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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force **Date:** March 2024

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| Appropriation/Budget Activity 3620F: Research, Development, Test & Evaluation, Space Force I BA 5: System Development & Demonstration (SDD) | R-1 Program Element (Number/Name) PE 1206447SF I Resilient Missile Warning Missile Tracking - Medium Earth Orbit (MEO) |
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| 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 | - | 408.527 | 538.208 | 846.349 | 0.000 | 846.349 | 714.718 | 1,122.441 | 1,641.784 | 1,653.557 | Continuing | Continuing |
| 657MEO: Resilient MW/MT - MEO | - | 408.527 | 538.208 | 846.349 | 0.000 | 846.349 | 714.718 | 1,122.441 | 1,641.784 | 1,653.557 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

Note
 In FY 2025, a portion of the RDT&E budget from PE 1206448SF, Resilient Missile Warning Missile Tracking - Integrated Ground Segment, Project 657124 has transferred into PE 1206447SF, Resilient Missile Warning Missile Tracking - Medium Earth Orbit (MEO), Project 657MEO, to centralize USSF and SDA Missile Warning Tracking activities and improve transparency. Ground segment activities now included in this PE are a continuation of activities from PE 1206448SF and does not constitute a New Start.

A. Mission Description and Budget Item Justification

The United States Space Force (USSF) Space Systems Command (SSC) and Space Development Agency (SDA) are collaborating to deliver Overhead Persistent Infrared (OPIR) capabilities, in concert with Department of Defense (DoD) and Intelligence Community (IC) partners, to support a proliferated space architecture that is resilient by design and capable of operating through contested environments. Resilient Missile Warning/Missile Tracking (MW/MT) - Medium Earth Orbit (MEO) space and ground efforts pivot the Department of the Air Force's (DAF) legacy missile warning force design to a more resilient multi-orbit approach to counter advanced missiles, hypersonic glide vehicles, and fractional orbital bombardment threats. MW/MT - MEO is anchored in Missile Warning and Missile Defense Capability Development Document (CDD) requirements validated by the Joint Requirements Oversight Council (JROC). Constellation resiliency is foundational to the DAF Resilient Missile Warning and Tracking force design, therefore, the OPIR Family of Systems, including MW/MT - MEO, is designed to work cohesively to gain and maintain custody of a spectrum of missile threats.

The MEO program will deploy space assets in multiple epochs to allow for incremental capability delivery and to ensure competition throughout the lifecycle of the program. Resilient MW/MT - MEO will bolster legacy Space Based Infrared Satellite (SBIRS) and Next-Gen OPIR capabilities and will independently satisfy all mission area CDD requirements for both missile warning and tracking by as early as FY 2031. FY 2025 funding supports final build, test, and delivery of flight payloads and buses to support Epoch 1 as well as the start of satellite level assembly integration and test. FY 2025 funding includes ground activities previously captured in PE 1206448, Project 657124, that continue ground segment mission data processing application development and integration, command and control software and facilities build and integration into the MEO Space Operations Center (MSOC), and ground entry point site construction to support on-orbit initialization in 4th quarter FY 2026.

Using a Combined Program Office (CPO) construct, SSC, SDA, and the Missile Defense Agency (MDA) are teaming to develop and implement a system-of-systems integration strategy across for Missile Warning, Missile Tracking and Missile Defense constellations supporting low earth orbit, medium earth orbit, geosynchronous orbit and polar orbit regimes. Resilient MW/MT - MEO Epoch 1 is comprised of multiple space and ground lines of effort to include the following space and ground items:
 - Space vehicle development efforts are currently underway with two vendors [Raytheon (RTX) and Millennium Space Systems (MSS)] with contract options currently in place to deliver nine space vehicles; six from MSS and three from RTX.

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| <ul style="list-style-type: none"> - Delivery of nine total space vehicles [three RTX and six MSS] includes: design, build, hardware integration, testing, delivery, launch vehicle integration, space vehicle launch & early orbit operations, calibration, tuning, flying, and delivery of formatted two-dimensional tracks into the Real-Time Transfer Service (RTS) for incorporation with other sensors data necessary for warning/tracking requirements and operations. - FY 2023 congressional add allowed for contract award for a third vendor [L3 Harris] previously identified in the original Epoch 1 source selection. The contract is specifically to develop an advanced mission payload that will inform future capability decisions. - Mission data processing and unique ground software contract let on December 2022 - Perform the operations and integration of the space vehicles into the operations center for command and control at the Tools, Applications, and Processing (TAP) lab starting in 2nd quarter FY 2025. - Develop integration command and control and mission data processing software to operate constellation of MEO space vehicles for supporting multiple collection layers. - Additional ground applications for ground resource management and sensor tasking will be included as part of the Operations and Integration contract. - Acquire, build, install, test, and operate ground-based antennas for uplink/downlink of commands and mission data. At least two sites and six apertures are required for Epoch 1, and at least two additional sites and six more apertures are needed for Epoch 2. On contract for first three sites as of December 2022. - Test, assess, and validate sensor performance on the ground and on-orbit to ensure track data is integrated by Program of Record (PoR) data and fusion operational programs such as Future Operationally Resilient Ground Evolution (FORGE) (PE 1206440SF), Ballistic Missile Defense OPIR Architecture, other classified partners and missions, research and development multi-intelligence fusion (PE 1206442SF), and intelligence characterization. SV testing is on contract as of December 2022. Fusion software studies underway with FORGE program as of March 2023. Additional studies planned with Ballistic Missile Defense OPIR Architecture to start in FY 2024. - Mature integrated digital model: support SSC role as the mission area integrator, perform resiliency analyses, baseline future requirements, and assess performance against current and new targets. On contract as of May 2021. <p>Will start Epoch 2 in FY 2025. The program will acquire additional planes of capability for 6-12 Satellites in the first phase of Epoch 2. Will acquire from a prime both SVs as well as ground contractor command and control (C2) and mission data processing (MDP) software. The program will continue to leverage the FORGE framework and TAP Lab for both operations and underlying hardware and software framework services. Will continue the tasking and fusion architecture that began in Epoch 1 for Epoch 2 acquisitions. Furthermore, Epoch 2 will also leverage an ops and integration contractor to assist with on boarding space craft and vendor operations into the TAP Lab. Epoch 2 will expand upon the Ground Entry Points (GEP) to procure additional antennas necessary to support SV planes. Finally, Epoch 2 will also continue the use of model-based systems engineering and digital models to ease integration.</p> <p>This program element may include necessary civilian pay expenses required to manage, execute, and deliver MW/MT capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392SF and 1206398SF.</p> <p>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.</p> | | |

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| B. Program Change Summary (\$ in Millions) | FY 2023 | FY 2024 | FY 2025 Base | FY 2025 OCO | FY 2025 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget | 408.527 | 538.208 | 362.250 | 0.000 | 362.250 |
| Current President's Budget | 408.527 | 538.208 | 846.349 | 0.000 | 846.349 |
| Total Adjustments | 0.000 | 0.000 | 484.099 | 0.000 | 484.099 |
| • 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 | 0.000 | 0.000 | | | |
| • Other Adjustments | 0.000 | 0.000 | 484.099 | 0.000 | 484.099 |

Change Summary Explanation

FY 2025: +339.949M; transfers funding and effort for the MEO Ground Segment portion of shared PE 1206448SF, Project 657124, to PE 1206447SF, Resilient Missile Warning Missile Tracking, Resilient MW/MT - MEO Project 657MEO to centralize Missile Warning Missile Tracking activities and improve transparency.

FY 2025: +142.454M; funds transferred from Procurement, to support development and test activities.

FY 2025: +\$1.696M other adjustment

| C. Accomplishments/Planned Programs (\$ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|--|----------------|----------------|----------------|
| Title: Missile Warning / Missile Tracking - MEO Space and Ground | 408.527 | 538.208 | 846.349 |
| Description: This activity funds development of MEO satellites, with two launches planned to deliver nine satellites by FY 2027, and ground efforts with operations necessary to deliver Initial Warfighting Capability (IWC) for the combined LEO and MEO architecture. IWC consists of regional tracking, mission management and control, and coordinated regional warning and access validated through on-orbit measurements. After performance validation is complete, prototype sensors will feed data directly to operational warning and defense systems. Furthermore, IWC will provide sensitivity to detect emerging threats, accurate tracking to contain maneuvering targets, and mission data delivery within required latency timelines to close the kill-chain. | | | |
| MW/MT MEO Data Fusion: Test, assess, and validate sensor performance on the ground and on-orbit to ensure track data is integrated by PoR data and fusion operational programs such as FORGE (PE 1206440SF), Ballistic Missile Defense OPIR Architecture, other classified partners and missions, research and development multi-intelligence fusion (PE 1206442SF), and intelligence characterization. SV testing is on contract as of December 2022. Fusion software studies underway with FORGE program as of March 2023. Additional early integration support and studies are planned with the Ballistic Missile Defense OPIR | | | |

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| C. Accomplishments/Planned Programs (\$ in Millions) | | FY 2023 | FY 2024 | FY 2025 |
| <p>Architecture to start in FY 2024. Additionally in FY 2024, sensor models will begin to be built to support future modeling and simulation activities with the FORGE and Missile Defense program offices.</p> <p>FY 2024 Plans: The Space Vehicle CDRs kicks off FY 2024 efforts as the program finalizes two designs. Execute design, development, and integration of a MEO MW/MT constellation from two current vendors. Conduct Space Vehicle and System Critical Design Reviews and proceed to payload and bus build, integration, and test activities. Additionally, FY 2024 activities mature and finalize the crosslink design, communication system, and bus subsystems. Furthermore, completion of long lead spacecraft purchases and establishment of test equipment infrastructure, lab, and clean room processing is planned to support multi-vehicle test assembly. The program will continue to execute and build off of digital models and process workflow established in prior years under the track custody demonstration effort and conduct technical operations in a digital cloud-based ecosystem to host structural, functional, and performance models. Activities may include, but are not limited to: program office support, studies, technical analysis, experimentation, prototyping, etc. Finally, FY 2024 activities are planned to include payload critical design review for a third vendor with all associated model deliveries and hardware/software ground demonstrations.</p> <p>Vendors will work with the chosen MDP and C2 Ops floor centers to integrate their ground architecture solutions in preparation for pre-launch and early orbit testing. GEP contractor will construct and connect dedicated GEPs in Continental United States (CONUS) and Outside Continental United States (OCONUS) locations with an expected completion in time to support Epoch 1 launch and early orbit operations. Expand development for C2 and MDP to meet the initial warfighter capability for sensitivity, accuracy, and latency of the MW/MT MEO space layer. Investments in FY 2024 will continue for GEP construction, contract services, operations and integration support, and any other general ground infrastructure required to standup an instantiation of the minimum viable ground infrastructure to support Epoch 1 space vehicles. Vendors will begin to incorporate an instantiation of the FORGE MDPAF for MDP and appropriate C2 solutions. Vendors will also leverage and expand upon existing Mission Data Processing Applications and Joint OPIR Ground initiatives to ensure rapid processing and dissemination of Epoch 1 sensor tracks to the global warfighting community. Develop initial integration modelling and simulation test cases and run for early integration testing with fusion and correlation operational warning and tracking systems. Plan and execute performance and integration risk mitigation activities associated with C2 challenges, MDP expansion, and interagency integration. 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, etc.</p> <p>The program plans to continue acquisition of additional Epoch 1 spacecraft with acceleration funds for up to another plane of capability. Also, to support up to a third plane of Epoch 1 spacecraft, the program added additional acceleration funds in FY 2024 to supplement the Congressional add and aggressively pursue additional Epoch 1 capabilities to address adversary hypersonic</p> | | | | |

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C. Accomplishments/Planned Programs (\$ in Millions)

threats. The program office is allowing each solution to mature and the competition to continue until selecting a vendor for additional spacecraft development

FY 2025 Plans:
Space: Crucial deliveries of payloads and satellite buses from both contractors for integration and assembly. Each vendor intends to deliver at least two flight payloads and satellite buses and start space vehicle level assembly, integration and testing by the end of FY 2025. Complete launch vehicle integration studies and launch vehicle selection for both launches. Initiate Epoch 2 planning activities and award contracts to execute space, ground, and integration. Epoch 2 will build out the architecture for global missile tracking with up to four planes of additional capability.

FY 2025 marks the start of Epoch 2. Notionally, Epoch 2 is set to release a Request For Proposal (RFP) in mid CY 2024 to support a mid FY 2025 contract execution for space, ground, and integration. Epoch 2 will build out the architecture for global missile tracking with up to four planes of additional capability. The USSF began early engagement with industry with Requests For Information in 2023 and has a good understanding on industrial performance capabilities and cost.

Ground: Completion of SV contractor software builds for both Command and Control and Mission Data Processing and continues ground system integration and test into the TAP Lab in Boulder, Colorado. Continue to outfit the MEO Space Operations Center (MSOC) at the TAP Lab, including Ops floor build out allowing separate rooms for proprietary work for each SV vendors. Continue integration of SV vendor ground hardware into the TAP Lab and establish interfacing connectivity between the SV vendors and MSOC. The Operation and Integration (O&I) contractor, Parsons, will facilitate the integration of ground systems into the TAP Lab and will lead the MSOC Authority to Operate cyber security package to establish the MSOC enclave in preparation for initial testing and operations.

Delivery of six Hardware In the Loop (HWIL) test beds (developed by the GEP Contractor, Northrop Grumman), to each of the SV vendors and begin supporting early space vehicle integration and launch and early orbit testing on the testbeds. Deliver the 1st GEP antenna to Schriever Space Force Base (SFB). The contractor plans to deliver one antenna every month until all nine antennas have been delivered to their respective locations. Begin GEP Integration, test, validation, and verification in preparation for launch rehearsals and Launch and Early On-Orbit Test (LEOT) campaign.

MW/MT MEO Data Fusion: Finalize sensor model builds and verification & validation (V&V) campaigns to ensure the fidelity of the models are adequate to be integrated into enterprise sensor test campaigns spanning the entire OPIR architecture. In FY 2025, major simulation and ground test campaign planning will occur to ensure sensor models and live on-orbit data will be ingested at the appropriate missile warning and missile defense test events occurring in FY 2026-2027.

| | FY 2023 | FY 2024 | FY 2025 |
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| C. Accomplishments/Planned Programs (\$ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|----------------|----------------|----------------|
| The Ground Preliminary Design Review (PDR) assessed the maturity of the design for both SV contractors' ground solution and GEP antennas. The assessment included a detailed review of the CONOPS to include the interaction between the SV system, subsystems, SV ground, and external factories. The PDR also included a review of the ground hardware design and cyber Security Controls Traceability Matrix (SCTM) for the ground segment to establish an allocated baseline to proceed to a detailed design in Critical Design Review (CDR). Funds allow both space and ground efforts 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. FY 2024 to FY 2025 Increase/Decrease Statement: FY 2025 increased to continue to execute MEO spacecraft and constellation design, build and test activities and ground activities. | | | |
| Accomplishments/Planned Programs Subtotals | 408.527 | 538.208 | 846.349 |

| D. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | |
|--|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|------------------------------------|
| Line Item | 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 |
| • 1206442SF: Next Generation OPIR | 97.770 | - | - | - | - | - | - | - | - | - Continuing Continuing |

Remarks

E. Acquisition Strategy

Space: The Resilient MW/MT - MEO initiative began in FY 2019 as Next Gen OPIR "Block 1 Prototype" under the Next Gen OPIR Space Modernization Initiative (SMI) PE1206442SF. Six missile track custody prototype contracts were competitively awarded under this effort which utilized a multi-phased contracting strategy to field an on-orbit "Missile Track Custody Demonstration" or the MTCD space vehicle. Early efforts also included digital engineering risk reduction which serves as the foundation for current Resilient MW/MT- MEO efforts.

In FY 2021, following the completion of the Space Warfighting Analysis Center (SWAC) force design for the MW/MT mission area, MTCD efforts were formalized as Resilient MW/MT - MEO Epoch 1. The May 2021 Epoch 1 contract awards were the result of a free, fair, and open competition where five vendors submitted proposals and two were selected to develop the first six vehicles for fielding no later than FY 2027 as Resilient MW/MT - MEO Epoch 1. The Full Missile Warning/Missile Defense OPIR CDD and Technical Requirements Document (TRD) were included in the RFP. The Space Force will field Epoch 1 capability under current contracts that were competitively awarded for the first three vehicles from each contractor (Space Vehicles 1-6). In May 2022, the Space Force Program Executive Officer (SFPEO) for Space Sensing (SN) approved an acquisition strategy for all of Epoch 1 scope: Vehicles 1-6; additional vehicles to meet performance baseline (at least 3); command and control software; mission data processing software; operations and integration; and at least two GEPs (six total ground antennas) for command and telemetry.

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In January 2023, the SFPEO for SN approved the acquisition strategy for Epoch 1, nine satellites [Millennium Space Systems' delivery of an additional three space vehicles - SV's 4-6]. The program delivered an integrated acquisition strategy for all of Epoch 1 to enter the acquisition pathway as a Middle Tier Acquisition with an advisory board designation expected in FY 2024. The strategy will include acceleration of additional spacecraft as part of the FY 2023 Congressional Add. The Epoch 1 requirements are derived from the Missile Warning and Missile Defense OPIR Enterprise CDD, validated by the JROC in May 2019. Epoch 1 serves as the first delivery of capability targeting regional warning and tracking coverage with launches in 2026. Future epochs are planned for competitive awards and a follow-on acquisition strategy is in development.

Ground: The Space Force will deliver MDP and C2 software development under current contracts that were competitively awarded in FY 2021 under the NG OPIR PE 1206442SF. A contract for the GEPs was awarded via a mission partner (MP) in December 2022, and an O&I contract award in May 2023 under the MW/MT PE 1206447SF. Continuous updates to the C2 and MDP software will be expected, and ground antenna contracts will continue execution led in collaboration with MPs. The program office is leveraging a competitively awarded operations center and integration contract with General Services Administration (GSA) for integrating and testing the ground system. The program developed an acquisition strategy for all of Epoch 1 scope: vehicles 1-6; additional vehicles to meet performance baseline (at least three); command and control software; mission data processing software; operations and integration, and at least six ground antennas for operating the space vehicles. The Epoch 1 requirements are derived from the Missile Warning and Missile Defense OPIR Enterprise CDD, validated by the JROC in May 2019. Epoch 1 serves as the first delivery of capability targeting polar warning and regional tracking coverage with launches in late CY 2026. Future epochs are planned for competitive awards and a follow-on acquisition strategy is still in development. The acquisition strategy for the space and mission-unique ground portions of Epoch 1 were approved by the PEO for Space Sensing in May 2022. Epoch 2 is submitting its acquisition strategy in 2Q FY 2024 for consideration by the SAE on the acquisition pathway and scope.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force **Date:** March 2024

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| Product Development (\$ in Millions) | | | | FY 2023 | | FY 2024 | | FY 2025 Base | | FY 2025 OCO | | FY 2025 Total | | | |
|---|-----------------------------------|---|--------------------|----------------|-------------------|----------------|-------------------|---------------------|-------------------|--------------------|-------------------|----------------------|-------------------------|-------------------|---------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| MW/MT MEO Epoch 1, Vendor 1 SV 1-3 | Various | Raytheon : El Segundo, CA | - | 111.279 | Dec 2022 | 197.840 | Dec 2023 | 283.688 | Dec 2024 | - | | 283.688 | Continuing | Continuing | - |
| MW/MT MEO Epoch 1, Vendor 2 SV 1-3 | C/Various | Millennium Space Systems : El Segundo, CA | - | 74.722 | Mar 2023 | 64.380 | Dec 2023 | 81.001 | Dec 2024 | - | | 81.001 | Continuing | Continuing | - |
| MW/MT MEO Epoch 1, Vendor 2 SV 4-6 | C/FFP | Millennium Space Systems : El Segundo, CA | - | - | | 109.860 | Dec 2023 | 58.000 | Dec 2024 | - | | 58.000 | Continuing | Continuing | - |
| MW/MT MEO Epoch 1, Acceleration Vendor 1 SV 1-3 | Various | Raytheon : El Segundo, CA | - | 39.281 | Sep 2023 | - | | - | | - | | - | Continuing | Continuing | - |
| MW/MT MEO Epoch 1, Acceleration Vendor 2 SV 1-3 | C/Various | Millennium Space Systems : El Segundo, CA | - | 40.981 | Sep 2023 | - | | - | | - | | - | Continuing | Continuing | - |
| MW/MT MEO Epoch 1, Acceleration Vendor 2 SV 4-6 | C/FFP | Millennium Space Systems : El Segundo, CA | - | 25.303 | Aug 2023 | - | | - | | - | | - | Continuing | Continuing | - |
| MW/MT MEO Epoch 1, Vendor 3 | C/FFP | L3 Harris : Melbourne, FL | - | 29.738 | May 2023 | - | | - | | - | | - | Continuing | Continuing | - |
| MW/MT MEO Epoch 1 Acceleration | TBD | TBD : TBD | - | - | | 147.547 | Dec 2023 | - | | - | | - | Continuing | Continuing | - |
| MW/MT MEO Operations & Integration (O&I) | MIPR | Parsons : Centreville, VA | - | 10.958 | Mar 2023 | - | | 15.000 | Jan 2025 | - | | 15.000 | Continuing | Continuing | - |
| MW/MT MEO Ground Entry Point (GEP) | MIPR | Northrop Grumman : Fairfax, VA | - | 51.100 | Mar 2023 | - | | 43.700 | Jan 2025 | - | | 43.700 | Continuing | Continuing | - |
| MW/MT MEO Data Fusion | Various | Various : Various | - | 2.384 | Mar 2023 | - | | 21.400 | Jan 2025 | - | | 21.400 | Continuing | Continuing | - |
| MW/MT MEO Epoch 2 | TBD | TBD : TBD | - | - | | - | | 280.000 | Jun 2025 | - | | 280.000 | Continuing | Continuing | - |
| Enterprise SE&I | Various | Various : Various, CA | - | 7.845 | Dec 2022 | 2.524 | Dec 2023 | 9.566 | Dec 2024 | - | | 9.566 | Continuing | Continuing | - |
| Technical Mission Analysis | RO | Aerospace : El Segundo, CA | - | 1.963 | Dec 2022 | 1.343 | Jan 2024 | 3.645 | Jan 2025 | - | | 3.645 | Continuing | Continuing | - |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force | | Date: March 2024 |
| Appropriation/Budget Activity 3620F / 5 | R-1 Program Element (Number/Name) PE 1206447SF / <i>Resilient Missile Warning Missile Tracking - Medium Earth Orbit (MEO)</i> | Project (Number/Name) 657MEO / <i>Resilient MW/MT - MEO</i> |

Schedule Details

| Events by Sub Project | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| <i>Resilient Missile Warning/Missile Tracking - Space</i> | | | | |
| Epoch 1 Payload Critical Design Review | 1 | 2023 | 1 | 2023 |
| Epoch 1 Sensor / Mission Data Processing development | 2 | 2023 | 2 | 2025 |
| Epoch 1 Design, Production & Build of SVs | 2 | 2023 | 2 | 2026 |
| Epoch 1 System Critical Design Review | 4 | 2023 | 1 | 2024 |
| Epoch 1 Mission Payload Assembly, Integration & Test | 1 | 2024 | 1 | 2026 |
| Epoch 1 Bus Assembly, Integration & Test | 1 | 2024 | 2 | 2026 |
| Epoch 1 SV Assembly, Test & Launch Operations | 4 | 2025 | 1 | 2027 |
| Epoch 1 Vendor 1 Ready for Launch | 4 | 2026 | 4 | 2026 |
| Epoch 1 Vendor 2 Ready for Launch | 4 | 2026 | 4 | 2026 |
| Epoch 1 On-Orbit Experimentation/Demo | 1 | 2027 | 4 | 2029 |
| Epoch 2 Contract Authority to Proceed | 3 | 2025 | 3 | 2025 |
| Epoch 2 Design | 3 | 2025 | 3 | 2026 |
| Epoch 2 SV Build, Integrate, Test | 3 | 2026 | 4 | 2029 |
| <i>Resilient Missile Warning/Missile Tracking - Ground</i> | | | | |
| Mission Data Processing design, build, integration & test | 1 | 2023 | 4 | 2029 |
| Command & Control design, build, integration & test | 1 | 2023 | 4 | 2029 |
| GEP selection criteria | 1 | 2023 | 2 | 2023 |
| Initial Operating Capability for Ground Operations | 1 | 2023 | 4 | 2026 |
| Complete MSOC Selections | 1 | 2023 | 2 | 2023 |
| GEPs ready for end-to-end testing | 1 | 2025 | 2 | 2026 |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force | | Date: March 2024 |
| Appropriation/Budget Activity 3620F / 5 | R-1 Program Element (Number/Name) PE 1206447SF / <i>Resilient Missile Warning Missile Tracking - Medium Earth Orbit (MEO)</i> | Project (Number/Name) 657MEO / <i>Resilient MW/MT - MEO</i> |

| Events by Sub Project | Start | | End | |
|--|----------------|-------------|----------------|-------------|
| | Quarter | Year | Quarter | Year |
| GEP Contract Support | 2 | 2023 | 4 | 2029 |
| GEP site surveys complete | 2 | 2023 | 2 | 2023 |
| GEP contract award | 2 | 2023 | 2 | 2023 |
| Build and deploy GEP testbeds to contractor facilities | 2 | 2023 | 4 | 2024 |
| MSOC ground network infrastructure design and construction, hardware installation and checkout | 2 | 2023 | 4 | 2026 |
| MEO Data Fusion | 2 | 2023 | 4 | 2027 |
| MSOC fit up: Ops room fit up, HVAC and power, furnish workstations | 2 | 2023 | 4 | 2026 |
| Ground System PDR O&I | 2 | 2024 | 2 | 2024 |
| GEP sites design, development, and integration & test | 2 | 2023 | 3 | 2026 |
| GEP site construction | 4 | 2024 | 2 | 2026 |
| MSOC ready for end-to-end testing with GEPs and SCN | 1 | 2025 | 4 | 2026 |