| Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy | Date: March 2023 |
|---|---|
| **Appropriation/Budget Activity**<br>1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)* | **R-1 Program Element (Number/Name)**<br>PE 0604373N *I Airborne Mine Countermeasures* |

| COST ($ in Millions) | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 87.314 | 10.838 | 10.882 | 11.368 | - | 11.368 | 11.126 | 11.336 | 11.471 | 11.700 | Continuing | Continuing |
| 4026: *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* | 76.312 | 9.885 | 9.924 | 10.367 | - | 10.367 | 10.142 | 10.335 | 10.456 | 10.665 | Continuing | Continuing |
| 9179: *Surf Navy Integ Undersea Tactical Tech* | 11.002 | 0.953 | 0.958 | 1.001 | - | 1.001 | 0.984 | 1.001 | 1.015 | 1.035 | Continuing | Continuing |

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

The Airborne Mine Countermeasures (AMCM) Program Element (PE) previously provided resources to develop advanced Mine Countermeasures (MCM) systems, which are now in production. It currently funds post mission analysis software, integrated tactics and tactics training for mine warfare operations, and post mission analysis proficiency training. The MCM systems provide mobile, quick reaction forces capable of land or sea-based minehunting and mines countermeasures operations worldwide. Resources are for developing and deploying advanced mine-sweeping systems and the intelligence and oceanographic capabilities that will enable mine warfare superiority. Tactics and techniques used vary across a diversity of environments and threats, including both asymmetric and emerging. Resources provide for systems and support of mine warfare systems and expeditionary systems to allow for continuous operations of the Navy's warships and support vessels, other military vessels, and commercial vessels. Core capabilities include forward presence, deterrence, sea control, power projection, maritime security, humanitarian assistance and disaster response to maintain freedom of the seas. Capability improvements include reducing post-mission analysis time; reducing detect, classify, and identify decision time; improving neutralization time; improving network communications; automatic target recognition; and achieving in-stride detect-to-engage capability. Concept-of-operations include development of cooperative, modular systems with a common post mission analysis system providing advanced tools to automate the complex problem of contact management for the thousands of recorded detections and the establishment of capable networked command and control systems. Efforts benefit the MCM force by transforming the Navy from the platform-centered legacy set of systems to a capability-centered force that is distributed, networked, and able to provide unique maritime influence and access across the entire maritime domain. The Airborne Mine Countermeasures (AMCM) programs will provide detection, classification, localization, identification, neutralization, influence sweep, and post mission analysis capabilities. This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA).

Project 4026 Net-Centric Sensor Analysis for Mine Warfare (NSAM) also includes the Integrated Tactics project. NSAM is the next generation post mission analysis (PMA) system which will replace the Organic Post Mission Analysis (OPMA) system. NSAM will be the single tactical and environmental PMA system for all Mine Warfare (MIW) sensor data and will provide integrated contact management capabilities. NSAM creates a collaborative, multi-data set, multi-user environment with the goal of reducing the mission timeline and increasing the mission effectiveness. NSAM is designed with an extensible architecture, to ease integration of additional sensors and advanced algorithms. The Integrated Tactics project develops tactics at the MIW Staff and MCM Scenario level. Project provides new MIW tactics theory and Fleet tactics training for MIW Staffs Theory and tactics are documented and published into doctrine for Fleet users.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy | Date: March 2023 |
|---|---|
| **Appropriation/Budget Activity**<br>1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)* | **R-1 Program Element (Number/Name)**<br>PE 0604373N *I Airborne Mine Countermeasures* |

Project 9179, Surface Navy Integrated Undersea Tactical Technology (SNIUTT) is a software tool which provides contact recognition training modules for Mine Countermeasures (MCM) sensor systems and runs on existing PMA and training systems.

| B. Program Change Summary ($ in Millions) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 10.881 | 10.882 | 11.154 | - | 11.154 |
| Current President's Budget | 10.838 | 10.882 | 11.368 | - | 11.368 |
| Total Adjustments | -0.043 | 0.000 | 0.214 | - | 0.214 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -0.043 | 0.000 | | | |
| • Rate/Misc Adjustments | 0.000 | 0.000 | 0.214 | - | 0.214 |

**Change Summary Explanation**

FY 2022 reduced by $43K for SBIR assessments.
FY 2023 no adjustments
FY 2024 +$214K misc. rate adjustments

| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | | Date: March 2023 |
|---|---|---|---|
| Appropriation/Budget Activity<br>1319 / 5 | R-1 Program Element (Number/Name)<br>PE 0604373N / *Airborne Mine Countermeasures* | Project (Number/Name)<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* | |

| COST ($ in Millions) | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4026: *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* | 76.312 | 9.885 | 9.924 | 10.367 | - | 10.367 | 10.142 | 10.335 | 10.456 | 10.665 | Continuing | Continuing |
| Quantity of RDT&E Articles | | - | - | - | - | - | - | - | - | - | | |

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

Project 4026: Net-centric Sensor Analysis for Mine Warfare (NSAM) includes both NSAM and the Integrated Tactics project. NSAM will replace the Organic Post Mission Analysis (OPMA) system, which provides post mission analysis (PMA) capabilities for the Airborne Laser Mine Detection System (ALMDS), the Airborne Mine Neutralization System (AMNS), and a separate module for contact management. NSAM will be the single tactical and environmental PMA system for all Mine Warfare (MIW) sensor data and will provide integrated contact management capabilities. NSAM creates a collaborative, multi-data set, multi-user environment with the goal of reducing the mission timeline and increasing the mission effectiveness. NSAM is designed with an extensible architecture, to ease integration of additional sensors and advanced algorithms. The Integrated Tactics project develops tactics at the MIW Staff and MCM Scenario level. Project provides new MIW tactics theory and Fleet tactics training for MIW Staffs. Theory and tactics are documented and published into doctrine for Fleet users.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|---|---|---|---|---|
| ***Title:*** NSAM Product Development | 6.937 | 7.087 | 7.447 | 0.000 | 7.447 |
| ***Articles:*** | - | - | - | - | - |
| ***FY 2023 Plans:***<br>-Continue NSAM software development for v1.5 AN/AQS-20C PMA.<br>-Begin v1.3 development for annual release, to meet Information Systems Capability Development Document (IS-CDD) requirements.<br>-Develop v1.2.5 RHEL 8 installer build.<br>-Support tactics training needs for MIW Staffs by developing wargame scenarios and conducting wargames. | | | | | |
| ***FY 2024 Base Plans:***<br>-Continue NSAM software development for v1.5, AN/AQS-20C PMA.<br>-Begin v1.4 development for annual release, to meet Information Systems Capability Development Document (IS-CDD) requirements.<br>-Support tactics training needs for MIW Staffs by developing wargame scenarios and conducting wargames. | | | | | |
| ***FY 2024 OCO Plans:*** | | | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|---|---|---|---|---|
| N/A<br>***FY 2023 to FY 2024 Increase/Decrease Statement:***<br>FY 2023 to FY 2024 increase associated with planned software development for v1.4 additional CDD requirements build and v1.5 AN/AQS-20C PMA. | | | | | |
| ***Title:*** Engineering Services/ILS: | 2.159 | 1.949 | 2.212 | 0.000 | 2.212 |
| ***Articles:*** | - | - | - | - | - |
| ***FY 2023 Plans:***<br>-Continue requirements analysis of new draft NSAM Information Systems Capability Development Document (IS-CDD).<br>- Continue providing NSAM engineering support to LCS MCM Mission Package, following their TECHEVAL and IOT&E.<br>- Adjudicate test observation reports (TORs) and document them as software backlog items.<br>- Maintain cybersecurity compliance. Continue applying RMF guidelines and implement continuous monitoring strategy adhering to the ATO requirements. Conduct RMF ATO renewal process, to renew ATO by 1QFY24.<br>***FY 2024 Base Plans:***<br>- Continue tracking implementation of high-level requirements.<br>- Adjudicate test observation reports (TORs) and document them as software backlog items.<br>- Continue applying RMF guidelines and implement continuous monitoring strategy adhering to the ATO requirements.<br>***FY 2024 OCO Plans:***<br>N/A<br>***FY 2023 to FY 2024 Increase/Decrease Statement:***<br>No significant scope changes from FY2023 to FY2024. | | | | | |
| ***Title:*** Test and Evaluation | 0.267 | 0.527 | 0.164 | 0.000 | 0.164 |
| ***Articles:*** | - | - | - | - | - |
| ***FY 2023 Plans:***<br>- Conduct quarterly incremental tests of engineering builds.<br>- Conduct v1.2.5 developmental test (DT). | | | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|---|---|---|---|---|
| - Develop test materials for v1.3 DT and begin v1.3 DT.<br>***FY 2024 Base Plans:***<br>- Conduct quarterly incremental tests of engineering builds.<br>- Complete v1.3 DT.<br>- Develop test materials in preparation for v1.4 DT.<br>***FY 2024 OCO Plans:***<br>N/A<br>***FY 2023 to FY 2024 Increase/Decrease Statement:***<br>No significant scope changes from FY2023 to FY2024. | | | | | |
| ***Title:*** Management Support | 0.522 | 0.361 | 0.544 | 0.000 | 0.544 |
| ***Articles:*** | - | - | - | - | - |
| ***FY 2023 Plans:***<br>- Continue to plan, track, follow-up and report on cost, schedule, and performance status.<br>- Conduct management and oversight of project technical processes.<br>***FY 2024 Base Plans:***<br>- Continue to plan, track, follow-up and report on cost, schedule, and performance status.<br>- Conduct management and oversight of project technical processes.<br>- Conduct Milestone B and address actions following the Milestone B review.<br>***FY 2024 OCO Plans:***<br>N/A<br>***FY 2023 to FY 2024 Increase/Decrease Statement:***<br>No significant scope changes from FY2023 to FY2024. | | | | | |
| **Accomplishments/Planned Programs Subtotals** | 9.885 | 9.924 | 10.367 | 0.000 | 10.367 |

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

| Line Item | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • OPN/4248: *Legacy Airborne MCM* | 4.443 | 4.689 | 12.202 | - | 12.202 | 10.786 | 12.116 | 12.356 | 12.269 | 0.000 | 170.589 |

| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |

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

| Line Item | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Remarks**

-NSAM is item 2 in the OPN line item above. NSAM's portion of the OPN funding is $0.801 in FY 2024, $0.740 in FY 2025, and $0.589 in FY 2026.
-OPN funding, FY 2024-2026 supports hardware procurement to address DMSMS, obsolescence issues, and processing power requirements. Funding supports partial replacement of existing hardware.

**D. Acquisition Strategy**

The NSAM project is executed by government-led teams at Naval Surface Warfare Center (NSWC) Panama City Division (PCD) and Naval Research Laboratory - Stennis Space Center (NRL-SSC), with additional services provided by contractor support labor. NSAM is currently a pre-acquisition category IV-monitor program and plans to enter the acquisition process at Milestone B.

The Integrated Tactics project is executed by a government team at NSWC PCD.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy | | | Date: March 2023 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2022 Cost | FY 2022 Award Date | FY 2023 Cost | FY 2023 Award Date | FY 2024 Base Cost | FY 2024 Base Award Date | FY 2024 OCO Cost | FY 2024 OCO Award Date | FY 2024 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hardware/Software Development | WR | NSWC PCD : Panama City FL | 40.485 | 4.553 | Oct 2021 | 4.277 | Oct 2022 | 4.578 | Oct 2023 | - | | 4.578 | Continuing | Continuing | Continuing |
| Hardware/Software Development | WR | NRL-SSC : Bay St. Louis, MS | 8.691 | 2.019 | Oct 2021 | 2.445 | Oct 2022 | 2.504 | Oct 2023 | - | | 2.504 | Continuing | Continuing | Continuing |
| Hardware/Software Development | C/CPFF | Various: NSWC PC : Panama City, FL | 0.730 | 0.365 | Oct 2021 | 0.365 | Oct 2022 | 0.365 | Oct 2023 | - | | 0.365 | 0.000 | 1.825 | - |
| | | **Subtotal** | 49.906 | 6.937 | | 7.087 | | 7.447 | | - | | 7.447 | Continuing | Continuing | N/A |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2022 Cost | FY 2022 Award Date | FY 2023 Cost | FY 2023 Award Date | FY 2024 Base Cost | FY 2024 Base Award Date | FY 2024 OCO Cost | FY 2024 OCO Award Date | FY 2024 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Engineering and Logistics Support | C/CPFF | NSWC PCD : Various | 0.920 | 0.190 | Oct 2021 | 0.440 | Oct 2022 | 0.190 | Oct 2023 | - | | 0.190 | 0.000 | 1.740 | - |
| Engineering and Logistics Support | WR | NSWC PCD : Panama City, FL | 18.233 | 1.969 | Oct 2021 | 1.509 | Oct 2022 | 2.022 | Oct 2023 | - | | 2.022 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 19.153 | 2.159 | | 1.949 | | 2.212 | | - | | 2.212 | Continuing | Continuing | N/A |

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

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2022 Cost | FY 2022 Award Date | FY 2023 Cost | FY 2023 Award Date | FY 2024 Base Cost | FY 2024 Base Award Date | FY 2024 OCO Cost | FY 2024 OCO Award Date | FY 2024 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Developmental Test & Evaluation (DT&E) | WR | NSWC PC : Panama City, FL | 3.527 | 0.267 | Oct 2021 | 0.263 | Oct 2022 | 0.164 | Oct 2023 | - | | 0.164 | 0.000 | 4.221 | - |
| Developmental Test & Evaluation (DT&E) | WR | JHU-APL : Laurel, MD | 0.356 | 0.000 | Oct 2021 | 0.100 | Oct 2022 | 0.000 | | - | | 0.000 | 0.000 | 0.456 | - |
| Developmental Test & Evaluation (DT&E) | C/CPFF | NSWC PC : Various | 0.164 | 0.000 | Oct 2021 | 0.164 | Oct 2022 | 0.000 | | - | | 0.000 | 0.000 | 0.328 | - |
| | | **Subtotal** | 4.047 | 0.267 | | 0.527 | | 0.164 | | - | | 0.164 | 0.000 | 5.005 | N/A |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |

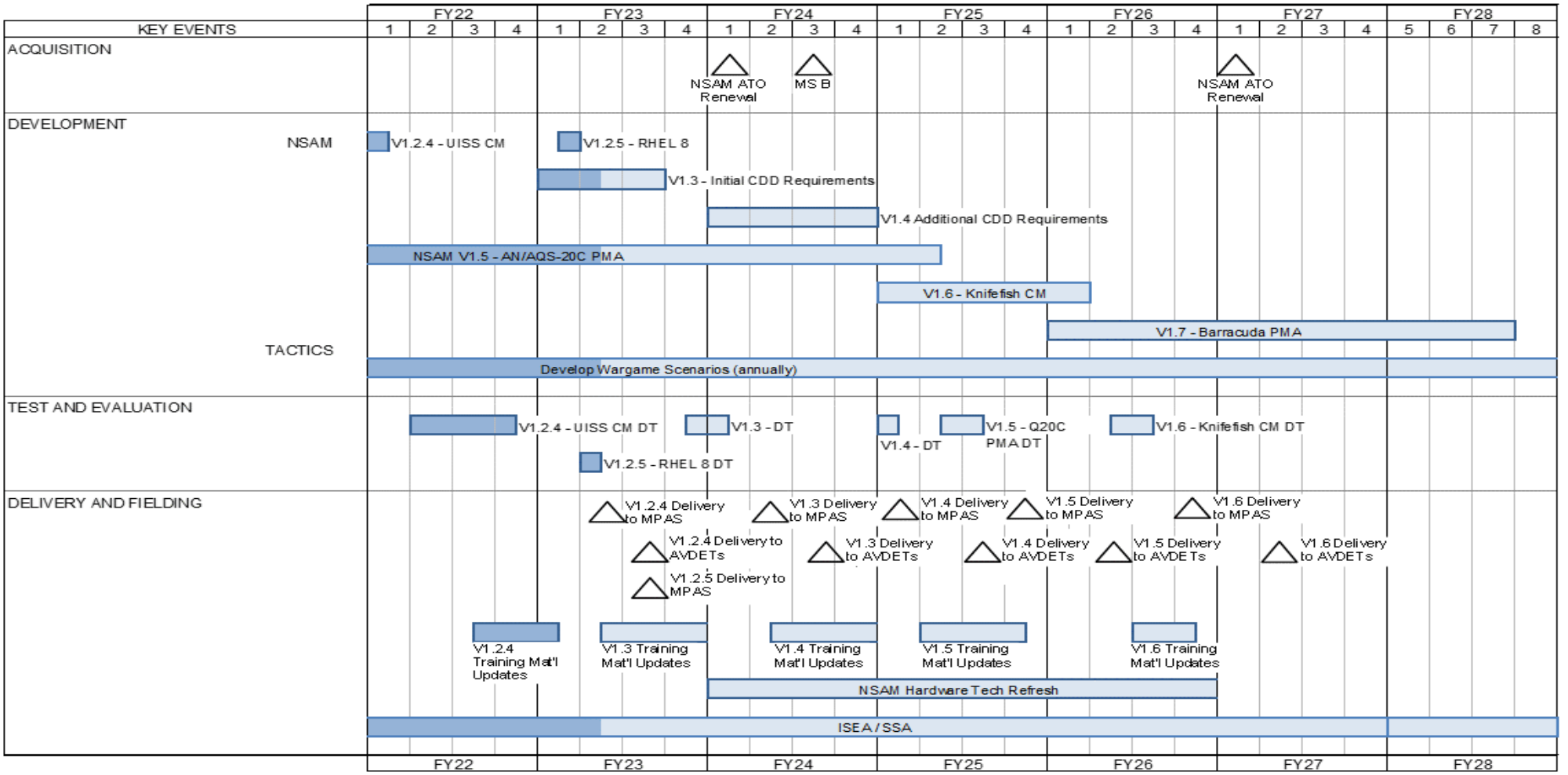
**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2022 Cost | FY 2022 Award Date | FY 2023 Cost | FY 2023 Award Date | FY 2024 Base Cost | FY 2024 Base Award Date | FY 2024 OCO Cost | FY 2024 OCO Award Date | FY 2024 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Management Support | WR | NSWC PC : Panama City FL | 3.163 | 0.522 | Oct 2021 | 0.361 | Oct 2022 | 0.544 | Oct 2023 | - | | 0.544 | Continuing | Continuing | Continuing |
| Acquisition Workforce Fund | Various | Various : Various | 0.043 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.043 | - |
| | | **Subtotal** | 3.206 | 0.522 | | 0.361 | | 0.544 | | - | | 0.544 | Continuing | Continuing | N/A |

| | Prior Years | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 76.312 | 9.885 | | 9.924 | | 10.367 | | - | | 10.367 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 4026*** | | | | |
| Acquisition Milestones: NSAM: Milestone B | 3 | 2024 | 3 | 2024 |
| Acquisition Milestones: NSAM ATO Renewal | 1 | 2024 | 1 | 2024 |
| Acquisition Milestones: NSAM ATO Renewal 2 | 1 | 2027 | 1 | 2027 |
| Acquisition Milestones: NSAM: S/W Development Build 1.2.4 UISS Contact Management | 1 | 2022 | 1 | 2022 |
| Acquisition Milestones: NSAM: S/W Development Build 1.2.5 RHEL 8 Installer | 1 | 2023 | 1 | 2023 |
| Acquisition Milestones: NSAM: S/W Development Build 1.5 AN/AQS-20C PMA | 1 | 2022 | 2 | 2025 |
| Acquisition Milestones: NSAM: S/W Development Build 1.3 initial CDD requirements | 1 | 2023 | 3 | 2023 |
| Acquisition Milestones: NSAM: S/W Development Build 1.4 additional CDD requirements | 1 | 2024 | 4 | 2024 |
| Acquisition Milestones: NSAM: S/W Development Build 1.6 Knifefish Contact Management | 1 | 2025 | 1 | 2026 |
| Acquisition Milestones: NSAM: S/W Development Build 1.7 Barracuda PMA | 1 | 2026 | 3 | 2028 |
| Acquisition Milestones: Tactics: S/W Development Build: Develop wargame scenarios | 1 | 2022 | 4 | 2028 |
| Test & Evaluation: NSAM: Developmental Testing Build 1.2.4 UISS Contact Management | 2 | 2022 | 4 | 2022 |
| Test & Evaluation: NSAM: Developmental Testing Build 1.2.5 RHEL 8 Installer | 2 | 2023 | 2 | 2023 |
| Test & Evaluation: NSAM: Developmental Testing Build 1.3 initial CDD requirements | 4 | 2023 | 1 | 2024 |
| Test & Evaluation: NSAM: Developmental Testing Build 1.4 additional CDD requirements | 1 | 2025 | 1 | 2025 |
| Test & Evaluation: NSAM: Developmental Testing Build 1.5 AN/AQS-20C PMA | 2 | 2025 | 3 | 2025 |
| Test & Evaluation: NSAM: Developmental Testing Build 1.6 Knifefish Contact Management | 2 | 2026 | 3 | 2026 |

| Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)* |

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| NSAM Deliveries: Build 1.2.4 UISS Contact Management (MPAS) | 2 | 2023 | 2 | 2023 |
| NSAM Deliveries: Build 1.2.4 UISS Contact Management (AVDETs) | 3 | 2023 | 3 | 2023 |
| NSAM Deliveries: Build 1.2.5 RHEL 8 Installer | 3 | 2023 | 3 | 2023 |
| NSAM Deliveries: Build 1.3 initial CDD requirements (MPAS) | 2 | 2024 | 2 | 2024 |
| NSAM Deliveries: Build 1.3 initial CDD requirements (AVDETs) | 3 | 2024 | 3 | 2024 |
| NSAM Deliveries: Build 1.4 additional CDD requirements (MPAS) | 1 | 2025 | 1 | 2025 |
| NSAM Deliveries: Build 1.4 additional CDD requirements (AVDETs) | 3 | 2025 | 3 | 2025 |
| NSAM Deliveries: Build 1.5 AN/AQS-20C PMA (MPAS) | 4 | 2025 | 4 | 2025 |
| NSAM Deliveries: Build 1.5 AN/AQS-20C PMA (AVDETs) | 2 | 2026 | 2 | 2026 |
| NSAM Deliveries: Build 1.6 Knifefish Contact Management (MPAS) | 4 | 2026 | 4 | 2026 |
| NSAM Deliveries: Build 1.6 Knifefish Contact Management (AVDETS) | 2 | 2027 | 2 | 2027 |
| NSAM Deliveries: NSAM: Build 1.2.4 UISS CM Training Material Update | 3 | 2022 | 1 | 2023 |
| NSAM Deliveries: NSAM: Build 1.3 initial CDD requirements Training Material Update | 2 | 2023 | 4 | 2023 |
| NSAM Deliveries: NSAM: Build 1.4 additional CDD requirements Training Material Update | 2 | 2024 | 4 | 2024 |
| NSAM Deliveries: NSAM: Build 1.5 AN/AQS-20C PMA Training Material Update | 2 | 2025 | 4 | 2025 |
| NSAM Deliveries: NSAM: Build 1.6 Knifefish CM Training Material Update | 3 | 2026 | 4 | 2026 |

| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | | Date: March 2023 |
|---|---|---|---|
| Appropriation/Budget Activity<br>1319 / 5 | R-1 Program Element (Number/Name)<br>PE 0604373N / *Airborne Mine Countermeasures* | Project (Number/Name)<br>9179 / *Surf Navy Integ Undersea Tactical Tech* | |

| COST ($ in Millions) | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9179: *Surf Navy Integ Undersea Tactical Tech* | 11.002 | 0.953 | 0.958 | 1.001 | - | 1.001 | 0.984 | 1.001 | 1.015 | 1.035 | Continuing | Continuing |
| Quantity of RDT&E Articles | | - | - | - | - | - | - | - | - | - | | |

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

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) is a software tool which provides contact recognition training modules for Mine Countermeasures (MCM) sensor systems. SNIUTT training modules include skills and refresher/proficiency training; the contact recognition training focuses on detection, classification, and identification of mine-like contacts. The modules run on existing PMA and training systems; this implementation reinforces PMA procedures for Fleet operators. Modules are customized based on Fleet-user needs for a specific weapons system and are used both in the classroom and at the squadrons, as contact recognition is a perishable skill. SNIUTT training modules are available for the following systems: 1) Post Mission Analysis training systems for AN/AQS-24; 2) Coastal Battlefield Reconnaissance and Analysis (COBRA) training systems for COBRA sensors; 3) Organic Post Mission Analysis (OPMA) for ALMDS and the Contact Management Tool; and 4) Net-centric Sensor Analysis for Mine Warfare (NSAM) PMA system for ALMDS.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|---|---|---|---|---|
| ***Title:*** Product Development | 0.600 | 0.623 | 0.619 | 0.000 | 0.619 |
| ***Articles:*** | - | - | - | - | - |
| ***FY 2023 Plans:***<br>- Conduct SNIUTT v1.3.5 software development, which will include additional AN/AQS-24C components, COBRA training updates and NSAM scenario import/export functionality; components for NSAM AN/AQS-20C deferred to FY24 when data to support development will be available.<br>***FY 2024 Base Plans:***<br>- Conduct SNIUTT v1.3.6 software development, which will include initial components for NSAM AN/AQS-20C<br>***FY 2024 OCO Plans:***<br>N/A<br>***FY 2023 to FY 2024 Increase/Decrease Statement:***<br>No significant scope changes from FY2023 to FY2024. | | | | | |
| ***Title:*** Engineering and Logistics Support | 0.353 | 0.335 | 0.382 | 0.000 | 0.382 |
| ***Articles:*** | - | - | - | - | - |
| ***FY 2023 Plans:*** | | | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>9179 / *Surf Navy Integ Undersea Tactical Tech* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|---|---|---|---|---|
| - Develop high-level and derived requirements for SNIUTT v1.3.5 and v1.3.6 software products.<br>-Develop SNIUTT interface documentation.<br>- Perform configuration management of system requirements, develop engineering change proposals, manage ticket backlogs. Maintain SNIUTT source code repository, requirements, and documents.<br>- Develop test plan and test cases, provide test results, and generate test reports. Execute test events for each SNIUTT build.<br>***FY 2024 Base Plans:***<br>- Develop high-level and derived requirements for SNIUTT v1.3.6 and v1.3.7 software products.<br>- Perform configuration management of system requirements, develop engineering change proposals, manage ticket backlogs. Maintain SNIUTT source code repository, requirements, and documents.<br>- Develop test plan and test cases, provide test results, and generate test reports. Execute test events for each SNIUTT build.<br>***FY 2024 OCO Plans:***<br>N/A<br>***FY 2023 to FY 2024 Increase/Decrease Statement:***<br>No significant scope changes from FY2023 to FY2024. | | | | | |
| **Accomplishments/Planned Programs Subtotals** | 0.953 | 0.958 | 1.001 | 0.000 | 1.001 |

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

N/A

**Remarks**

**D. Acquisition Strategy**

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) is executed by a government-led team at NSWC PCD.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy | | | Date: March 2023 |
|---|---|---|---|
| Appropriation/Budget Activity<br>1319 / 5 | R-1 Program Element (Number/Name)<br>PE 0604373N / *Airborne Mine Countermeasures* | Project (Number/Name)<br>9179 / *Surf Navy Integ Undersea Tactical Tech* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2022 Cost | FY 2022 Award Date | FY 2023 Cost | FY 2023 Award Date | FY 2024 Base Cost | FY 2024 Base Award Date | FY 2024 OCO Cost | FY 2024 OCO Award Date | FY 2024 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Development | WR | NSWC PC : Panama City FL | 9.051 | 0.600 | Oct 2021 | 0.623 | Oct 2022 | 0.619 | Oct 2023 | - | | 0.619 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 9.051 | 0.600 | | 0.623 | | 0.619 | | - | | 0.619 | Continuing | Continuing | N/A |

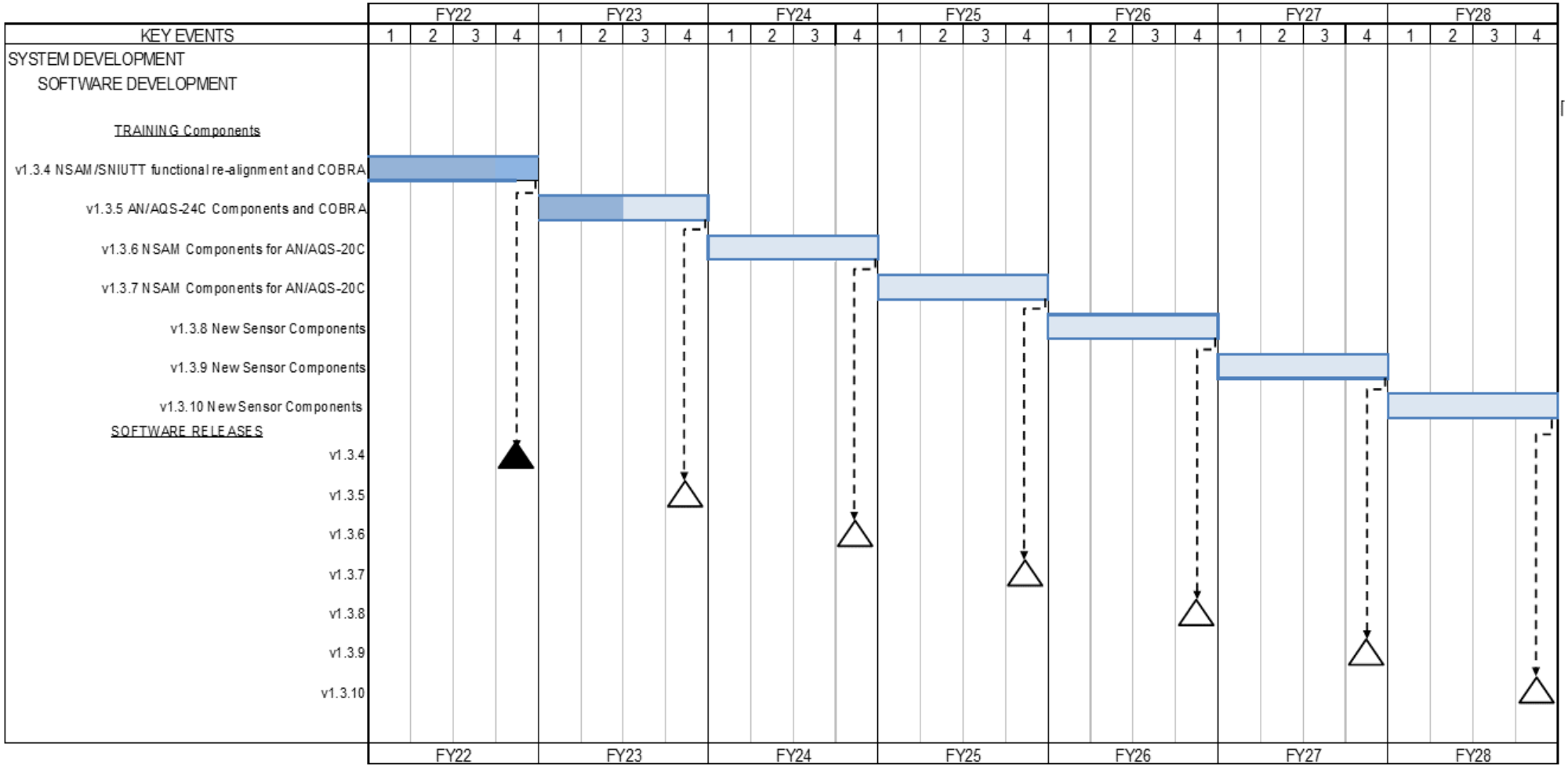
**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2022 Cost | FY 2022 Award Date | FY 2023 Cost | FY 2023 Award Date | FY 2024 Base Cost | FY 2024 Base Award Date | FY 2024 OCO Cost | FY 2024 OCO Award Date | FY 2024 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Engineering and Logistics Support | WR | NSWC, PC : Panama City FL | 1.951 | 0.353 | Oct 2021 | 0.335 | Oct 2022 | 0.382 | Oct 2023 | - | | 0.382 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 1.951 | 0.353 | | 0.335 | | 0.382 | | - | | 0.382 | Continuing | Continuing | N/A |

| | Prior Years | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 11.002 | 0.953 | | 0.958 | | 1.001 | | - | | 1.001 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>9179 / *Surf Navy Integ Undersea Tactical Tech* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy | | Date: March 2023 |
|---|---|---|
| **Appropriation/Budget Activity**<br>1319 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0604373N / *Airborne Mine Countermeasures* | **Project (Number/Name)**<br>9179 / *Surf Navy Integ Undersea Tactical Tech* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***SNIUTT*** | | | | |
| System Development: SNIUTT Software Development: v1.3.4 NSAM/SNUITT re-alignment and COBRA | 1 | 2022 | 3 | 2022 |
| System Development: SNIUTT Software Development: v1.3.4 software release | 4 | 2022 | 4 | 2022 |
| System Development: SNIUTT Software Development: v1.3.5 AN/AQS-24C Components, COBRA and NSAM functionality | 3 | 2022 | 3 | 2023 |
| System Development: SNIUTT Software Development: v1.3.5 software release | 4 | 2023 | 4 | 2023 |
| System Development: SNIUTT Software Development: v1.3.6 NSAM Components for AN/AQS-20C | 1 | 2024 | 3 | 2024 |
| System Development: SNIUTT Software Development: v1.3.6 software release | 4 | 2024 | 4 | 2024 |
| System Development: SNIUTT Software Development: v1.3.7 NSAM Components for AN/AQS-20C | 1 | 2025 | 3 | 2025 |
| System Development: SNIUTT Software Development: v1.3.7 software release | 4 | 2025 | 4 | 2025 |
| System Development: SNIUTT Software Development: v1.3.8 New sensor components | 1 | 2026 | 3 | 2026 |
| System Development: SNIUTT Software Development: v1.3.8 software release | 4 | 2026 | 4 | 2026 |
| System Development: SNIUTT Software Development: v1.3.9 New sensor components | 1 | 2027 | 3 | 2027 |
| System Development: SNIUTT Software Development: v1.3.9 software release | 4 | 2027 | 4 | 2027 |
| System Development: SNIUTT Software Development: v1.3.10 New sensor components | 1 | 2028 | 3 | 2028 |
| System Development: SNIUTT Software Development: v1.3.10 software release | 4 | 2028 | 4 | 2028 |