various : Various | - | 85.937 | Dec 2022 | 94.073 | Dec 2023 | 155.258 | Dec 2024 | - | | 155.258 | Continuing | Continuing | - |
| Space Based SDA Technical Mission Analysis | Various | Various : Various | - | 1.486 | Nov 2022 | 1.500 | Nov 2023 | 1.200 | Nov 2024 | - | | 1.200 | Continuing | Continuing | - |
| Space Based SDA Enterprise SE&I | Various | Various : Various | - | 1.890 | Nov 2022 | 1.450 | Nov 2023 | 1.890 | Nov 2024 | - | | 1.890 | Continuing | Continuing | - |
| Space Based SDA SBIR/ STTR | Allot | TBD : TBD | - | - | | 4.029 | Oct 2023 | 6.412 | Oct 2024 | - | | 6.412 | Continuing | Continuing | - |
| | | **Subtotal** | - | 89.313 | | 101.052 | | 164.760 | | - | | 164.760 | Continuing | Continuing | N/A |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Space Based SDA Civilian Reimbursable Budget Authority | RO | SSC : El Segundo, CA | - | 0.000 | Dec 2022 | 0.225 | Dec 2023 | 0.225 | Dec 2024 | - | | 0.225 | Continuing | Continuing | - |
| | | **Subtotal** | - | 0.000 | | 0.225 | | 0.225 | | - | | 0.225 | Continuing | Continuing | N/A |

**Management Services ($ in Millions)**

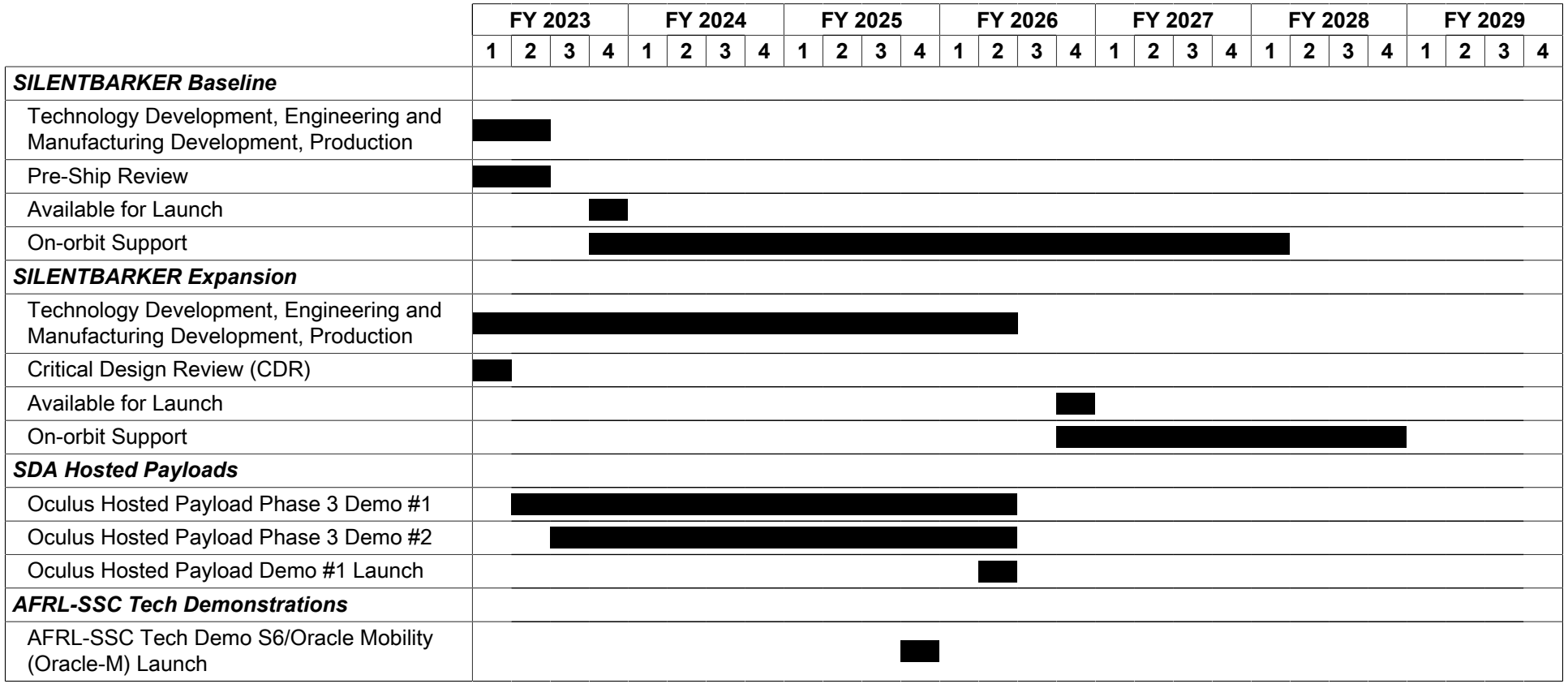
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Space Based SDA FFRDC | RO | Aerospace Corp : Los Angeles, CA | - | 0.831 | Nov 2022 | 0.900 | Nov 2023 | 0.475 | Nov 2024 | - | | 0.475 | Continuing | Continuing | - |
| Space Based SDA A&AS | Various | Various : Various | - | 3.645 | Jan 2023 | 13.119 | Jan 2024 | 12.440 | Jan 2025 | - | | 12.440 | Continuing | Continuing | - |
| Space Based SDA Other Support | Various | Various : Various | - | 0.125 | Mar 2023 | 0.340 | Mar 2024 | 0.200 | Mar 2025 | - | | 0.200 | Continuing | Continuing | - |
| | | **Subtotal** | - | 4.601 | | 14.359 | | 13.115 | | - | | 13.115 | Continuing | Continuing | N/A |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>3620F / 5 | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awarenes s Systems* | Project (Number/Name)<br>65A006 / *Space Based SDA* | |

| | Prior Years | FY 2023 | | FY 2024 | | FY 2025 Base | | FY 2025 OCO | | FY 2025 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | - | 93.914 | | 115.636 | | 178.100 | | - | | 178.100 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A006 / *Space Based SDA* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A006 / *Space Based SDA* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***SILENTBARKER Baseline*** | | | | |
| Technology Development, Engineering and Manufacturing Development, Production | 1 | 2023 | 2 | 2023 |
| Pre-Ship Review | 1 | 2023 | 2 | 2023 |
| Available for Launch | 4 | 2023 | 4 | 2023 |
| On-orbit Support | 4 | 2023 | 1 | 2028 |
| ***SILENTBARKER Expansion*** | | | | |
| Technology Development, Engineering and Manufacturing Development, Production | 1 | 2023 | 2 | 2026 |
| Critical Design Review (CDR) | 1 | 2023 | 1 | 2023 |
| Available for Launch | 4 | 2026 | 4 | 2026 |
| On-orbit Support | 4 | 2026 | 4 | 2028 |
| ***SDA Hosted Payloads*** | | | | |
| Oculus Hosted Payload Phase 3 Demo #1 | 2 | 2023 | 2 | 2026 |
| Oculus Hosted Payload Phase 3 Demo #2 | 3 | 2023 | 2 | 2026 |
| Oculus Hosted Payload Demo #1 Launch | 2 | 2026 | 2 | 2026 |
| ***AFRL-SSC Tech Demonstrations*** | | | | |
| AFRL-SSC Tech Demo S6/Oracle Mobility (Oracle-M) Launch | 4 | 2025 | 4 | 2025 |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>3620F / 5 | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awarenes s Systems* | Project (Number/Name)<br>65A037 / *Ground Based Optical Sensor* | |

| COST ($ in Millions) | Prior Years | FY 2023 | FY 2024 | FY 2025 Base | FY 2025 OCO | FY 2025 Total | FY 2026 | FY 2027 | FY 2028 | FY 2029 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 65A037: *Ground Based Optical Sensor* | - | 0.000 | 42.452 | 50.943 | 0.000 | 50.943 | 12.775 | 0.000 | 0.000 | 0.000 | 0.000 | 106.170 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

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

Ground Based Optical Sensor System (GBOSS) includes an upgrade to the Ground-based Electro-Optical Deep Space Surveillance (GEODSS) system which monitors small, closely-spaced, and advanced threats in low, mid, high, and geostationary orbits. The upgraded system will discover currently undetectable space threats, reduce an adversary's tactical surprise and deliver the data required to support accurate, timely, actionable SDA. This facilitates decision-making within the compressed timelines dictated by the realities of the congested, contested, competitive space domain. The program delivers a combination of performance upgrades to the existing White Sands Missile Range and Maui GEODSS sites, including advanced data exploitation and rapid data dissemination, and will incorporate coalition and commercial data to provide a global capability to positively identify an adversary committing an orbital attack. The program includes updates to the GEODSS image processing and optical subsystems that will enhance the sensitivity, resolution, search rate, detection processing, and extend the life of the GEODSS system.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| ***Title:*** Ground Based Optical Sensor System (GBOSS) | 0.000 | 42.452 | 50.943 |
| ***Description:*** GBOSS provides a global, ground-based, optical sensor capability for Space Domain Awareness (SDA). The program implements advanced capabilities that may leverage coalition data, commercial data, and sophisticated exploitation algorithms to enhance system response and resiliency to operate in the contested space domain based on aggressive threats by our pacing-competitors, China and Russia. Ground Based Optical Sensor improves resolution, sensitivity, search rate, tracking of non-cooperative launches, precise tagging of clustered objects, detection of closely spaced dim objects, attribution of orbital attackers and delivers foundational technology to support data exploitation for advanced indications and warnings. This effort includes upgrading existing sensors, dissemination of all data to DoD and IC stakeholders via the Unified Data Library (UDL). The GBOSS acquisition is planned for four phases. Currently funded, Phase 1 upgrades the White Sands Missile Range (WSMR) and Maui sites. Phases 2 through 4 are not included in the current Acquisition Program Baseline (APB) and are unfunded. Phases 2 through 4 field Ground Based Optical Sensor capabilities to new locations in accordance with USSF Leadership direction. The future phases of the program may also acquire new advanced technology sensors to improve persistence and advanced multi-spectral data collection, enabling high-fidelity characterization and rapid attribution. The program will collaborate with Combined Space Operations Center (CSpOC), National Space Defense Center (NSDC), and National Air and Space Intelligence Center (NASIC) efforts to ensure enterprise data fusion and dissemination supporting Space Command and Control (Space C2). | | | |
| ***FY 2024 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A037 / *Ground Based Optical Sensor* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| Complete the installation, contractor verification testing, and developmental testing of the GEODSS Enhanced Tower (GET) upgrade at the WSMR GEODSS site. Prepare for deployment of GET materials needed to upgrade the Maui GEODSS site. Incorporate coalition and commercial data to mitigate the Atlantic Optical Gap. Incorporate commercial data to help mitigate optical sensor coverage gaps over the Atlantic and Indo-Pacific regions.<br><br>FY 2024 funding will allow the program office to continue developing and fielding a resilient system necessary to operate in the contested space domain. Activities may include, but are not limited to: integration and test of command and control (C2) and mission partner interfaces, implementation of advanced data exploitation algorithms that may include pattern of life (PoL), advanced indications and warnings (I&W), enhanced defensive cyber operations resiliency measures, space test/combat range events, studies, technical analysis, risk reduction experiments, prototyping and program office support, etc.<br><br>***FY 2025 Plans:***<br>Complete contractor verification, developmental, and operational testing of the GEODSS Enhanced Tower (GET) upgrade at the WSMR GEODSS site leading to operational acceptance. Prepare and ship material, install and checkout GET towers at the GEODSS Maui site. Continue investment in commercial data to bolster United States Indo-Pacific Command (USINDOPACOM) efforts and to mitigate coverages in the Atlantic gap. FY 2025 funding will allow the program office to rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, and activities that may leverage commercial and international opportunities.<br><br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>FY 2025 increased due to simultaneous execution of GET upgrades at WSMR and Maui sites and investment in commercial data to fill gaps in areas of critical military needs. | | | |
| **Accomplishments/Planned Programs Subtotals** | 0.000 | 42.452 | 50.943 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

This program began in FY 2018 to address ground-based optical SDA gaps and shortfalls. The acquisition strategy, approved in March 2018, accelerates the development and fielding of the solution, minimizing the time to address the requirements in light of current and emerging threats. Initial Technology Maturation & Risk Reduction (TMRR) activities were executed using existing defense, intelligence, and lab contracts. Engineering & Manufacturing Development (EMD) activities are being executed on the Maintenance of Space Situational Awareness Integrated Capabilities (MOSSAIC) contract awarded through full and open competition.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>3620F / 5 | R-1 Program Element (Number/Name)<br>PE 1206425SF / *Space Situation Awarenes s Systems* | Project (Number/Name)<br>65A037 / *Ground Based Optical Sensor* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBOSS Design, development and life extension | C/CPIF | L3 Harris : Colorado Springs, CO | - | - | | 32.768 | Nov 2023 | 41.241 | Nov 2024 | - | | 41.241 | Continuing | Continuing | - |
| GBOSS Testing | Various | Various : Various | - | - | | 1.000 | Nov 2023 | 0.750 | Nov 2024 | - | | 0.750 | Continuing | Continuing | - |
| GBOSS Technical Mission Analysis | RO | Various : Various | - | - | | 2.630 | Nov 2023 | 3.424 | Nov 2024 | - | | 3.424 | Continuing | Continuing | - |
| SBIR/STTR | Allot | Not specified. : TBD | - | - | | 1.479 | Oct 2023 | 1.830 | Oct 2024 | - | | 1.830 | Continuing | Continuing | - |
| | | **Subtotal** | - | - | | 37.877 | | 47.245 | | - | | 47.245 | Continuing | Continuing | N/A |

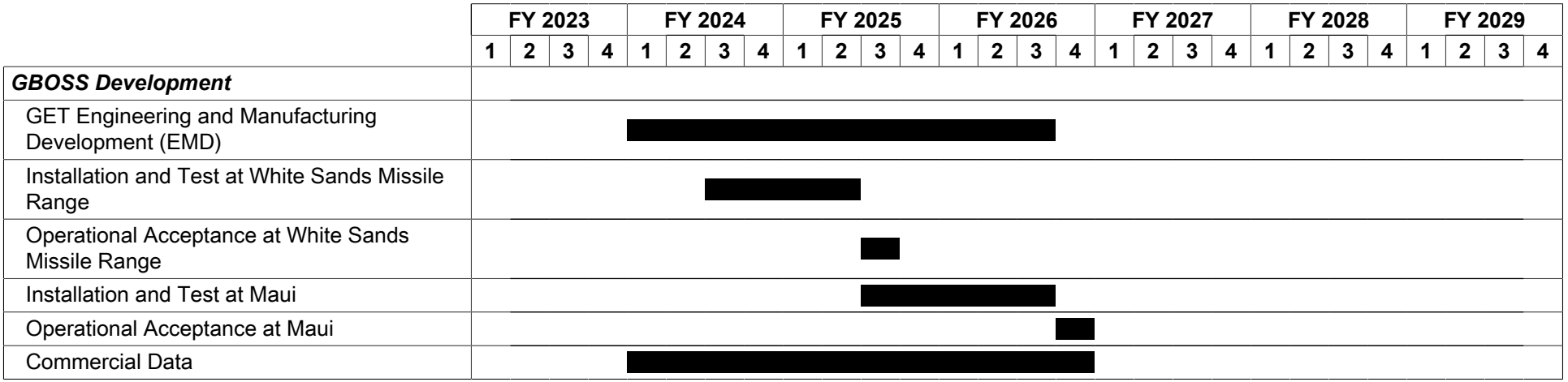
**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2023 Cost | FY 2023 Award Date | FY 2024 Cost | FY 2024 Award Date | FY 2025 Base Cost | FY 2025 Base Award Date | FY 2025 OCO Cost | FY 2025 OCO Award Date | FY 2025 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A&AS | Various | Various : Various | - | - | | 2.200 | Nov 2023 | 1.560 | Nov 2024 | - | | 1.560 | Continuing | Continuing | - |
| FFRDC | RO | Various : Various | - | - | | 2.300 | Nov 2023 | 2.038 | Nov 2024 | - | | 2.038 | Continuing | Continuing | - |
| Other Support | C/CPAF | Various : Various | - | - | | 0.075 | Nov 2023 | 0.100 | Nov 2024 | - | | 0.100 | Continuing | Continuing | - |
| | | **Subtotal** | - | - | | 4.575 | | 3.698 | | - | | 3.698 | Continuing | Continuing | N/A |

| | Prior Years | FY 2023 | | FY 2024 | | FY 2025 Base | | FY 2025 OCO | | FY 2025 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | - | - | | 42.452 | | 50.943 | | - | | 50.943 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A037 / *Ground Based Optical Sensor* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>3620F / 5 | **R-1 Program Element (Number/Name)**<br>PE 1206425SF / *Space Situation Awarenes s Systems* | **Project (Number/Name)**<br>65A037 / *Ground Based Optical Sensor* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***GBOSS Development*** | | | | |
| GET Engineering and Manufacturing Development (EMD) | 1 | 2024 | 3 | 2026 |
| Installation and Test at White Sands Missile Range | 3 | 2024 | 2 | 2025 |
| Operational Acceptance at White Sands Missile Range | 3 | 2025 | 3 | 2025 |
| Installation and Test at Maui | 3 | 2025 | 3 | 2026 |
| Operational Acceptance at Maui | 4 | 2026 | 4 | 2026 |
| Commercial Data | 1 | 2024 | 4 | 2026 |