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

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</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	5,855.072	339.032	487.281	399.919	-	399.919	402.751	387.226	390.948	416.254	675.258	9,353.741
3051: <i>E-2D Adv Hawkeye</i>	5,790.853	319.725	467.281	399.919	-	399.919	402.751	387.226	390.948	416.254	675.258	9,250.215
9999: <i>Congressional Adds</i>	64.219	19.307	20.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	103.526

A. Mission Description and Budget Item Justification

The E-2D Advanced Hawkeye (AHE) program provides the Navy with a carrier-based airborne command and control platform, which is equipped with the APY-9 radar system, multiple communications systems for data and voice, and additional sensor systems. All of these systems are integrated into the aircraft via a computing infrastructure that is highly automated, which enables a highly trained crew of just 5 aviators to conduct battle management that would otherwise require several dozen personnel at multiple locations.

E-2D is a core pillar of theater and carrier strike group air defense and a key enabler to Joint long-range fires kill webs necessary to defeat the threats of our peer adversaries. Work has begun on upgrading the 25-year old computing architecture of the AHE that will allow the Navy to lead the Joint All Domain Command and Control (JADC2) efforts in any theater.

As production of the airplane winds down (final airframe procurement is scheduled for FY23), the threat continues to increase in both capability and capacity. The E-2D Research, Development, Test and Evaluation budget reflects the Navy's investment into the E-2D to ensure that the US maintains a tactical advantage over any adversary.

Efforts initiated in recent years ensure that the E-2D can outpace the threat, and include upgrades to the air vehicle, mission systems, datalinks, and sensors. The program integrates and tests these new capabilities, and provides Fleet concurrent training equipment upgrades. Subsequent to successful testing, new capabilities are delivered on a regularly scheduled basis, and are put together as a Delta System/Software Configuration (DSSC) package to ensure commonality and configuration control across the Fleet.

Among the other E-2D mission systems R&D efforts, there are 2 major initiatives that will ensure that the E-2D is ready & relevant into the coming decades. First, obsolete and failing components of the 15-year old cockpit design are being addressed by HECTR (Hawkeye Cockpit Technical Refresh), which ensures a higher safety margin for carrier landings after 8-12 hour sorties, and will substantially decrease sustainment costs over the lifecycle of the airplane. Second is TCID (Theater Combat Identification), which includes the upgrades to the 25-year old computing infrastructure mentioned above. TCID will bring Multi-Level Security and Cross-Domain solutions through an Open Mission System (OMS) Architecture. TCID is the key to establishing the CNO's vision for the Naval Operational Architecture and the Joint Chiefs' vision for JADC2. HECTR and TCID are planned for DSSC-6, FY28 delivery.

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JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	348.360	502.956	459.352	-	459.352
Current President's Budget	339.032	487.281	399.919	-	399.919
Total Adjustments	-9.328	-15.675	-59.433	-	-59.433
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-35.675			
• Congressional Rescissions	-	-			
• Congressional Adds	-	20.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-9.328	0.000			
• Program Adjustments	0.000	0.000	-37.667	-	-37.667
• Rate/Misc Adjustments	0.000	0.000	-21.766	-	-21.766

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

Project: 9999: *Congressional Adds*

Congressional Add: *Radar modernization and testing*

	FY 2022	FY 2023
Congressional Add Subtotals for Project: 9999	19.307	20.000
Congressional Add Totals for all Projects	19.307	20.000

Change Summary Explanation

Technical: Not applicable.

Funding adjustments since President's Budget 23:

The FY 2024 funding request was adjusted following a decision to delay DSSC-6 fielding from FY27 to FY29; the schedule change was required to mitigate budget shortfalls by lengthening the development period and thereby reducing the total amount of required RDT&E,N funding in FY24. Additionally, the request was adjusted to reflect rate changes and reductions for higher Navy priorities.

Schedule:

Delta System/Software Configuration (DSSC) build schedule changes are as follows:

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<p>DSSC 5: Accelerated fleet release plan utilizes agile development and test to fast-track fielding of capability in incremental drops in FY24, FY25, and FY26 vice the previous plan to field all DSSC 5 capability in FY25.</p> <p>DSSC-6: Fielding delayed from FY27 to FY28 to mitigate budget shortfalls. Developmental completion date changed from Q3/FY23 to Q2/FY25 Integration end date changed from Q1/FY26 to Q3/FY26 Developmental Test completion date changed from Q4/FY26 to Q3/FY27 Operational Test complete date changed from Q3/FY27 to Q4/FY28 Fleet Release date changed from Q3/FY27 to Q4/FY28</p>		

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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
3051: <i>E-2D Adv Hawkeye</i>	5,790.853	319.725	467.281	399.919	-	399.919	402.751	387.226	390.948	416.254	675.258	9,250.215
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DSSC build schedule is outlined below along with the capabilities that are planned to comprise each DSSC build.

DSSC-3.1 is comprised of the following capabilities:

1. Crypto Modernization/Frequency Remapping: The E-2D Multifunctional Information Distribution System/Joint Tactical Radio System (MIDS/JTRS) with concurrent Multi-netting will be integrated into the E-2D. This effort includes replacing the Multifunctional Information Distribution System-Low Volume Terminal (MIDS LVT) radio with MIDS/JTRS that has incorporated Link-16 concurrent Multi-netting (CMN-4) and replacing the JTIDS High Power Amplifier Group with a Link-16 High Power Amplifier which will address Crypto Modernization and Frequency Remapping.

2. Hybrid-Beyond Line of Sight(H-BLOS)SIPRChat will provide a Secret Internet Protocol Router Network(SIPRNet)Chat capability via INMARSAT.

DSSC-4 is planned for operational test and Fleet release in FY23. DSSC-4 provides critical capabilities needed to outpace the threat and enables components of terminal defense. DSSC-4 is comprised of the following capabilities:

1. E-2D Navigation Warfare (NAVWAR) prevents loss of Global Positioning System (GPS) by using a Controlled Reception Pattern Antenna (CRPA) and antenna electronics (AE) unit which will function to provide GPS access in an Electronic Attack (EA) environment. NAVWAR significantly reduces the likelihood of loss of critical GPS Position, Navigation and Timing functionality that is fundamental to E-2D battlespace awareness and its contributions to multiple link networks. Without NAVWAR capability, the E-2D AHE will be unable to provide its services in GPS contested airspace, putting Navy units at unacceptable risk and hindering Joint operational flexibility. NAVWAR capability will allow the E-2D AHE to operate in areas where signal disruption and jamming would prohibit unprotected GPS reception. With this new capability, the E-2D AHE will be able to provide continuous operations in a degraded GPS environment for mission areas that depend on GPS for precise position, navigation, and timing.

2. The E-2D Multifunctional Information Distribution System/Joint Tactical Radio System (MIDS/JTRS)Tactical Targeting Networking Technology (TTNT) integrates Advanced Tactical Data Link functionality into the E-2D. This effort includes replacing the MIDS LVT radio with MIDS/JTRS that has incorporated Link-16 Concurrent Multi-Netting and TTNT. MIDS/JTRS TTNT is a key enabler for E-2D sensor netting capability in support of the NIFC mission. Conduct Communication-as-a-Service (CaaS) demonstration to support development of a solution for resilient communication paths of tactical information throughout the battlespace.

3. The fully integrated E-2D Secret Internet Protocol Router (SIPR) Chat capability will support integration of current collaboration tools including tactical "chat" (text) communications, real-time tasking, and Air Tasking Order distribution. Recent real world operations have demonstrated a migration of Command and Control communications from voice to Internet protocol based networks.

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4. The E-2D DSSC-4 Counter Electronic Attack (CEA) capability will allow the E-2D radar system to maintain performance in a hostile electromagnetic interference environment. CEA will ensure continuous E-2D effectiveness is maintained in an Electronic Attack environment supporting the NIFC capability and overall Navy and Joint Integrated Air and Missile Defense strategy.

5. DSSC-4 NIFC will incorporate software improvements to implement capabilities and performance needed to meet partial NIFC increment 3 requirements. This improvement will specifically improve From the Sea (FTS) performance. Additional details are classified.

DSSC-5 has an accelerated fleet release plan to fast-track fielding of capability in incremental drops in FY24, FY25, and FY26 vice the previous plan to field all DSSC 5 capability in FY25. DSSC-5 provides the capabilities necessary for E-2D to meet NIFC increment 3 requirements and is comprised of the following capabilities:

1. DSSC-5.1 will provide a Counter Electronic Attack (CEA) capability which will allow the E-2D radar system to maintain performance in an advanced hostile intentional electromagnetic interference environment. CEA will ensure continuous E-2D effectiveness is maintained in an Electronic Attack environment supporting the NIFC capability and overall Navy and Joint Integrated Air and Missile Defense strategy.

2. DSSC-5.1 and 5.2 will provide phased E-2D Data Fusion Improvements for a fusion engine to blend on and off-board sensor derived track data (e.g. Electronic Surveillance, Satellite Receiver System data, Fighter to Fighter backlink data) with already blended radar, Identify Friend or Foe and Cooperative Engagement Capability track files, enhancing situational awareness and tactical decision making. Integrating Link-16 Network Participation Group 20 messages improves interoperability between E-2D and participating US Navy fighters, including 5th generation aircraft. This enhances the combat effectiveness of the E-2D, increases situational awareness and shortens kill-chain timeliness (including NIFC). Successful E-2D NIFC employment depends on a clear/unambiguous tactical picture.

3. DSSC-5.2 and 5.3 will provide phased E-2D Cooperative Engagement Capability (CEC) Signal Data Processor (SDP) processing capacity and cryptographic upgrades required to implement the NIFC capabilities integrated into DSSC 5. CEC utilizes the SDP to encrypt tactical data and control the antenna during transmission of the data. This capability will correct obsolescence deficiencies based on processors, encryption, and capacity and establish the baseline architecture for expanded capability in CEC. The fully integrated E-2D Communication-as-a-Service (CaaS) will enhance CEC improvements to ensure resilient communication paths for tactical information throughout the battlespace. CEC Block II capabilities will ensure continued interoperability with the rest of the carrier strike group, and enable new CEC capabilities necessary to counter expected advances in threat capabilities. Additional CEC improvements will provide Communication-as-a-Service (CaaS) solutions for resilient communication paths of tactical information throughout the battlespace. Initial integration of CEC Block II capabilities must be conducted on time to maintain interoperability and keep pace with expected threats.

4. DSSC-5.1, 5.2, and 5.3 will provide phased E-2D Sensor Netting capabilities which provide fusion of data from off-board sources via a high bandwidth network that will allow E-2D to support NIFC increment 3 requirements. Additional details are classified.

E-2D Stores Performance Assessment Requested Quality (SPARQ):

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Due to budget constraints and reprioritization of efforts, E-2D Stores Performance Assessment Requested Quality (SPARQ) capabilities have been removed from the DSSC-5 build. These funds were reprioritized to higher development priorities. Capability to be incorporated in a future DSSC build.

DSSC-6 is planned for operational test in FY28 and Fleet Release in FY29. DSSC-6 provides the capabilities necessary for E-2D to meet NIFC increment 3 requirements and is comprised of the following capabilities:

1. E-2D Hawkeye Cockpit Technical Refresh (HECTR) involves a redesign of critical components of the current E-2D Integrated Navigation Control and Display System (INCDS) driven by component obsolescence and fleet identified deficiencies. The effort includes the integration of these components with remaining cockpit hardware, integration of new software applications, and integration with TCID weapon system architecture. HECTR will also integrate a visual reference via a Helmet Mounted Display (HMD). HECTR will bring a Required Navigation Performance Area Navigation (RNP RNAV) capability to the E-2D platform, to improve reliability, to address current human machine interface (HMI) deficiencies and to address obsolescence of the current cockpit. All current functions of the INCDS will be included in the HECTR cockpit, to include unique non-navigation functions such as landing gear and gross take-off weight, which are currently housed in the Avionics Flight Management Computer. Additionally, new capability, such as a weather radar and traffic avoidance may be integrated.

2. Theater E-2D Combat Identification (TCID) including Mission Computer Display re-architecture enables the E-2D to distribute longer range and more accurate Combat Identification data to the Carrier Strike Group (CSG). E-2D will receive National Technical Means (NTM) and tactical TCID data at all security levels and filter/distribute at the highest possible security levels to the tactical edge. Using the Open Mission Systems (OMS) design, the new mission computer architecture will provide multi-level security and cyber hardening provisions to support current and planned capabilities. The OMS design will allow faster integration of these capabilities required to pace the evolving threat. The fully integrated E-2D Communication-as-a-Service (CaaS) will enhance TCID improvements to ensure resilient communication paths for tactical information throughout the battlespace.

E-2D Survivability capabilities for the ALQ-217 ESM:

Due to budget constraints and reprioritization of efforts, E-2D Survivability capabilities for the ALQ-217 ESM capabilities have been removed from the DSSC-6 build. These funds were reprioritized to higher development priorities.

Aerial Refueling (AR) Capability:

AR capability allows the E-2D AHE to receive fuel from various organic and non-organic tanker aircraft. It provides Expanded Battle Space Surveillance and Targeting through significantly enhanced persistence and increased flexibility (range & endurance). AR enables the E-2D AHE to fully support current Carrier Strike Group /Joint 24/7 Theater Operations by providing more versatile stationing and/or forward basing options. Previous E-2D testing established operational envelopes for KC-10, KC-130, KC-135, KC-707, and F/A-18E/F aircraft under E-2 Squadrons, PE 0204152N. Future AR tanker testing will include qualification of KC46 and MQ25.

ESM E-2D capabilities for the ALQ-217:

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E-2D AN/ALQ-217 Electronic Support Measures (ESM) integrates digital receiver and processing technology. The ALQ-217B digital ADRP addresses all known and imminent obsolescence issues in ALQ-217B Receiver/Processor. The replacement incorporates technical solutions to meet current and future mandates to support mission needs against evolving threats.

Counter Electronic Attack (CEA) capability:

E-2D CEA capability will allow the E-2D radar system to maintain performance in an advanced hostile electromagnetic interference environment. The E-2D CEA program will ensure continuous E-2D effectiveness is maintained in an Electronic Attack environment supporting the NIFC and long-range fires capability and overall Navy and Joint Integrated Air and Missile Defense strategy.

Software Support Activity:

Software Support Activity provides system requirements and integration in software development environments and software integration labs to support the E-2D software and hardware configurations. This includes software development tools, test tools, and hardware benches. Classified Support for various capabilities associated with the E-2D DSSC Builds.

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

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>Title: Air Vehicle</p> <p align="right">Articles:</p> <p>Description: E-2D Air Vehicle improvements include the development of solutions to improve safety, structural integrity, and systems reliability of the E-2D aircraft. Improvements include analysis and redesign of structural components and components to minimize excessive and premature wear, increase reliability, improve existing design deficiencies, and respond to Fleet urgent operational requirements. The improvements will address known, predicted, and emergent obsolescence equipment issues. These efforts include, but are not limited to Aerial Refueling (AR), Improved Landing Mode (ILM) capabilities, airframe, engine, and electrical component improvements, full scale fatigue testing, and technology upgrades. Future AR tanker testing will include qualification of KC-130, KC46, and MQ25. Funding also includes the flight/engine hours that are necessary for design, development, validation and verification.</p> <p>FY 2023 Plans: E-2D will continue improvement efforts to maintain aircraft readiness. The program will continue to address known, predicted, and emergent obsolescence equipment issues, continuing efforts from prior years. Continue Full Scale Fatigue Test to assure continued safe operation of the aircraft. The test program will continue towards the final goal of 20,000 test hours. Inspections and analysis will be performed at 500 effective flight hour intervals. Repairs of the test article will be conducted, as required. Upon completion of the fatigue test</p>	14.023	25.148	21.222	0.000	21.222
	-	-	-	-	-

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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
<p>article achieving 20,000 Effective Flight Hours (EFH), the test article will be disassembled and examined. The objectives is to identify fatigue critical locations and demonstrate that the E-2D aircraft structure satisfy the programs service life requirement. Continue AR capability envelope expansion efforts.</p> <p>FY 2024 Base Plans: E-2D will continue improvement efforts to maintain aircraft readiness. The program will continue to address known, predicted, and emergent obsolescence equipment issues, continuing efforts from prior years. The test program will complete fatigue testing achieving 20,000 Effective Flight Hours (EFH). Upon completion the test article will be dissembled and examined. The objectives are is to identify fatigue critical locations and demonstrate that the E-2D aircraft structure satisfy the programs service life requirement. Continue AR capability envelope expansion efforts.</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Air Vehicle FY23 to FY24 decrease is due to the completion of the 20,000 Full Scale Fatigue Effective flight hours (EFH) testing and transition to teardown and inspection.</p>					
<p>Title: Mission Systems</p> <p align="right">Articles:</p> <p>Description: E-2D Mission Systems improvements include development, integration, and testing of aircraft Mission Systems hardware/software updates and capability expansions to support aircraft avionics, displays, navigation, communication, electronic sensors, battle management, data fusion, system-of-systems, and countermeasure efforts. Efforts include continuous improvement of Mission Systems equipment and software in order to maintain mission availability for safe and reliable operations. Funding also includes development tools, test tools, and hardware benches in support of software environments and integration labs. Advanced system development and testing activities will address replacement components to address obsolescence, incorporate technical solutions to meet current and future mandates and standards, and incorporate improved technology to support evolving mission needs. Integration of Communication-as-a-Service (CaaS) to support future interoperability efforts. Studies and analyses will evaluate future capability expansions. Mission Systems efforts include, but are not limited to, Hawkeye Cockpit Technical Refresh (HECTR), improvements to/development of Communication Navigation and Identification Friend or Foe (CNI), Datalinks, Avionics, Mission System Software (MSS), Theater Combat Identification (TCID) mission computer, Naval Integrated Fire Control (NIFC), Data Fusion, Cooperative</p>	124.694	225.861	238.000	0.000	238.000
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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
<p>Engagement Capability (CEC) Signal Data Processor (SDP) Upgrade, battle management, technology upgrades, and emergent tactical requirements as they arise.</p> <p>FY 2023 Plans: Continue developmental efforts for DSSC-5 Sensor Netting solution. Complete DSSC-5 Data Fusion development efforts and begin integration. Continue development efforts and begin integration for HECTR. Continue development efforts for TCID, to include Mission computer and Display hardware, National Technical Means (NTM), Open Mission Systems (OMS) and Multi-level Security architecture. Continue development efforts for CaaS. Continue DSSC-5 CEC and SDP software and hardware efforts. Provide support of software development environments and integration labs required for E-2D software and hardware configurations. Systems engineering will support ongoing and emergent analysis and design/development/test efforts required to identify Engineering Change Proposal (ECP) requirements to respond to evolving and emergent threats, mission systems, communications systems, navigation equipment, and countermeasures. Evaluate future capability expansions via studies and analyses.</p> <p>FY 2024 Base Plans: Complete developmental efforts and begin integration for DSSC-5 Sensor Netting and Data Fusion solutions. Continue HECTR development. Continue development efforts for TCID, to include Mission computer and Display hardware, National Technical Means (NTM), Open Mission Systems (OMS) and Multi-level Security architecture, CaaS. Continue DSSC-5 CEC and SDP software and hardware efforts. Provide support of software development environments and integration labs required for E-2D software and hardware configurations. Systems engineering will support ongoing and emergent analysis and design/development/test efforts required to identify Engineering Change Proposal (ECP) requirements to respond to evolving and emergent threats, mission systems, communications systems, navigation equipment, and countermeasures. Evaluate future capability expansions via studies and analyses.</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Mission Systems FY23 to FY24 increase is due to the ramp up of TCID and HECTR development and integration efforts.</p>					
<p>Title: Sensors</p> <p align="right">Articles:</p>	47.643	35.104	0.000	0.000	0.000
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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
<p>Description: E-2D Sensor Systems provide real-time situational awareness to Joint Force and Carrier Strike Group operations via active and passive detection capabilities. Sensor product upgrades provide real-time, on-scene improvements in the execution of early warning, battle management, and command and control missions. E-2D Sensor Systems improvements include development, integration, and testing of aircraft Sensor Systems hardware/software updates and capability expansions. Advanced system development and testing activities will address replacement components to address obsolescence, incorporate technical solutions to meet current and future mandates, and incorporate improved technology in of support mission needs against evolving threats. E-2D AN/ALQ-217 Electronic Support Measures (ESM) Theater Combat Identification (TCID) upgrade integrates digital receiver and processing technology, enabling the E-2D to locate, identify, and track current and future radars in combination with other ESM platforms across L-16 and Tactical Targeting Networking Technology (TTNT). The ESM upgrades bring increased processor capacity, sensor fidelity, and time accuracy. These capabilities will ensure the E-2D can perform its intended mission at locations required to support Naval and Joint force operations. Counter Electronic Attack (CEA) includes implementation of technologies developed by the Office of Naval Research. Studies and analyses will evaluate future capability expansions.</p> <p>FY 2023 Plans: Funds provided to continue DSSC-6 development efforts for CEA. Finalize testing and delivery of AN/ALQ-217 ESM Combat Identification upgrades. Funds provided for continuous emergent analysis and design/development/test efforts required to identify ECP requirements to respond to evolving, emergent threats and countermeasures. Evaluate future capability expansions via studies and analyses.</p> <p>FY 2024 Base Plans: N/A</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Sensors FY23 to FY24 decrease is due to the finalization efforts of the AN/ALQ-217 ESM Combat Identification and Counter Electronic Attack (CEA) upgrades. CEA developments effort previously associated with have been de-prioritized due to funding constraints.</p>					
Title: Integration, Test, and Training	131.975	181.168	140.697	0.000	140.697
Articles:	-	-	-	-	-

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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
<p>Description: Funds the necessary E-2D integration, testing, and Fleet training equipment upgrades required to improve the E-2D weapon system capabilities to meet reliability and increase performance. Includes E-2D System Software Configuration (DSSC) integration, engineering risk reduction efforts, Developmental Test (DT), and Operational Test (OT). In order to improve E-2D resiliency in a cyber-warfare contested environment, concurrent program protection development and integration efforts for both cybersecurity and anti-tamper will be conducted to mitigate vulnerabilities in compliance with Risk Management Framework (RMF) processes, CyberSAFE certification, and Authorities to Operate for E-2D aircraft and labs. Efforts at the E-2D Systems Test and Evaluation Lab (ESTEL) include incorporating Live Virtual Construct (LVC) capabilities to support reducing test costs and schedule as well as to mitigate testing challenges with classified capabilities. Purchase support equipment necessary to meet reliability and increase performance requirements. Incorporate updated mission systems components into both E-2D test aircraft and ESTEL to ensure accurate testing of the E-2D weapons system. Updates training devices concurrent with aircraft DSSC configurations, which includes development of E-2D Distributed Readiness Training (D-DRT) simulators that will allow training to incorporate the latest capabilities into the simulators as well as design, development, and fielding of advanced training tactics.</p> <p>FY 2023 Plans: Funds provided to complete DSSC-4 OT and continue DSSC-5 DT. Continue development of the D-DRT simulator in support of DSSC-5 for training on advanced tactics and incorporate test articles for flight test and in the lab. Continue to incorporate E-2D Cyber warfare program protection needed to pace future threats for critical capabilities in support of DSSC builds. Continue Fleet training development for DSSC capabilities. Continue development of Norfolk aircrew training procedures. Continue to build LVC capabilities, by providing the ability to replicate previous flight tests in the lab environment with captured data, which includes conducting live and/or virtual large scale test efforts.</p> <p>FY 2024 Base Plans: Funds provided to complete DSSC-5 DT. Continue development of the D-DRT simulator in support of DSSC-5 for training on advanced tactics and incorporate test articles for flight test and in the lab. Continue to incorporate E-2D Cyber warfare program protection needed to pace future threats for critical capabilities in support of DSSC builds. Continue Fleet training development for DSSC capabilities. Continue development of Norfolk aircrew training procedures. Continue to develop build LVC capabilities to provide the ability to replicate previous flight tests in the lab environment with captured data to include conducting live and/or virtual large scale test efforts.</p> <p>FY 2024 OCO Plans:</p>					

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Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>

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> Integration, Test, and Training FY23 to FY24 decrease is due to the completion of DSSC-4 OT efforts. The more complex and robust DSSC-5 DT is nearing completion which will decrease ground/flight testing. ESTEL upgrades to support the DSSC-5 capability is nearing completion.					
<i>Title:</i> Classified DSSC Support	1.390	0.000	0.000	0.000	0.000
<i>Articles:</i>	-	-	-	-	-
<i>FY 2023 Plans:</i> N/A					
<i>FY 2024 Base Plans:</i> N/A					
<i>FY 2024 OCO Plans:</i> N/A					
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> N/A					
Accomplishments/Planned Programs Subtotals	319.725	467.281	399.919	0.000	399.919

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/0195: <i>E-2D AHE</i>	944.475	1,407.727	182.817	-	182.817	199.490	23.428	0.000	0.000	2,234.667	21,402.295
• APN/0605: <i>Initial Spares - E-2</i>	2,295.577	2,047.417	2,451.244	-	2,451.244	1,832.522	1,690.871	1,601.312	1,822.090	Continuing	Continuing
• APN/0544: <i>E-2 Series</i>	199.869	188.897	183.246	-	183.246	186.747	139.272	89.821	188.458	1,527.305	4,632.267

Remarks

D. Acquisition Strategy
Milestone C Acquisition Strategy was approved by Milestone Decision Authority, Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) on 29 Dec 2008. Milestone C approval to proceed into Production and Deployment was given 11 June 2009 by USD (AT&L). Certification for entrance into Initial Operational Test & Evaluation was received on 06 Feb 2012. Full Rate Production Acquisition Strategy approved on 20 August 2012. Initial Operational Test & Evaluation concluded 1 October 2012. Successfully held a Defense Acquisition Board for Full Rate Production. Received a successful decision to enter into Full Rate

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
Production on 01 March 2013. Initial Operational Capability achieved on 10 October 2014. The program updated the ACAT-1C Acquisition Strategy on 14 December 2016 to cover Multi-year procurement II and modernization.		

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
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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			
AV - Primary Hardware-Fatigue	C/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	75.596	9.031	Nov 2021	12.972	Nov 2022	9.685	Nov 2023	-		9.685	75.652	182.936	182.936
AV - Primary Hardware-Aerial Refueling	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	294.527	2.328	Feb 2022	6.623	Feb 2023	6.650	Feb 2024	-		6.650	33.143	343.271	344.134
MS - Primary Hardware Dev - Theater TCID	C/CPIF	Navy Syst Mgt Activity : Arlington, VA	11.219	12.141	Dec 2021	28.371	Dec 2022	30.693	Dec 2023	-		30.693	141.847	224.271	230.535
MS - Primary Software Dev - Theater TCID	C/CPIF	Navy Syst Mgt Activity : Arlington, VA	9.610	11.867	Dec 2021	25.785	Dec 2022	19.551	Dec 2023	-		19.551	127.743	194.556	214.064
MS - Primary Hardware Dev - HECTR	Various	Northrop Grumm : Melbourne, FL	26.665	22.161	Dec 2021	51.994	Dec 2022	82.605	Dec 2023	-		82.605	280.134	463.559	460.169
MS - Primary Software Dev - NIFC	C/CPFF	Navy Syst Mgt Activity : Arlington, VA	8.175	15.893	Dec 2021	27.313	Dec 2022	19.166	Dec 2023	-		19.166	84.006	154.553	140.125
MS - Primary Software Dev - SDP	C/CPFF	Navy Syst Mgt Activity : Arlington, VA	3.532	4.908	Dec 2021	6.682	Dec 2022	2.091	Dec 2023	-		2.091	0.000	17.213	17.213
Sensors- Primary Hardware Dev - ESM	C/CPFF	Lockheed Martin : New York, NY	57.556	2.365	Dec 2021	0.000	Dec 2022	0.000		-		0.000	0.000	59.921	59.921
Sensors - Primary Software Development - ESM	C/CPFF	Lockheed Martin : New York, NY	29.189	2.189	Dec 2021	2.000	Dec 2022	0.000		-		0.000	0.000	33.378	33.378
Sensors - Primary Software -CEA	C/CPFF	Navy Syst Mgt Activity : Arlington, VA	0.000	23.841	Dec 2021	14.040	Dec 2022	0.000		-		0.000	0.000	37.881	41.884
ITT - Primary Software Dev - Cyber	C/CPIF	Navy Syst Mgt Activity : Arlington, VA	0.527	4.498	Dec 2021	7.309	Dec 2022	7.596	Dec 2023	-		7.596	6.796	26.726	31.730
ITT - Training Development	SS/FFP	Rockwell Collins : Cedar Rapids, IA	40.532	13.287	Dec 2021	14.283	Dec 2022	13.393	Dec 2023	-		13.393	121.403	202.898	204.947
ITT - Training Development	SS/FFP	Lockheed Martin : New York, NY	0.000	0.000		3.000	Dec 2022	2.800	Dec 2023	-		2.800	18.003	23.803	23.803

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
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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			
ITT - Training Development	C/CPFF	Navy Syst Mgt Activity : Arlington, VA	0.000	0.000		13.012	Dec 2022	7.668	Dec 2023	-		7.668	40.466	61.146	62.841
ITT - Test Assets Upgrades	Various	Various : Various	28.616	23.669	Dec 2021	35.436	Dec 2022	25.666	Dec 2023	-		25.666	75.697	189.084	-
Primary Software Dev - Various	Various	Navy Syst Mgt Activity : Arlington, VA	167.541	12.164	Dec 2021	27.824	Dec 2022	19.519	Dec 2023	-		19.519	521.909	748.957	577.364
System Engineering	Various	Various : Various	13.905	14.354	Dec 2021	19.009	Dec 2022	18.362	Dec 2023	-		18.362	131.219	196.849	193.653
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various : Various	3,784.891	0.000		0.000		0.000		-		0.000	0.000	3,784.891	-
Equipment	WR	NSMA : Arlington, VA	0.000	0.840	Aug 2022	0.000		0.000		-		0.000	0.000	0.840	-
Subtotal			4,552.081	175.536		295.653		265.445		-		265.445	1,658.018	6,946.733	N/A

Remarks

Product Development increase is due to ITT Test Asset Upgrade cost, previously reported under Test & Evaluation.

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			
MS -Software Development-SN	C/CPFF	Navy Syst Mgt Activity : Arlington, VA	90.592	21.427	Dec 2021	26.203	Dec 2022	18.522	Dec 2023	-		18.522	3.517	160.261	161.553
MS - Software Development-Data Fusion	C/CPFF	Navy Syst Mgt Activity : Arlington, VA	90.426	9.288	Dec 2021	9.784	Dec 2022	9.200	Dec 2023	-		9.200	4.048	122.746	122.746
Government Engineering Support	WR	Naval Air Warfare Center Aircraft Division (NAWCAD : Pax River, MD	193.175	21.229	Dec 2021	23.594	Dec 2022	21.220	Dec 2023	-		21.220	105.009	364.227	-
Government Engineering Support	Various	Various : Various	23.137	6.585	Dec 2021	10.165	Dec 2022	5.661	Dec 2023	-		5.661	25.507	71.055	-

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
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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			
Integrated Logistics Support	Various	Various : Various	25.032	12.721	Dec 2021	10.511	Dec 2022	13.950	Dec 2023	-		13.950	64.967	127.181	-
Contractor Engineering Support ETS	C/CPFF	Precise : Lexington Park, MD	7.157	1.471	Dec 2021	1.728	Dec 2022	1.585	Dec 2023	-		1.585	8.070	20.011	-
Prior Year Support costs no longer funded in FYDP	Various	Various : Various	218.980	0.000		0.000		0.000		-		0.000	0.000	218.980	-
Subtotal			648.499	72.721		81.985		70.138		-		70.138	211.118	1,084.461	N/A

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 : Pax River, MD	384.344	63.118	Nov 2021	69.855	Nov 2022	44.450	Nov 2023	-		44.450	280.281	842.048	-
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : Pt.Mugu, CA	0.000	0.000		9.267	Nov 2022	8.073	Nov 2023	-		8.073	57.145	74.485	-
Developmental Test & Evaluation (DT&E)	Various	Various : Various	76.013	5.760	Nov 2021	3.908	Nov 2022	5.918	Nov 2023	-		5.918	19.177	110.776	-
Operational Test & Evaluation (OT&E)	Various	Various : Various	23.812	1.585	Nov 2021	6.013	Nov 2022	5.245	Nov 2023	-		5.245	42.538	79.193	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	101.568	0.000		0.000		0.000		-		0.000	0.000	101.568	-
Subtotal			585.737	70.463		89.043		63.686		-		63.686	399.141	1,208.070	N/A

Remarks
 -Test and Evaluation decrease is due to Test Assets Upgrades being reported under Product Development.
 -The decrease is also due to annualized T&E Gray Flag test events being reported under Management Services.

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
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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			
Travel	Various	Various : Various	4.536	0.455	Oct 2021	0.350	Oct 2022	0.350	Oct 2023	-		0.350	2.110	7.801	-
Test Subject Matter Expect Support/Travel	Various	Various : Various	0.000	0.000		0.250	Oct 2022	0.300	Oct 2023	-		0.300	1.550	2.100	-
Contractor Engineering Support ETS	WR	NSMA : Arlingron, VA	0.000	0.500	May 2022	0.000		0.000		-		0.000	0.000	0.500	-
Travel	WR	NSMA : Various	0.000	0.050	Mar 2022	0.000		0.000		-		0.000	0.000	0.050	-
Subtotal			4.536	1.005		0.600		0.650		-		0.650	3.660	10.451	N/A

Remarks
Management Services increase is due to annualized T&E Gray Flag test events cost, previously reported under Test and Evaluation.

	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	5,790.853	319.725	467.281	399.919	-	399.919	2,271.937	9,249.715	N/A

Remarks

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

Date: March 2023

Appropriation/Budget Activity
1319 / 5

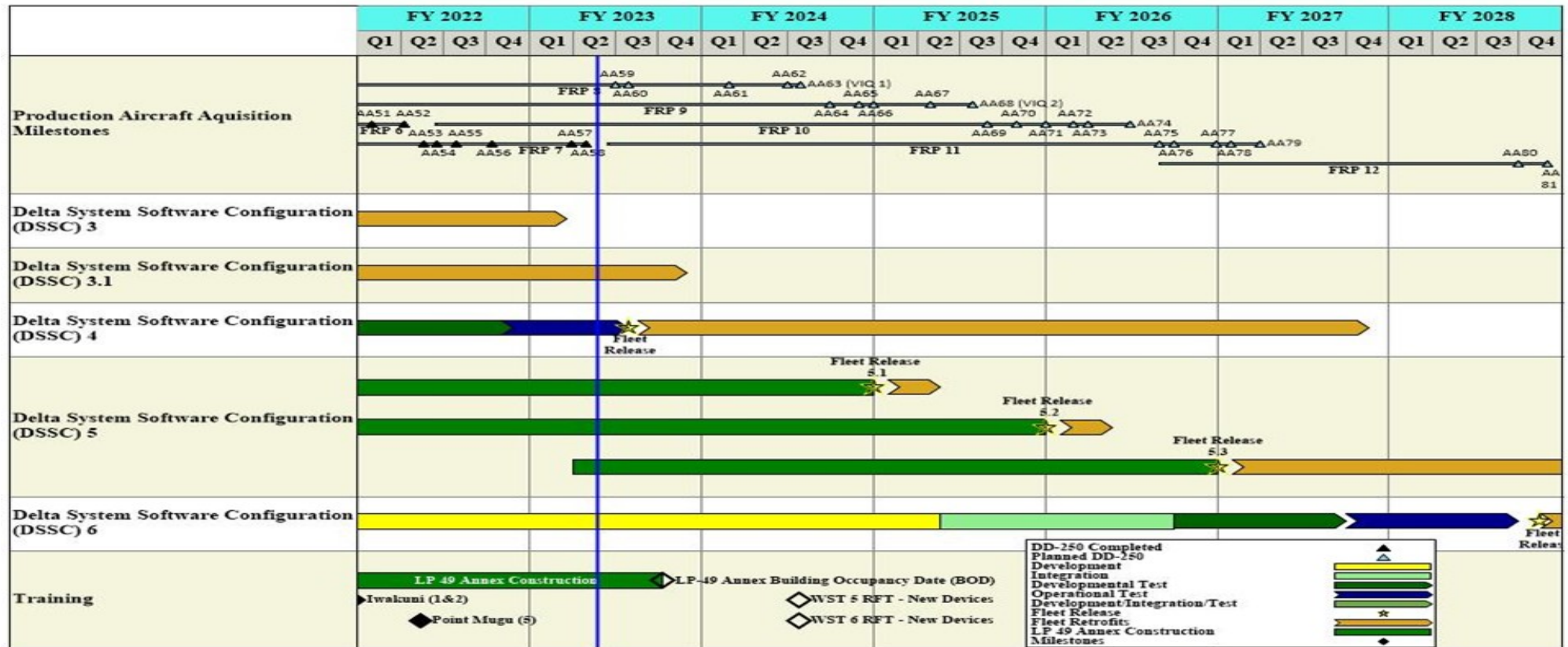
R-1 Program Element (Number/Name)
PE 0604234N / Advanced Hawkeye

Project (Number/Name)
3051 / E-2D Adv Hawkeye



PB24

E-2D Advanced Hawkeye



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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
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Proj 3051.S41	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Classified Support - Equipment																																
Classified Support - Engineering																																

2024DON - 0604234N - 3051.S41

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>E-2D Adv Hawkeye Delta Systems/Software Configuration (DSSC) Builds</i>				
Development & Design: DSSC-6 Hardware & Software Development	1	2022	2	2025
Development & Design: DSSC-6 Systems Integration	2	2025	3	2026
Test & Evaluation: Developmental Test & Evaluation: DSSC-4 Capability Dev & Testing	1	2022	4	2022
Test & Evaluation: Developmental Test & Evaluation: DSSC-5 Capability Dev & Testing	1	2022	4	2026
Test & Evaluation: Developmental Test & Evaluation: DSSC-6 Capability Dev & Testing	3	2026	3	2027
Test & Evaluation: Operational Test & Evaluation: DSSC-4 Operational Test	3	2022	1	2023
Test & Evaluation: Operational Test & Evaluation: DSSC-4 Fleet Release	3	2023	3	2023
Test & Evaluation: Operational Test & Evaluation: DSSC-5.1 Fleet Release	4	2024	4	2024
Test & Evaluation: Operational Test & Evaluation: DSSC-5.2 Fleet Release	4	2025	4	2025
Test & Evaluation: Operational Test & Evaluation: DSSC-5.3 Fleet Release	4	2026	4	2026
Test & Evaluation: Operational Test & Evaluation: DSSC-6 Operational Test	4	2027	3	2028
Test & Evaluation: Operational Test & Evaluation: DSSC-6 Fleet Release	4	2028	4	2028
Test & Evaluation: Contract Awards: Production Milestones - FRP Lot X CA	2	2022	2	2022
Test & Evaluation: Contract Awards: Production Milestones - FRP Lot XI CA	2	2023	2	2023
Test & Evaluation: Contract Awards: Production Milestones - FRP Lot XII CA	4	2023	4	2023
Deliveries: Production Deliveries - FRP VI (2 A/C)	1	2022	1	2022
Deliveries: Production Deliveries - FRP VII (2 A/C)	2	2022	2	2022
Deliveries: Production Deliveries - FRP VII - (2 A/C)	3	2022	3	2022
Deliveries: Production Deliveries - FRP VII (1 A/C)	1	2023	1	2023
Deliveries: Production Deliveries - FRP VII - (1 A/C)	2	2023	2	2023

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 3051 / <i>E-2D Adv Hawkeye</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Deliveries: Production Deliveries - FRP VIII - (1 A/C)	2	2023	2	2023
Deliveries: Production Deliveries - FRP VIII (1 A/C)	3	2023	3	2023
Deliveries: Production Deliveries - FRP VIII - (1A/C)	1	2024	1	2024
Deliveries: Production Deliveries - FRP VIII (1 A / C)	2	2024	2	2024
Deliveries: Production Deliveries - FRP VIII (1 A /C)	3	2024	3	2024
Deliveries: Production Deliveries - FRP IX (1 A/C)	3	2024	3	2024
Deliveries: Production Deliveries - FRP IX - (2 A/C)	4	2024	4	2024
Deliveries: Production Deliveries - FRP IX (1 A/C)	2	2025	2	2025
Deliveries: Production Deliveries - FRP IX(1 A/C)	3	2025	3	2025
Deliveries: Production Deliveries - FRP X (1 A/C)	3	2025	3	2025
Deliveries: Production Deliveries - FRP X - (2 A/C)	4	2025	4	2025
Deliveries: Production Deliveries - FRP X (2 A/C)	1	2026	1	2026
Deliveries: Production Deliveries - FRP X - (1 A/C)	2	2026	2	2026
Deliveries: Production Deliveries - FRP XI (2 A/C)	3	2026	3	2026
Deliveries: Production Deliveries - FRP XI (1 - A/C)	4	2026	4	2026
Deliveries: Production Deliveries - FRP XI (2 A/C)	1	2027	1	2027
Deliveries: Production Deliveries - FRP XII (1 - A/C)	3	2028	3	2028
Deliveries: Production Deliveries - FRP XII (1 A/C)	4	2028	4	2028
Classified Support - Equipment: Classified Support - Equipment	4	2022	4	2023
Classified Support - Engineering: Classified Support - Engineering Technical Support	3	2022	3	2023

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy										Date: March 2023		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>				Project (Number/Name) 9999 / <i>Congressional Adds</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
9999: <i>Congressional Adds</i>	64.219	19.307	20.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	103.526
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note
Congressional Add. Program Increase for E-2D Advanced Hawkeye (AHE) radar development.

A. Mission Description and Budget Item Justification

Congressional Add. The E-2D Advanced Hawkeye and associated APY-9 radar meet the requirements specified in the Capabilities Development Document (CDD), including detection ranges, detection velocities, and tracking accuracies, verified through extensive developmental and operational flight testing and deployed operations. Program increase for E-2D advanced radar development to stay ahead of the evolving threat.

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

	FY 2022	FY 2023
<i>Congressional Add:</i> Radar modernization and testing	19.307	20.000
<i>FY 2022 Accomplishments:</i> N/A		
<i>FY 2023 Plans:</i> N/A		
Congressional Adds Subtotals	19.307	20.000

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

N/A

Remarks

D. Acquisition Strategy

Program increase to continue improving radar capability of the E-2D Hawkeye to stay ahead of the evolving threat. Planned investments in the E-2D, APY-9 radar and new antenna technology will continue to pace emerging threats.

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
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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			
System Engineering	C/FFP	Northrop Grumman Corporation (NGC) : Melbourne, FL	23.240	1.300	Dec 2022	2.000	Nov 2023	0.000		-		0.000	0.000	26.540	25.240
System Engineering	Various	Various : Various	13.376	4.257	Nov 2022	2.393	May 2024	0.000		-		0.000	0.000	20.026	16.276
System Engineering	C/CPFF	Navy Syst Mgt Activity : Arlington VA	5.517	0.000		0.000		0.000		-		0.000	0.000	5.517	6.017
System Engineering	C/CPFF	North Star Scientific Corp : Kapolei, HI	14.437	13.050	Jun 2023	11.307	Aug 2024	0.000		-		0.000	0.000	38.794	24.437
System Engineering	C/CPFF	Massachusetts Institute of Tech Lincoln Lab : Lexington, MA	0.000	0.000		4.000	Sep 2023	0.000		-		0.000	0.000	4.000	-
Subtotal			56.570	18.607		19.700		0.000		-		0.000	0.000	94.877	N/A

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			
Government Engineering	WR	SPAWAR : San Diego	0.116	0.000		0.000		0.000		-		0.000	0.000	0.116	-
Government Engineering	WR	NAWCAD : Pax River	1.898	0.500	May 2022	0.300	Apr 2023	0.000		-		0.000	0.000	2.698	-
Software Development	C/CPFF	Navy Syst Mgt Activity : Arlington VA	4.428	0.000		0.000		0.000		-		0.000	0.000	4.428	8.428
Subtotal			6.442	0.500		0.300		0.000		-		0.000	0.000	7.242	N/A

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

Date: March 2023

Appropriation/Budget Activity
1319 / 5

R-1 Program Element (Number/Name)
PE 0604234N / *Advanced Hawkeye*









Project (Number/Name)
9999 / *Congressional Adds*



PB24

Advanced Radar – Congressional Add



	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Milestones	<p align="center">HG-UESA NSS CA </p> <p align="center">HG-UESA NGC CA </p> <p align="center">MIT-Radar Research CA </p> <p align="center">NAVFAC HI CA </p> <p align="center">PMRF HI CA </p>																											
Systems Requirements	<p align="center"> Systems Requirements</p>																											
	<p align="right">  CA Milestones  Development </p>																											

UNCLASSIFIED

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / <i>Advanced Hawkeye</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Advanced Radar Congressional Add</i>				
Systems Development: Systems Requirements	1	2023	4	2024
Systems Development: Contract Awards: Production Milestones - MIT Radar Research	3	2023	3	2023
Systems Development: Contract Awards: Production Milestones - HGUESA 1	4	2023	4	2023
Systems Development: Contract Awards: Production Milestones - HGUESA 2	4	2023	4	2023
Systems Development: Contract Awards: Production Milestones - Pacific Missile Range Facility (PMRF) HI	3	2023	3	2023
Systems Development: Contract Awards: Production Milestones - Naval Facilities Engineering Command (NAVFAC) HI	3	2023	3	2023