| Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army | | | | | | | | | | | Date: March 2024 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appropriation/Budget Activity<br>2040: *Research, Development, Test & Evaluation, Army* / BA 4: *Advanced Component Development & Prototypes (ACD&P)* | | | | | R-1 Program Element (Number/Name)<br>PE 0603308A / *Army Space Systems Integration* | | | | | | | |
| **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 | - | 30.453 | 19.120 | 19.659 | - | 19.659 | 19.678 | 19.889 | 20.102 | 20.303 | 0.000 | 149.204 |
| 990: *Space And Missile Defense Integration* | - | 30.453 | 19.120 | 19.659 | - | 19.659 | 19.678 | 19.889 | 20.102 | 20.303 | 0.000 | 149.204 |

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

This Program Element (PE) funds the United States Army Space and Missile Defense Command (USASMDC) development activities, and employment of global space and high-altitude (SHA) capabilities to the Army, joint force, allies and partners, to enable multi-domain combat effects; enhance deterrence, assurance, and detection of strategic attacks; and protect the Nation. The USASMDC is the warfighting function lead and Department of the Army force modernization proponent for integration of current and future SHA systems to enable Army forces on the battlefield. The USASMDC workforce supports the research and doctrine development from one of the USASMDC principal locations in Huntsville, AL; Colorado Springs, CO; and Joint Base Langley-Eustis. Employing cutting-edge technology and incorporating feedback from the warfighter, the command develops critical space and high-altitude capabilities to maintain overmatch of the nation's near-peer adversaries and to deter, deny and defeat any challenge. USASMDC/ARSTRAT: Headquarters, Department of the Army General Order 37, dated 16 October 2006, designated USASMDC/ARSTRAT as the Army proponent for space, the Army integrator for global missile defense (GMD), and the Army Service Component Command (ASCC) of the USSTRATCOM. Army Regulation (AR) 10-87, Army Commands, Army Service Component Commands, and Direct Reporting Units, dated 4 September 2007, and AR 5-22, The Army Force Modernization Proponent System, dated 19 August 2009, designated USASMDC/ARSTRAT as the Army specified proponent for Space/High Altitude capabilities. As the Army proponent for space and high altitude, USASMDC/ARSTRAT is responsible for developing warfighting concepts, conduct warfighting experiments to validate those concepts, identify capabilities needed to implement the validated concepts, and develop Doctrine, Organizations, Training, Material, Leadership & Education, Personnel, Facilities and Policy (DOTMLPF-P) solutions.

| B. Program Change Summary ($ in Millions) | FY 2023 | FY 2024 | FY 2025 Base | FY 2025 OCO | FY 2025 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 30.945 | 19.120 | 19.417 | - | 19.417 |
| Current President's Budget | 30.453 | 19.120 | 19.659 | - | 19.659 |
| Total Adjustments | -0.492 | 0.000 | 0.242 | - | 0.242 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | -0.181 | - | | | |
| • SBIR/STTR Transfer | -0.311 | - | | | |
| • Adjustments to Budget Years | - | - | 0.242 | - | 0.242 |

| Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army | Date: March 2024 |
|---|---|
| **Appropriation/Budget Activity**<br>2040: *Research, Development, Test & Evaluation, Army I* BA 4: *Advanced Component Development & Prototypes (ACD&P)* | **R-1 Program Element (Number/Name)**<br>PE 0603308A *I Army Space Systems Integration* |

| Congressional Add Details ($ in Millions, and Includes General Reductions) | FY 2023 | FY 2024 |
|---|---|---|
| **Project:** 990: *Space And Missile Defense Integration* | | |
| Congressional Add: *Multi-mission Synthetic Aperture Radar Payload Development* | 5.000 | - |
| Congressional Add: *Full Spectrum Protective Technologies for Cyber Mission Assurance* | 8.000 | - |
| Congressional Add Subtotals for Project: 990 | 13.000 | - |
| Congressional Add Totals for all Projects | 13.000 | - |

**Change Summary Explanation**

Fiscal Year 2025 increase of $209K is due to realignment of civilian manpower to support Air and Missile Defense, Hypersonics and Strategic Weapons, Directed Energy Technologies, Space and High-Altitude Technologies, or Test and Evaluation.

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Army | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>2040 / 4 | R-1 Program Element (Number/Name)<br>PE 0603308A / *Army Space Systems Integration* | Project (Number/Name)<br>990 / *Space And Missile Defense Integration* | |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 990: *Space And Missile Defense Integration* | - | 30.453 | 19.120 | 19.659 | - | 19.659 | 19.678 | 19.889 | 20.102 | 20.303 | 0.000 | 149.204 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

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

This Program Element (PE) funds the Space and High Altitude (SHA) Force Development activities of the United States Army Space and Missile Defense Command (USASMDC) Space and Missile Defense Center of Excellence (SMDCoE) and Technical Center (TC). The SMDCoE is the warfighting function lead and Department of the Army force modernization proponent for integration of current and future SHA systems to enable Army forces on the battlefield. The SMDCoE workforce supports the research and doctrine development from one of the SMDCoE principle locations in Huntsville, AL; Colorado Springs, CO; and Joint Base Langley-Eustis. As the Army proponent for SHA, the SMDCoE is responsible for developing warfighting concepts, identifying and validating needed capabilities, conducting warfighting experiments, and developing Doctrine, Organizations, Training, Material, Leadership & Education, Personnel, Facilities and Policy (DOTMLPF-P) solutions for the Army to leverage the SHA domains in support of Army operations. The SMDCoE focuses on providing solutions for capability gaps of land domain forces in a multi-domain battle environment in two ways: First, by leveraging the benefits of the SHA domains to enable decentralized land force operations in support of the Army's mission command philosophy; and second by delivering synchronized capabilities from, through and into the space domain in direct support of land domain forces. Effective integration of SHA capabilities enable the application of strategic land power and execution of Multi-Domain Operations (MDO). Additionally, SHA capabilities anchor the Army's ability to penetrate and disintegrate enemy anti-access and area denial (A2AD) systems and exploit the resultant freedom of maneuver to achieve strategic objectives and force a return to competition on favorable terms. Under the direction of an experienced member of the Senior Executive Service (SES), the SMDCoE receives guidance from the USASMDC Commanding General and works in close coordination with the Army Combined Arms Center, Army Futures Command, the United States Strategic Command, the United States Space Command the Missile Defense Agency.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| ***Title:*** Space and High Altitude Capability Development Proponency | 9.787 | 10.910 | 11.200 |
| ***Description:*** Perform Army Force Modernization Responsibilities for the SHA Altitude Domains. | | | |
| ***FY 2024 Plans:***<br>Continue to develop concepts, transition technologies, and provide acquisition support for SHA technologies to assure uninterrupted access to space based technologies and leverage the capabilities provided for Army force operations on the battlefield. | | | |
| ***FY 2025 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Army | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>2040 / 4 | **R-1 Program Element (Number/Name)**<br>PE 0603308A / *Army Space Systems Integration* | **Project (Number/Name)**<br>990 / *Space And Missile Defense Integration* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| Support Army modernization efforts by developing concepts to integrate emerging technologies to enhance Multi-Domain Operations with a particular focus on increasing Multi-Domain Task Force (MDTF), Multi-Domain Effects Battalion (MDEB) and Theater Strike Effects Groups (TSEG) capabilities.<br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>Minor increase due to economic assumptions. | | | |
| ***Title:*** Joint Friendly Force Tracking (J-FFT) Testbed<br>***Description:*** Development and deployment of J-FFT capabilities.<br>***FY 2024 Plans:***<br>J-FFT will continue to exploit, expand and provide mission owners with approved infrastructures at all classification levels that achieve improved performance and reduce costs. Ensure J-FFT technologies remain a key contributor to support coalition assessments and exercises that advancing US and allies FFT interoperability.<br>***FY 2025 Plans:***<br>J-FFT testbed and development teams respond to the growth in FFT device use by enabling multiple device types, data types, and displays supported by the various FFT and HF TTL data architectures. The JFFT Testbed will develop and deliver new capabilities for added functionality in data visualization and management. JFFT will continue to exploit, expand and provide approved infrastructures at all classification levels that improve performance and reduce costs. | 3.200 | 3.368 | 3.368 |
| ***Title:*** Assured Positioning, Navigation and Timing / Navigation Warfare (A-PNT/NAVWAR)<br>***Description:*** Provide PNT/NAVWAR capability development support for the Army.<br>***FY 2024 Plans:***<br>Continue to identify, develop, integrate and provide the Assured-Positioning, Navigation, and Timing (A-PNT) Cross Functional Team (CFT)with products and analysis to guide development and fielding of capabilities to achieve the PNT overmatch necessary to support future Army operations.<br>***FY 2025 Plans:***<br>The SMDCoE Army Capability Manager for Space and High-Altitude (ACM SHA) works to mitigate capability gaps due to the growing threat to PNT, to provide situational awareness of the NAVWAR environment, and to prevent adversary use of PNT information through coordinated employment of NAVWAR capabilities. | 2.355 | 2.263 | 2.263 |
| ***Title:*** Space and High Altitude Models, Simulations and Operations Support | 2.111 | 2.579 | 2.619 |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Army | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>2040 / 4 | **R-1 Program Element (Number/Name)**<br>PE 0603308A / *Army Space Systems Integration* | **Project (Number/Name)**<br>990 / *Space And Missile Defense Integration* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2023 | FY 2024 | FY 2025 |
|---|---|---|---|
| ***Description:*** Supports the SMDCoE responsibility to provide Space and High-Altitude modeling and simulations, and resources underlying operating expenses and support.<br><br>***FY 2024 Plans:***<br>Continue to support modeling and simulation, operational analysis and overarching operations to test and provide analytical rigor behind space and high altitude concepts and capability development<br><br>***FY 2025 Plans:***<br>Resources provide the computational and network resources, modeling and simulation, and operational analysis required to support major decisions concerning the acquisition of systems and the development of concepts of operations (CONOPS) that provide the best Joint, and Army Space and High-Altitude capabilities to current and future Warfighters.<br><br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>Minor increase due to economic assumptions. | | | |
| ***Title:*** Space and High-Altitude Engineering Subject Matter Expertise<br><br>***Description:*** This program provides engineering subject matter expertise within the technical areas of Air and Missile Defense, Hypersonics and Strategic Weapons, Directed Energy Technologies, Space and High-Altitude Technologies Test and Evaluation in support of the Space and Missile Defense Technical Center.<br><br>***FY 2025 Plans:***<br>The manpower provides engineering subject matter expertise within the technical areas of Air and Missile Defense, Hypersonics and Strategic Weapons, Directed Energy Technologies, Space and High-Altitude Technologies Test and Evaluation in support of the Space and Missile Defense Technical Center.<br><br>***FY 2024 to FY 2025 Increase/Decrease Statement:***<br>Increase due to civilian manpower alignment to support Air and Missile Defense, Hypersonics and Strategic Weapons, Directed Energy Technologies, Space and High-Altitude Technologies, or Test and Evaluation. | - | - | 0.209 |
| **Accomplishments/Planned Programs Subtotals** | 17.453 | 19.120 | 19.659 |

| | FY 2023 | FY 2024 |
|---|---|---|
| ***Congressional Add:*** Multi-mission Synthetic Aperture Radar Payload Development | 5.000 | - |
| ***FY 2023 Accomplishments:*** This project will develop a low-cost multi-function multi-mission SAR sensor payload that can be used to provide SAR imagery for multiple mission functions including weather prediction, mission planning and other tactical and strategic operations. Project will result in a design of LEO satellite to | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2025 Army | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>2040 / 4 | **R-1 Program Element (Number/Name)**<br>PE 0603308A / *Army Space Systems Integration* | **Project (Number/Name)**<br>990 / *Space And Missile Defense Integration* |

| | FY 2023 | FY 2024 |
|---|---|---|
| provide high resolution, multi-spectral imagery of cloud cover, including sensor, orbital configuration and down linked high resolution multi-spectral capability for multiple missions. | | |
| ***Congressional Add:*** Full Spectrum Protective Technologies for Cyber Mission Assurance | 8.000 | - |
| ***FY 2023 Accomplishments:*** Develop protective technologies and capabilities to safeguard critical assets across the space and missile defense capability areas from cyber exploitation to ensure a sustained competitive edge against near-peer adversaries. | | |
| **Congressional Adds Subtotals** | 13.000 | - |

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

N/A

**Remarks**

SMDCoE space and high altitude capability development efforts have a natural association and linkage with Army Strategic Missile Defense (SMD) capability development also performed within the SMDCoE. Emerging space and high altitude technologies and concepts often influence SMD identification, tracking and response.

**D. Acquisition Strategy**

N/A.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army | | | Date: March 2024 |
|---|---|---|---|
| Appropriation/Budget Activity<br>2040 / 4 | R-1 Program Element (Number/Name)<br>PE 0603308A / *Army Space Systems Integration* | Project (Number/Name)<br>990 / *Space And Missile Defense Integration* | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government Personnel and Operations support | Various | SMDC/ARSTRAT : Huntsville, AL and Colorado Springs, | 35.938 | 14.433 | | 15.752 | | 16.291 | | - | | 16.291 | Continuing | Continuing | - |
| | | **Subtotal** | 35.938 | 14.433 | | 15.752 | | 16.291 | | - | | 16.291 | Continuing | Continuing | N/A |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multi-mission Synthetic Aperture Radar Payload Development | TBD | Various : Various | - | 5.000 | | - | | - | | - | | - | 0.000 | 5.000 | - |
| Full Spectrum Protective Technologies for Cyber Mission Assurance | TBD | Various : Various | - | 8.000 | | - | | - | | - | | - | 0.000 | 8.000 | - |
| | | **Subtotal** | - | 13.000 | | - | | - | | - | | - | 0.000 | 13.000 | N/A |

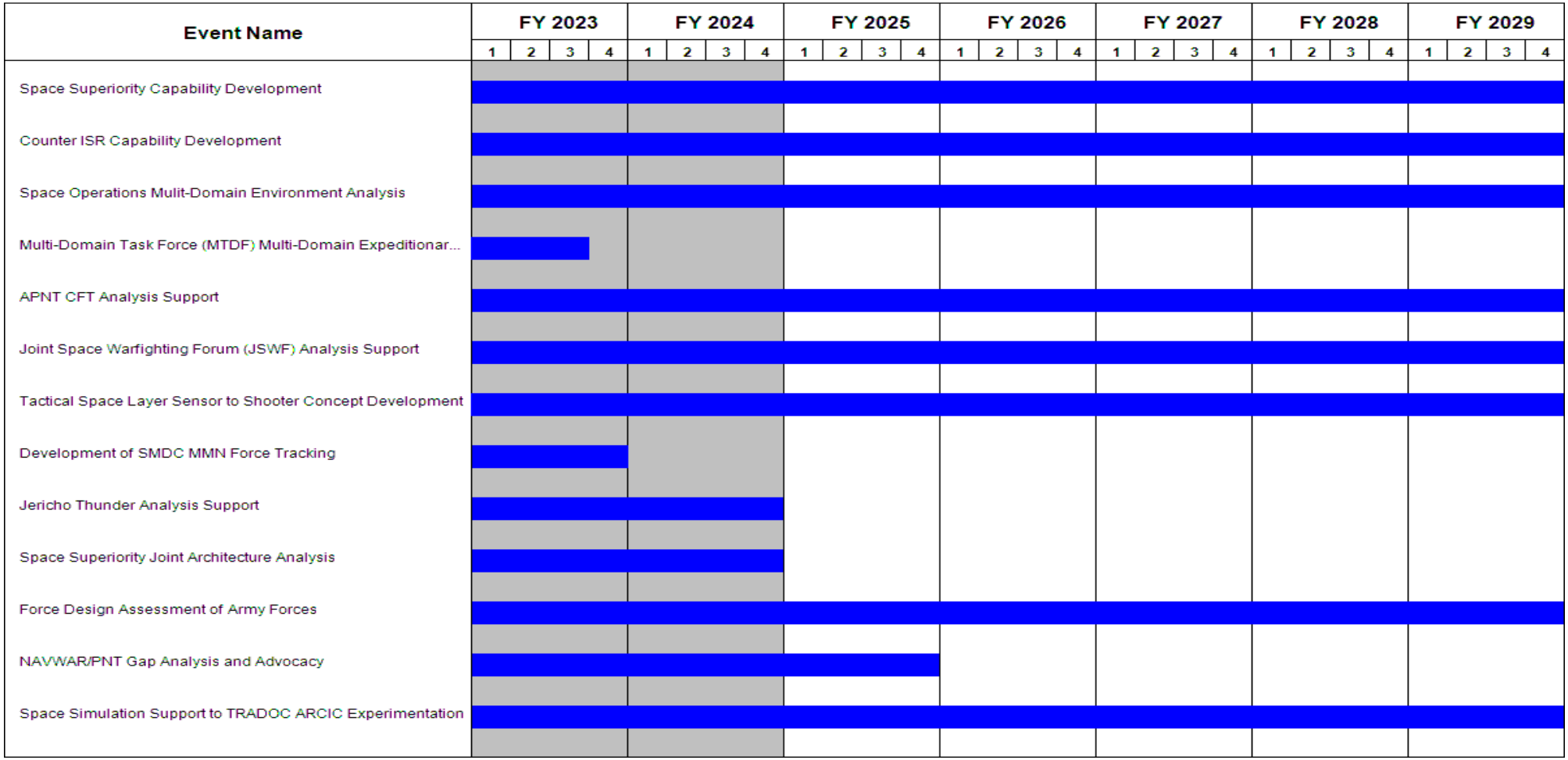
**Support ($ in Millions)**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J-FFT Testbed and Development | Various | SMDC/ARSTRAT : Colorado Springs, CO | 3.170 | 3.020 | | 3.368 | | 3.368 | | - | | 3.368 | Continuing | Continuing | - |
| | | **Subtotal** | 3.170 | 3.020 | | 3.368 | | 3.368 | | - | | 3.368 | Continuing | Continuing | N/A |

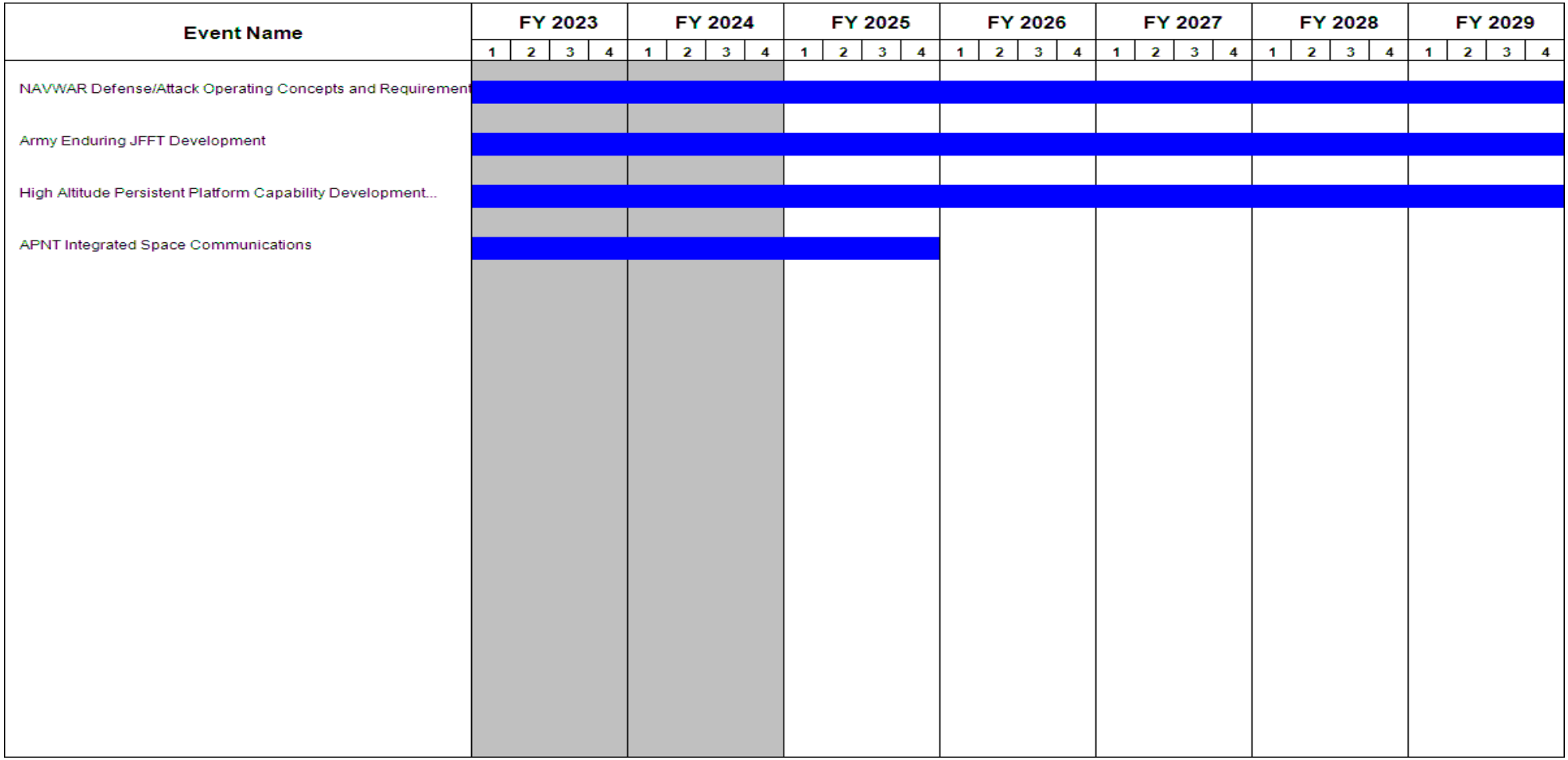
| | Prior Years | FY 2023 | | FY 2024 | | FY 2025 Base | | FY 2025 OCO | | FY 2025 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 39.108 | 30.453 | | 19.120 | | 19.659 | | - | | 19.659 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>2040 / 4 | **R-1 Program Element (Number/Name)**<br>PE 0603308A / *Army Space Systems Integration* | **Project (Number/Name)**<br>990 / *Space And Missile Defense Integration* |



| Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>2040 / 4 | **R-1 Program Element (Number/Name)**<br>PE 0603308A / *Army Space Systems Integration* | **Project (Number/Name)**<br>990 / *Space And Missile Defense Integration* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army | | Date: March 2024 |
|---|---|---|
| **Appropriation/Budget Activity**<br>2040 / 4 | **R-1 Program Element (Number/Name)**<br>PE 0603308A / *Army Space Systems Integration* | **Project (Number/Name)**<br>990 / *Space And Missile Defense Integration* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events** | **Quarter** | **Year** | **Quarter** | **Year** |
| Space Superiority Capability Development | 1 | 2021 | 4 | 2029 |
| Counter ISR Capability Development | 1 | 2021 | 4 | 2029 |
| Space Operations Mulit-Domain Environment Analysis | 1 | 2021 | 4 | 2029 |
| Multi-Domain Task Force (MTDF) Multi-Domain Expeditionary Brigade (MDEB) Study | 3 | 2021 | 3 | 2023 |
| APNT CFT Analysis Support | 1 | 2021 | 4 | 2029 |
| Joint Space Warfighting Forum (JSWF) Analysis Support | 1 | 2021 | 4 | 2029 |
| Tactical Space Layer Sensor to Shooter Concept Development | 3 | 2021 | 4 | 2029 |
| Development of SMDC MMN Force Tracking | 1 | 2021 | 4 | 2023 |
| Jericho Thunder Analysis Support | 1 | 2021 | 4 | 2024 |
| Space Superiority Joint Architecture Analysis | 1 | 2021 | 4 | 2024 |
| Force Design Assessment of Army Forces | 1 | 2021 | 4 | 2029 |
| NAVWAR/PNT Gap Analysis and Advocacy | 1 | 2021 | 4 | 2025 |
| Space Simulation Support to TRADOC ARCIC Experimentation | 1 | 2021 | 4 | 2029 |
| NAVWAR Defense/Attack Operating Concepts and Requirement | 1 | 2021 | 4 | 2029 |
| Army Enduring JFFT Development | 1 | 2021 | 4 | 2029 |
| High Altitude Persistent Platform Capability Development Documentation | 1 | 2021 | 4 | 2029 |
| APNT Integrated Space Communications | 1 | 2021 | 4 | 2025 |