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

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|---|---|
| Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)</i> | R-1 Program Element (Number/Name) PE 0604272N / <i>Tact Air Dir Infrared CM (TADIRCM)</i> |
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| 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 | 196.948 | 32.530 | 39.028 | 34.684 | - | 34.684 | 22.146 | 15.422 | 14.569 | 15.169 | Continuing | Continuing |
| 3348: <i>DAIRCM Development</i> | 196.948 | 32.530 | 15.028 | 34.684 | - | 34.684 | 22.146 | 15.422 | 14.569 | 15.169 | Continuing | Continuing |
| 9999: <i>Congressional Adds</i> | 0.000 | 0.000 | 24.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 24.000 |

A. Mission Description and Budget Item Justification

This element includes development of electronic warfare systems for worldwide deployment of United States Navy (USN) and United States Marine Corps (USMC) assault aircraft. This includes the development and testing of advanced infrared (IR) countermeasures systems for aircraft survivability against emerging threats and for emergency contingencies. This program develops Hostile Fire Indication (HFI), and Laser Warning Sensors that integrates IR missile countermeasures with aircraft Countermeasures Dispensing Systems (CMDs) and expendables. DAIRCM adopts future multi-band, networking capabilities to facilitate real-time transfer of threat information, off-board queuing, and control of onboard sensors. DAIRCM studies and evaluates current and future aircraft threats, makes modeling and simulation for improved countermeasure capabilities, develops, tests and provides test equipment to address new and emerging threats for improved aircraft survivability of assault aircraft in complex terrain and EW environments.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

| B. Program Change Summary (\$ in Millions) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget | 33.246 | 15.028 | 16.102 | - | 16.102 |
| Current President's Budget | 32.530 | 39.028 | 34.684 | - | 34.684 |
| Total Adjustments | -0.716 | 24.000 | 18.582 | - | 18.582 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | 24.000 | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -0.716 | 0.000 | | | |
| • Program Adjustments | 0.000 | 0.000 | 18.732 | - | 18.732 |
| • Rate/Misc Adjustments | 0.000 | 0.000 | -0.150 | - | -0.150 |

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: *Congressional Adds*

| FY 2022 | FY 2023 |
|---------|---------|
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| Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)</i> | R-1 Program Element (Number/Name) PE 0604272N / <i>Tact Air Dir Infrared CM (TADIRCM)</i> |
|---|---|

| Congressional Add Details (\$ in Millions, and Includes General Reductions) | FY 2022 | FY 2023 |
|--|----------------|----------------|
| Congressional Add: <i>Distributed aperture infrared countermeasures</i> | 0.000 | 24.000 |
| Congressional Add Subtotals for Project: 9999 | 0.000 | 24.000 |
| Congressional Add Totals for all Projects | 0.000 | 24.000 |

Change Summary Explanation

The FY24 funding request increased by \$18.582M for continued design, development, integration and test of the AN/AAQ-45 Distributed Aperture Infrared Countermeasures (DAIRCM) system.

Several factors contributed to a revised program schedule to include previous reprioritization decisions resulting in funding reductions across the FYDP and global supply chain issues impacting the prime contractor's ability to acquire hardware components to support system processor and sensor development, build and test. PB24 provides funding across the FYDP and coupled with the FY23 congressional add, executes a program strategy to introduce capability to the Fleet as quickly as possible. As a result of these factors, the following adjustments have occurred from PB23 to PB24.

Acquisition Milestones: DAIRCM Test Readiness Review (TRR) IOT&E Gate was in Q2FY24 at PB23. Due to later than expected deliveries of EMD hardware, TRR has been separated into two events. TRR1 is in Q2FY23 and is expected to determine the system's ability to enter into Software in the Loop (SIL) testing and allows the buy down of technical risk earlier in the program than previously planned. TRR2 is in Q4FY23 and is expected to determine the system's ability to enter into developmental flight test. DAIRCM Milestone C moved from 3QFY24 to 4QFY25. Full Rate Production Decision (FRPD) moved from 1QFY26 to 2QFY27. Initial Operational Capability (IOC) moved from 4QFY26 to 3QFY28.

Contract Milestones: The EMD contract award was extended by 13 months to allow for later than expected hardware deliveries. The Engineering Design Model (EDM) hardware deliveries moved from Q1FY23 to Q1FY24. EMD deliveries began on time but will take the entirety of FY23 to deliver vice the previously contracted completion of deliveries in Q1 of FY23. The Low-Rate Initial Production (LRIP) contract award moved from Q3FY24 to Q1FY26. The LRIP delivery schedule moved from Q4FY25-Q1FY27 to Q3FY26-Q3FY28. The Full-Rate Production (FRP) contract award moved from Q1FY26 to Q2FY27. The FRP delivery schedule moved from Q1FY27-Q4FY27 to Q3FY28-Q4FY28. The DRS BOA, IDIQ contract, and Production Representative Models (PRM) were added to the schedule.

Test and Evaluation: DAIRCM Integrated Test (IT) moved from Q1FY24-Q2FY24 to Q1FY26-Q3FY26. Due to the later than expected deliveries of EMD hardware, the program has adopted a SIL heavy test program using surrogate hardware to buy down program technical risk in in FY23 while waiting for the delivery of actual EMD hardware. The program will execute a fly-fix-fly strategy during developmental flight test in FY24 and early FY25. This will maximize the number of deficiencies that can be discovered and corrected prior to the COTF Operational Assessment and MS-C Decision. Independent Logistics Assessment (ILA) moved from Q4FY23 to Q4FY24. Flight Test (FT) Q3FY23 has been removed and replaced with Developmental Test (DT) and is now in Q2FY4-Q1FY25. FY24 DAIRCM Live Fire (LF) has been removed and replaced with Live Fire Test and Evaluation (LFT&E) in Q1FY25-Q2FY25 and FY26 DAIRCM Live Fire (LF) has been changed to Live Fire Test and Evaluation (LFT&E) 3Q26-4Q26. Installation of PRM hardware on an Operational Test (OT) aircraft is the precursor to

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Appropriation/Budget Activity
1319: *Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)*

R-1 Program Element (Number/Name)
PE 0604272N / *Tact Air Dir Infrared CM (TADIRCM)*

post-MSD IT, LFT&E and OT. DAIRCM Initial Operational Test and Evaluation (IOT&E) has been removed and replaced with OT on the schedule. SIL TEST has been added to the schedule. First Article (FA) has been removed from the schedule. SVR/FC/A/PRR moved from Q3FY24 to Q3FY25 and has been realigned from T&E to Production Milestones on the schedule.

Software Builds: Pt. Mugu Software Development Builds and DRS Software Builds were added to the schedule. OT Installs/IOC Installs/FRP Installs, NRL SW Threat Pacing Development Builds, and DRS Pre Planned Product Improvements have been added to provide additional detail in FY26-28. JUONS Technical Insertion and installs were removed.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy **Date:** March 2023

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| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / <i>Tact Air Dir Infrared CM (TA DIRCM)</i> | Project (Number/Name) 3348 / <i>DAIRCM Development</i> |
|--|--|--|

| COST (\$ in Millions) | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---------------------------------|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| 3348: <i>DAIRCM Development</i> | 196.948 | 32.530 | 15.028 | 34.684 | - | 34.684 | 22.146 | 15.422 | 14.569 | 15.169 | Continuing | Continuing |
| Quantity of RDT&E Articles | | 4 | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

The projects in this element advances the processor, laser, and sensor development of the AN/AAQ-45 Distributed Aperture Infrared Countermeasures (DAIRCM) system in order to outpace current / future threats in addition to adding growth for future capabilities. These modifications significantly increase aircraft survivability of Department of Navy (DoN) assault aircraft in complex terrain for worldwide deployment. The DAIRCM system consists of three major components: missile warning sensors, processor, and inexhaustible laser countermeasures. DAIRCM interfaces with the platform aircraft and provides signals to onboard Aircraft Survival Equipment (ASE). Within the Department of Navy, UH-1Y is the lead platform for the DAIRCM Program. The DAIRCM program advances lessons learned from the JUONs to incorporate the system under glass in the H-1; improves laser power; increases processor to allow for additional sensors to meet platform/mission needs; improves sensor countermeasure features; improves effectiveness for flare deployment; and further develops cyber security. The DAIRCM design is scalable to expedite expansion to other platforms and improve crew threat situational awareness. The program also advances modeling and simulation for new countermeasures, and develops necessary test equipment for program success.

FY24 RDT&E funding is required to continue development and test of the DAIRCM system. The program will continue development of Government tracking software and testing of under glass solutions. DAIRCM will continue studies and evaluations of current and future aircraft threats, modeling and simulation for improved countermeasure capabilities, development, testing, and test equipment to address new and emerging threats. The program will conduct lead platform (UH-1Y) ground and flight test for DAIRCM integration of both A-Kit and B-Kit as well as correct deficiencies found during test.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

| | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|--|---------|---------|--------------|-------------|---------------|
| Title: DAIRCM Development | 32.530 | 15.028 | 34.684 | 0.000 | 34.684 |
| Articles: | 4 | - | - | - | - |
| FY 2023 Plans: | | | | | |
| Complete Software drop one (SW1) acceptance qualification. Complete Platform A-kit integration. Begin SIL testing. Complete TRR (1) and TRR (2). | | | | | |
| FY 2024 Base Plans: | | | | | |
| Complete delivery of four (4) EDM and Mass Models. Complete Software drops two (2), three (SW3), and four (SW4) acceptance and qualification testing. Complete DT install and begin Developmental Test (DT) on aircraft. Complete Independent Logistic Assessment (ILA). | | | | | |
| FY 2024 OCO Plans: | | | | | |

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| 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 | | | | | |
| <i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Increase in budget from FY2023 to FY2024 of \$19.656M required to complete delivery of EDM control processors, EDM Lasers, EDM Sensors, and EDM Fiber optic Cable Assemblies. Additionally, continued OFP software development, including development and incorporation of advanced missile tracking algorithms and Hostile Fire indication algorithms and system security. Procure Production Representative Models to support FOT&E. | | | | | |
| Accomplishments/Planned Programs Subtotals | 32.530 | 15.028 | 34.684 | 0.000 | 34.684 |

| 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 |
| • APN/0576: <i>Distributed Aperture Infrared Countermeasures (DAIRCM)</i> | 2.006 | 32.311 | 1.500 | - | 1.500 | 14.584 | 22.931 | 21.559 | 34.042 | 203.838 | 415.287 |
| • APN/0605: <i>(9504) Common ECM Mod Spares (OCO)</i> | 6.867 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.867 |

Remarks
 APN/0576 represents one (1) OSIP (OSIP 018-17 Distributed Aperture Infrared Countermeasures (DAIRCM)) from the Common ECM Equipment budget.
 APN/0605 represents only a portion of the total Common ECM Mod Spares budget.

D. Acquisition Strategy
 The Distributed Aperture Infrared Countermeasures (DAIRCM) ACAT II Program is a scalable acquisition approach that provides the architecture for an integrated aircraft survivability system with preplanned product improvements (P3I) to outpace the threats into the future. It replaces the existing AN/AAR-47 UV Threat Warning System - providing an inexhaustible countermeasure with improved 2-color IR Threat Warning system and growth capability to meet future design improvements and combat advanced threats. It leverages JUONs capability, cooperation between Government laboratories and industry partners to grow into an integrated capability that meets the key performance parameters. The DAIRCM program awarded a development cost contract in FY20. The DAIRCM program will also award contract modifications for new platforms to procure DAIRCM Engineering Development Models (EDMs), Production Representative Models (PRMs) and nonrecurring engineering development and test support as future material solution for their platforms. The addition of other Services platforms is expected to lower the overall acquisition costs for all services. A separate production contract will be awarded for Milestone C planned for 4Q2025 for services that selected DAIRCM as future material solution for their platforms.

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

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|--|--|--|

| Product Development (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|---------------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| H-1 Operational Flight Program Dev | C/CPFF | Northrop Grumman : Woodland Hills, CA | 4.510 | 1.415 | Jun 2022 | 0.300 | Jun 2023 | 0.150 | Jun 2024 | - | | 0.150 | Continuing | Continuing | Continuing |
| Govt Eng Support | WR | NAWCAD : Patuxent River, MD | 4.880 | 2.651 | Oct 2021 | 2.408 | Oct 2022 | 2.443 | Oct 2023 | - | | 2.443 | Continuing | Continuing | Continuing |
| Govt Eng Support | WR | FRC : Jacksonville, FL | 0.575 | 0.079 | Nov 2021 | 0.134 | Nov 2022 | 0.136 | Nov 2023 | - | | 0.136 | Continuing | Continuing | Continuing |
| Govt Software Eng Support | WR | NAWCWD : PT Mugu | 5.590 | 1.035 | Nov 2021 | 1.008 | Nov 2022 | 1.008 | Nov 2023 | - | | 1.008 | Continuing | Continuing | Continuing |
| Aircraft Integration | WR | FRC East : Cherry Point, NC | 0.400 | 0.200 | Apr 2022 | 0.204 | Nov 2022 | 0.224 | Nov 2023 | - | | 0.224 | Continuing | Continuing | Continuing |
| Govt Software Eng Support | WR | NRL : Washington, DC | 14.176 | 1.927 | Nov 2021 | 1.140 | Nov 2022 | 1.140 | Nov 2023 | - | | 1.140 | Continuing | Continuing | Continuing |
| Primary HW Dev DAIRCM | C/CPFF | DRS Sysco : Melbourne, FL | 68.986 | 18.884 | May 2022 | 4.923 | Mar 2023 | 24.628 | Nov 2023 | - | | 24.628 | Continuing | Continuing | Continuing |
| H-1 Operational Flight Program Dev | C/CPFF | Bell Tech : Fort Worth, TX | 0.556 | 0.488 | May 2022 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.044 | - |
| Prior Year (Product Development) costs no longer funded in FYDP | Various | Various : Various | 64.753 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 64.753 | - |
| Subtotal | | | 164.426 | 26.679 | | 10.117 | | 29.729 | | - | | 29.729 | Continuing | Continuing | N/A |

Remarks

(1) FY24 decrease (\$0.150M) H-1 Operational Flight Program Dev at Northrop Grumman due to planned completion of work within the FY.

(2) FY24 increase (\$0.035M) Govt Eng Support at NAWCAD Patuxent River, MD to account for the addition of A-Kit design for H-1 to be completed by Government vice Bell Tech.

(3) FY24 increase (\$0.002M) Govt Eng Support at FRC Jacksonville, FL to account for inflation.

(4) FY24 increase (\$0.020M) FRC East Cherry Point, NC to support platform integration and technical documentation.

(5) FY24 increase (\$19.705M) DRS Sysco, Melbourne, FL. for continued development and delivery of EDM control processors, EDM Lasers, EDM Sensors, and EDM Fiber optic Cable Assemblies. Additionally, continued OFP software development, including development and incorporation of advanced missile tracking algorithms and Hostile Fire indication algorithms.

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|--|--|--|

| Support (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|-----------------------------------|------------------------|--|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| Govt Integrated Logistic Support | WR | Fleet Readiness Depot : Jacksonville, FL | 0.144 | 0.163 | Oct 2021 | 0.160 | Oct 2022 | 0.163 | Oct 2023 | - | | 0.163 | Continuing | Continuing | Continuing |
| Logistic Deliverables | SS/CPFF | RIAC : Ft. Belvoir, VA | 0.789 | 0.156 | Nov 2021 | 0.158 | Nov 2022 | 0.161 | Nov 2023 | - | | 0.161 | Continuing | Continuing | Continuing |
| ESOH support | WR | NAWC WD : China Lake | 0.139 | 0.008 | Nov 2021 | 0.008 | Nov 2022 | 0.008 | Nov 2023 | - | | 0.008 | 0.000 | 0.163 | - |
| Integrated Logistic Support | C/CPAF | Wyle Laboratories : Lexington Park, MD | 0.441 | 0.156 | Apr 2022 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.597 | 0.300 |
| Comercial Shipping TAC code | TBD | Various : Various | 0.055 | 0.045 | Nov 2021 | 0.030 | Oct 2022 | 0.030 | Oct 2023 | - | | 0.030 | Continuing | Continuing | Continuing |
| ESOH Support | SS/CPFF | RIAC : Ft. Belvoir, VA | 0.048 | 0.037 | Nov 2021 | 0.032 | Nov 2022 | 0.032 | Nov 2023 | - | | 0.032 | Continuing | Continuing | Continuing |
| Govt Integrated Logistics Support | WR | NAWCAD : Patuxent River, MD | 0.451 | 0.570 | Oct 2021 | 0.260 | Oct 2022 | 0.265 | Oct 2023 | - | | 0.265 | Continuing | Continuing | Continuing |
| Subtotal | | | 2.067 | 1.135 | | 0.648 | | 0.659 | | - | | 0.659 | Continuing | Continuing | N/A |

Remarks
 (1) FY24 increase (\$0.003M) FRC Depot Jax, FL to account for inflation.
 (2) FY24 increase (\$0.003M) Logistic Deliverables, RIAC Ft. Belvoir, VA to account for inflation.
 (3) FY24 increase (\$0.005M) Govt Integrated Logistics Support, NAWCAD Patuxent River, MD to account for inflation.

| Test and Evaluation (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| Developmental Test & Evaluation (DT&E) | WR | NAWCAD : Patuxent River, MD | 9.772 | 0.652 | Oct 2021 | 1.022 | Oct 2022 | 1.052 | Oct 2023 | - | | 1.052 | Continuing | Continuing | Continuing |
| Developmental Test & Evaluation (DT&E) | WR | NAWCWD : China Lake, CA | 6.442 | 0.053 | Nov 2021 | 0.829 | Nov 2022 | 0.853 | Nov 2023 | - | | 0.853 | Continuing | Continuing | Continuing |
| Developmental Test & Evaluation (DT&E) | C/CPFF | GWEF : Eglin AFB, FL | 1.955 | 0.214 | Jun 2022 | 0.200 | Dec 2022 | 0.200 | Dec 2023 | - | | 0.200 | Continuing | Continuing | Continuing |

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| Test and Evaluation (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|-----------------------------------|---|--------------------|----------------|-------------------|----------------|-------------------|---------------------|-------------------|--------------------|-------------------|----------------------|-------------------------|-------------------|---------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| Developmental Test & Evaluation (DT&E) | WR | COTF : Various | 1.642 | 0.195 | Jan 2022 | 0.579 | Jan 2023 | 0.494 | Jan 2024 | - | | 0.494 | Continuing | Continuing | Continuing |
| Developmental Test & Evaluation (DT&E) | WR | CRANE : CRANE | 1.050 | 0.100 | Jan 2022 | 0.109 | Jan 2023 | 0.111 | Jan 2024 | - | | 0.111 | 0.000 | 1.370 | - |
| Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E) | C/CPFF | NAWCWD : Point Mugu, CA | 0.483 | 1.035 | Nov 2021 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.518 | - |
| Prior Year Live Fire Test & Evaluation Not Funded FYDP (PYLFT&E) | Various | Various : Various | 0.915 | 0.554 | Jun 2022 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.469 | 0.450 |
| Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E) | Various | Various : Various | 5.247 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 5.247 | - |
| Subtotal | | | 27.506 | 2.803 | | 2.739 | | 2.710 | | - | | 2.710 | Continuing | Continuing | N/A |

Remarks

(1) FY24 increase (\$0.030M) Gov T&E Support at NAWCAD Patuxent River, MD due to increasing DAIRCM test requirements.
 (2) FY24 increase (\$0.024M) NAWCWD China Lake, CA to support FY24 testing of EDM systems.
 (3) FY24 decrease (\$0.085M) Govt T&E Support at COTF due to reduced test support requirements.
 (4) FY24 increase (\$0.002M) Govt T&E Support at Crane to account for inflation.

| Management Services (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|-----------------------------------|---|--------------------|----------------|-------------------|----------------|-------------------|---------------------|-------------------|--------------------|-------------------|----------------------|-------------------------|-------------------|---------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| Contractor Mgmt Support | C/CPFF | Amelex : California, MD | 0.161 | 0.219 | Jan 2022 | 0.147 | Jan 2023 | 0.149 | Jan 2024 | - | | 0.149 | 0.000 | 0.676 | - |
| Contractor Eng Support | C/CPFF | Various : Various | 1.161 | 0.398 | Jan 2022 | 0.103 | Jan 2023 | 0.105 | Jan 2024 | - | | 0.105 | 0.000 | 1.767 | - |
| Travel | WR | NAVAIR Various : Patuxent River, MD | 0.343 | 0.360 | Jun 2022 | 0.320 | Oct 2022 | 0.350 | Oct 2023 | - | | 0.350 | 0.000 | 1.373 | - |
| Govt PM Support | WR | NAWCAD : Patuxent River, MD | 1.025 | 0.916 | Dec 2021 | 0.934 | Oct 2022 | 0.962 | Oct 2023 | - | | 0.962 | 0.000 | 3.837 | - |

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|--|---|---|

| Management Services (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| DISA | C/BA | NAVIDFOR : Suffolk, VA | 0.020 | 0.020 | Jun 2022 | 0.020 | Jun 2023 | 0.020 | Jun 2024 | - | | 0.020 | 0.000 | 0.080 | - |
| Prior Year (Management Services) costs no longer funded in FYDP | Various | Various : Various | 0.239 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.239 | - |
| Subtotal | | | 2.949 | 1.913 | | 1.524 | | 1.586 | | - | | 1.586 | 0.000 | 7.972 | N/A |

Remarks
 (1) FY24 increase (\$0.002M) Contract Mgmt Support Amelex, California, MD to account for inflation.
 (2) FY24 increase (\$0.002M) Contract Eng Support Various, Various to account for inflation.
 (3) FY24 increase (\$0.030M) Govt travel as program shifts from design to Government test.
 (4) FY24 increase (\$0.028M) Gov PM Support NAWCAD Patuxent River, MD as program shifts from design to Government test.

| | 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 | 196.948 | 32.530 | 15.028 | 34.684 | - | 34.684 | Continuing | Continuing | N/A |

Remarks

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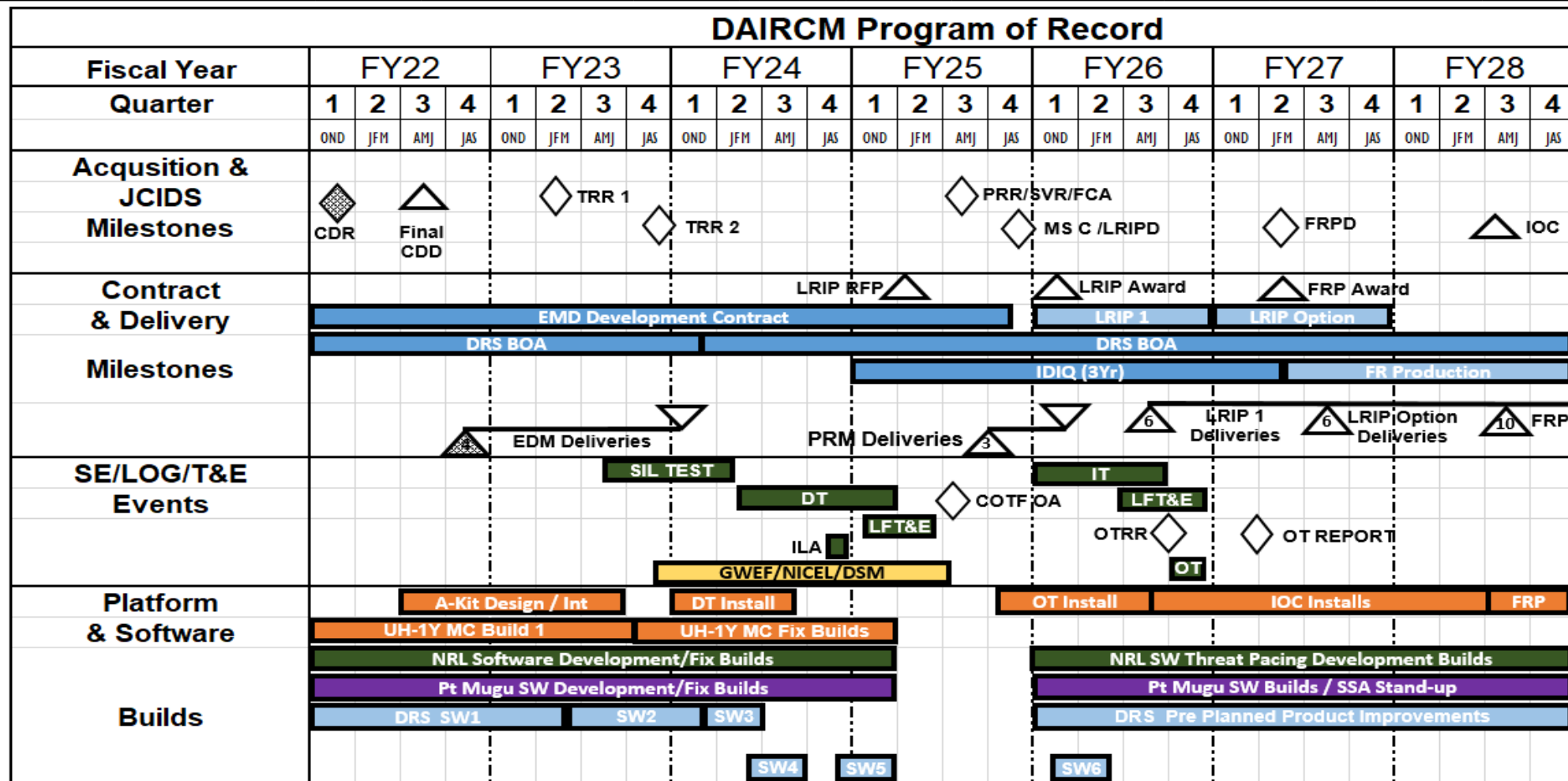
Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy

Date: March 2023

Appropriation/Budget Activity
1319 / 4

R-1 Program Element (Number/Name)
PE 0604272N / Tact Air Dir Infrared CM (TA
DIRCM)

Project (Number/Name)
3348 / DAIRCM Development



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| Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy | | Date: March 2023 |
| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / <i>Tact Air Dir Infrared CM (TA DIRCM)</i> | Project (Number/Name) 3348 / <i>DAIRCM Development</i> |

Schedule Details

| Events by Sub Project | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| DAIRCM | | | | |
| Acquisition Milestones: DAIRCM Final Capability Development Document (CDD): Schedule Detail | 3 | 2022 | 3 | 2022 |
| Acquisition Milestones: DAIRCM MSC Decision: Schedule Detail | 4 | 2025 | 4 | 2025 |
| Acquisition Milestones: Full-Rate Production Decision (FRPD): Schedule Detail | 2 | 2027 | 2 | 2027 |
| Acquisition Milestones: Initial Operational Capability (IOC): Schedule Detail | 3 | 2028 | 3 | 2028 |
| Acquisition Milestones: DAIRCM Test Readiness Review (TRR) IOT&E Gate: TRR 1 | 2 | 2023 | 2 | 2023 |
| Acquisition Milestones: DAIRCM Test Readiness Review (TRR) IOT&E Gate: TRR 2 | 4 | 2023 | 4 | 2023 |
| Acquisition Milestones: DAIRCM CDR: Schedule Detail | 1 | 2022 | 1 | 2022 |
| Acquisition Milestones: DAIRCM SVR/FC/A/PRR: Schedule Detail | 3 | 2025 | 3 | 2025 |
| Test and Evaluation: DAIRCM Development Flight Test: Schedule Detail | 2 | 2024 | 1 | 2025 |
| Test and Evaluation: DAIRCM Integrated Test (IT): Schedule Detail | 1 | 2026 | 3 | 2026 |
| Test and Evaluation: FY25 DAIRCM Live Fire Test & Evaluation (LFT&E): Schedule Detail | 1 | 2025 | 2 | 2025 |
| Test and Evaluation: DAIRCM Operational Test (OT): Schedule Detail | 4 | 2026 | 4 | 2026 |
| Test and Evaluation: FY26 DAIRCM LFT&E: Schedule Detail | 3 | 2026 | 4 | 2026 |
| Contract Milestones: Low-Rate Initial Production (LRIP) Award: Schedule Detail | 1 | 2026 | 1 | 2026 |
| Contract Milestones: Full-Rate Production (FRP) Award: Schedule Detail | 2 | 2027 | 2 | 2027 |
| Deliveries: Engineering Design Model (EDM) Hardware Deliveries: Schedule Detail | 4 | 2022 | 1 | 2024 |
| Deliveries: LRIP Deliveries: Schedule Detail | 3 | 2026 | 3 | 2028 |
| Deliveries: FRP Deliveries: Schedule Detail | 3 | 2028 | 4 | 2028 |

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy **Date:** March 2023

| | | |
|--|---|---|
| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / Tact Air Dir Infrared CM (TA DIRCM) | Project (Number/Name) 9999 / Congressional Adds |
|--|---|---|

| 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 |
|----------------------------|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| 9999: Congressional Adds | 0.000 | 0.000 | 24.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 24.000 |
| Quantity of RDT&E Articles | | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

FY 2023 Congressional Add: Tactical Aircraft Directable Infrared Countermeasure program (TADIRCM) for continued focus to develop and field the Distributed Aperture Infrared Countermeasure System (DAIRCM) for enhanced rotary aircraft survivability. DAIRCM is part of the long-term strategy for sustainable, cyber-secure aviation survivability against future battlefield threats and the funding request in fiscal year 2023 supports development of the program of record.

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

| | FY 2022 | FY 2023 |
|---|---------|---------|
| Congressional Add: Distributed aperture infrared countermeasures | 0.000 | 24.000 |
| FY 2022 Accomplishments: N/A | | |
| FY 2023 Plans: Conduct developmental flight test and integrated flight test as well as continue software development required to correct deficiencies found in SIL and flight test events. Finalize SIL testing and lead platform A-kit integration. Install EDM systems into developmental flight test aircraft. Conduct test events in the Guided Weapons Evaluation Facility (GWEF) and the Navy Infrared Countermeasures Effectiveness Laboratory (NICEL) to assist in determining system effectiveness. | | |
| Congressional Adds Subtotals | 0.000 | 24.000 |

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

| <u>Line Item</u> | <u>FY 2022</u> | <u>FY 2023</u> | <u>FY 2024 Base</u> | <u>FY 2024 OCO</u> | <u>FY 2024 Total</u> | <u>FY 2025</u> | <u>FY 2026</u> | <u>FY 2027</u> | <u>FY 2028</u> | <u>Cost To Complete</u> | <u>Total Cost</u> |
|---|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| • RDTE/0604272N/3348: <i>TADIRCM/DAIRCM Development</i> | 32.530 | 15.028 | 34.684 | - | 34.684 | 22.146 | 15.422 | 14.569 | 15.169 | Continuing | Continuing |
| • APN/0576: <i>Distributed Aperture Infrared Countermeasures (DAIRCM)</i> | 2.006 | 32.311 | 1.500 | - | 1.500 | 14.584 | 22.931 | 21.559 | 34.042 | 203.838 | 415.287 |
| • APN/0605: <i>(9504) Common ECM Mod Spares (OCO)</i> | 6.867 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.867 |

Remarks

APN/0576 represents one (1) OSIP (OSIP 018-17 Distributed Aperture Infrared Countermeasures (DAIRCM)) from the Common ECM Equipment budget.

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|--|---|--|
| Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy | | Date: March 2023 |
| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / <i>Tact Air Dir Infrared CM (TADIRCM)</i> | Project (Number/Name) 9999 / <i>Congressional Adds</i> |

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

| <u>Line Item</u> | <u>FY 2022</u> | <u>FY 2023</u> | <u>FY 2024</u> <u>Base</u> | <u>FY 2024</u> <u>OCO</u> | <u>FY 2024</u> <u>Total</u> | <u>FY 2025</u> | <u>FY 2026</u> | <u>FY 2027</u> | <u>FY 2028</u> | <u>Cost To</u> <u>Complete</u> | <u>Total Cost</u> |
|---|----------------|----------------|-------------------------------|------------------------------|--------------------------------|----------------|----------------|----------------|----------------|-----------------------------------|-------------------|
| APN/0605 represents only a portion of the total Common ECM Mod Spares budget. | | | | | | | | | | | |

D. Acquisition Strategy

FY 2023 Congressional Add: Tactical Aircraft Directable Infrared Countermeasure program (TADIRCM).

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

| | | |
|--|---|---|
| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / Tact Air Dir Infrared CM (TA DIRCM) | Project (Number/Name) 9999 / Congressional Adds |
|--|---|---|

| Product Development (\$ in Millions) | | | | FY 2022 | | FY 2023 | | FY 2024 Base | | FY 2024 OCO | | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | | | |
| Primary HW Dev DAIRCM | C/CPFF | DRS Sysco : Melbourne, FL | 0.000 | 0.000 | | 24.000 | Apr 2023 | 0.000 | | - | | 0.000 | 0.000 | 24.000 | - |
| Subtotal | | | 0.000 | 0.000 | | 24.000 | | 0.000 | | - | | 0.000 | 0.000 | 24.000 | N/A |

Remarks
 FY23 funds (\$24.000M) DRS Sysco, Melbourne, FL. to conduct developmental flight test and integrated flight test as well as continue software development required to correct deficiencies found in SIL and flight test events. Finalize SIL testing and lead platform A-kit integration. Install EDM systems into developmental flight test aircraft. Conduct test events in the Guided Weapons Evaluation Facility (GWEF) and the Navy Infrared Countermeasures Effectiveness Laboratory (NICEL) to assist in determining system effectiveness.

| | 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 | 0.000 | 0.000 | 24.000 | 0.000 | - | 0.000 | 0.000 | 24.000 | N/A |

Remarks

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

| | | |
|--|---|---|
| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / Tact Air Dir Infrared CM (TA DIRCM) | Project (Number/Name) 9999 / Congressional Adds |
|--|---|---|

| DAIRCM Congressional Add | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| Fiscal Year | FY22 | | | | FY23 | | | | FY24 | | | | FY25 | | | | FY26 | | | | FY27 | | | | FY28 | | | | | | | |
| Quarter | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS | OND | JFM | AMJ | JAS |
| Acquisition & JCIDS Milestones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contract & Delivery Milestones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SE/LOG/T&E Events | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Platform & Software Builds | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy | | Date: March 2023 |
| Appropriation/Budget Activity 1319 / 4 | R-1 Program Element (Number/Name) PE 0604272N / <i>Tact Air Dir Infrared CM (TA DIRCM)</i> | Project (Number/Name) 9999 / <i>Congressional Adds</i> |

Schedule Details

| Events by Sub Project | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| DAIRCM CONGRESSIONAL ADD | | | | |
| Contract & Delivery Milestones: EMD Development Contract | 3 | 2023 | 3 | 2025 |