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**Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	4,216.010	171.189	217.645	363.792	-	363.792	290.359	216.934	185.379	168.737	31.300	5,861.345
3051: <i>E-2D Adv Hawkeye</i>	4,216.010	171.189	209.145	363.792	-	363.792	290.359	216.934	185.379	168.737	31.300	5,852.845
9999: <i>Congressional Adds</i>	0.000	0.000	8.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.500

**Program MDAP/MAIS Code:** 364

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

The E-2D Advanced Hawkeye (AHE) program develops, demonstrates, tests, and procures the replacement of the AN/APS-145 radar system and other aircraft system components including Cooperative Engagement Capability Pre-Planned Product Improvement and Dual Transmit Satellite Communications that improve the E-2 weapon system to maintain open ocean mission capability while providing the United States Navy with an effective littoral surveillance, battle management, Naval Integrated Fire Control - Counter Air (NIFC-CA) and Theater Air and Missile Defense (TAMD) capability. Key radar technologies are Space-Time Adaptive Processing, Electronically Scanning Array, solid state transmitter, high dynamic range digital receivers and Identification Friend or Foe (IFF)/radar aperture integration. The resultant detection system provides a substantially improved overland performance by correcting current sensor shortfalls and enhancing all current required mission areas, while simultaneously contributing to the emerging TAMD mission requirements. Mode 5 is an upgrade to the existing IFF System providing the warfighter positive, secure and reliable identification of friendly aircraft, surface and sub-surface platforms. Mode 5 replaces the National Security Administration de-certified Mode 4 IFF capability, which is no longer effective or suitable for modern military operations. Mode 5 will support the Joint Initial Operational Capability (IOC) as defined by the Joint Requirements Oversight Council.

The Navy declared IOC for the E-2D in October 2014 with the first operational deployment in FY15. The System Development and Demonstration contract completed in FY15 as the program transitions into the production, deployment, and sustainment phase. Throughout the development of the E-2D, the threat has continued to evolve increasing in both capability and capacity. The E-2D Research, Development, Test and Evaluation budget after IOC reflects the Navy's further investment into the E-2D to ensure that carrier based command and control continues to pace the FY2020 and beyond threat in support of Navy and Joint operations around the world.

The program will be aligning the capability development in areas where there are interwoven technologies that leverage each other to provide the most efficient and cost effective means of delivering these capabilities to the warfighters. The program will deliver these capabilities to the Fleet users on approximately a 24 month release cycle as part of combined Delta System/Software Configuration (DSSC) builds. The baseline IOC configuration is named DSSC build 1 (DSSC-1). The DSSC build schedule is outlined along with the capabilities that are planned to comprise each DSSC build. If a capability is delayed or accelerated it will move between DSSC builds which will be reflected in updates to this budget.

DSSC-2 is planned for operational test and Fleet release in FY16. DSSC-2 incorporates several technologies developed under the System Development and Demonstration phase which include Dual Transmit Satellite Communications and an IFF technology refresh in preparation for Mode 5 and Mode S.

DSSC-3 is planned for operational test and Fleet release in FY19. DSSC-3 is comprised of the following capabilities:

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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>
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E-2D Accelerated Mid-Term Interoperability Improvement Program (AMIIP), NIFC-CA enhancements, Automatic Identification System and the Embedded National Tactical Receiver.

DSSC-3AR is planned for operational test and Fleet release in FY19. DSSC-3AR is comprised of all capabilities listed in DSSC-3 plus Aerial Refueling (AR).

DSSC-4 is planned for operational test in FY21 and Fleet release in FY21. DSSC-4 provides critical capabilities needed to pace the 2020 threat and enabling components of NIFC-CA increment 3. DSSC-4 is comprised of the following capabilities: E-2D Multifunctional Information Distribution System/Joint Tactical Radio System (MIDS/JTRS), Tactical Targeting Networking Technology (TTNT), Secret Internet Protocol Router (SIPR)Chat, Data Fusion, Fighter to Fighter Backlink, E-2D Navigation Warfare (NAVWAR) and E-2D Counter Electronic Attack (CEA).

DSSC-5 is planned for operational test in FY23 and Fleet release in FY23. DSSC-5 provides the capabilities necessary for E-2D to meet NIFC-CA increment 3 requirements and is comprised of the following: Sensor Netting, Stores Performance Assessment Requested Quality (SPARQ), and E-2D AN/ALQ-217 Electronic Support Measures (ESM).

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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	176.700	272.149	317.185	-	317.185
Current President's Budget	171.189	217.645	363.792	-	363.792
Total Adjustments	-5.511	-54.504	46.607	-	46.607
• Congressional General Reductions	-	-0.004			
• Congressional Directed Reductions	-	-63.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	8.500			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-5.511	0.000			
• Program Adjustments	0.000	0.000	55.448	-	55.448
• Rate/Misc Adjustments	0.000	0.000	-8.841	-	-8.841

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

**Project:** 9999: *Congressional Adds*

Congressional Add: *Adv Radar Innovation Fund - Air (Cong)*

	<b>FY 2015</b>		<b>FY 2016</b>
	0.000		8.500

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

	FY 2015	FY 2016
Congressional Add Subtotals for Project: 9999	0.000	8.500
Congressional Add Totals for all Projects	0.000	8.500

**Change Summary Explanation**

Technical: N/A

Schedule:

Updated Advanced Hawkeye schedule for the Test and Evaluation section to show the Delta System/Software Configuration (DSSC) Build plan since the program will be aligning the capability development in areas where there are interwoven technologies that leverage each other to provide the most efficient and cost effective means of delivering these capabilities to the warfighter. The program will be delivering capabilities to the Fleet as part of combined DSSC builds.

Updated program schedules to reflect FY16 President Budget control adjustments.

Increase in FY17 primarily associated with several new efforts, Crypto Modernization/Frequency Remapping and ALQ-217 Electronic Support Measures (ESM).

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy										<b>Date:</b> February 2016		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>				<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3051: <i>E-2D Adv Hawkeye</i>	4,216.010	171.189	209.145	363.792	-	363.792	290.359	216.934	185.379	168.737	31.300	5,852.845
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

The E-2D Advanced Hawkeye (AHE) program develops, demonstrates, tests, and procures the replacement of the AN/APS-145 radar system and other aircraft system components including Cooperative Engagement Capability Pre-Planned Product Improvement and Dual Transmit Satellite Communications that improve the E-2 weapon system to maintain open ocean mission capability while providing the United States Navy with an effective littoral surveillance, battle management, Naval Integrated Fire Control - Counter Air (NIFC-CA) and Theater Air and Missile Defense (TAMD) capability. Key radar technologies are Space-Time Adaptive Processing, Electronically Scanning Array, solid state transmitter, high dynamic range digital receivers and Identification Friend or Foe (IFF)/radar aperture integration. The resultant detection system provides a substantially improved overland performance by correcting current sensor shortfalls and enhancing all current required mission areas, while simultaneously contributing to the emerging TAMD mission requirements. Mode 5 is an upgrade to the existing IFF System providing the warfighter positive, secure and reliable identification of friendly aircraft, surface and sub-surface platforms. Mode 5 replaces the National Security Administration de-certified Mode 4 IFF capability, which is no longer effective or suitable for modern military operations. Mode 5 will support the Joint Initial Operational (IOC) as defined by the Joint Requirements Oversight Council.

The Navy declared IOC for the E-2D in October 2014 with the first operational deployment in FY15. The System Development and Demonstration contract completed in FY15 as the program transitions into the production, deployment, and sustainment phase. Throughout the development of the E-2D, the threat has continued to evolve increasing in both capability and capacity. The E-2D Research, Development, Test and Evaluation budget after IOC reflects the Navy's further investment into the E-2D to ensure that carrier based command and control continues to pace the 2020 and beyond threat in support of Navy and Joint operations around the world.

The program will be aligning the capability development in areas where there are interwoven technologies that leverage each other to provide the most efficient and cost effective means of delivering these capabilities to the warfighters. The program will deliver these capabilities to the Fleet users on an approximately 24 month release cycle as part of combined Delta System/Software Configuration (DSSC) builds. The baseline IOC configuration is named DSSC build 1 (DSSC-1). The DSSC build schedule is outlined below along with the capabilities that are planned to comprise each DSSC build. If a capability is delayed or accelerated it will move between DSSC builds which will be reflected in updates to this budget.

DSSC-2 is planned for operational test and Fleet release in FY16. DSSC-2 incorporates several technologies developed under the System Development and Demonstration phase which include Dual Transmit Satellite Communications and an IFF technology refresh in preparation for Mode 5 and Mode S.

DSSC-3 is planned for operational test and Fleet release in FY19. DSSC-3 is comprised of the following capabilities:

1. The E-2D Accelerated Mid-Term Interoperability Improvement Program (AMIIP) will address the most severe Cooperative Engagement Capability and data link related interoperability issues. This capability will significantly improve the quality of the tactical surveillance picture across all participants, reduce the possibility of track mis-identification and mitigate Blue on Blue engagements. AMIIP provides stable sensor fusion foundation to support sensor/weapon coordination requirements.

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<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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2. NIFC-CA enhancements will incorporate weapon system software improvements to implement capabilities and performance improvements needed to meet NIFC-CA increment 2 requirements. These capabilities come from software development in both the E-2D Classified and NIFC-CA Enhancement and Testing lines.

DSSC-3AR is planned for operational test and Fleet release in FY19. DSSC-3AR is comprised of all capabilities listed in DSSC-3 plus Aerial Refueling (AR).

1. An Aerial Refueling (AR) capability will allow 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 will better enable 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 domestic E-2 concept demonstration effort successfully established the feasibility of tanking behind the F/A-18E/F and KC-130 aircraft under E-2 Squadrons, PE 0204152N.

DSSC-4 is planned for operational test in FY21 and Fleet release in FY21. DSSC-4 provides critical capabilities needed to pace the 2020 threat and enabling components of NIFC-CA increment 3. DSSC-4 is comprised of the following capabilities:

1. 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 Multifunctional Information Distribution System - Low Volume Terminal (MIDS LVT) radio with MIDS/JTRS that has incorporated Link-16 concurrent Multi-netting (CMN-4) and TTNT. MIDS/JTRS TTNT is a key enabler for E-2D sensor netting capability in support of the NIFC-CA mission.

2. The 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.

3. FY17 start: E-2D Data Fusion provides a fusion engine to blend off-board tactical data (e.g. Electronic Surveillance and Satellite Receiver System (SRS) data) with already blended radar, Identify Friend or Foe (IFF) and Cooperative Engagement Capability (CEC) track-files, greatly enhancing situational awareness and tactical decision making. Successful E-2D NIFC-CA engagements depend on a clear/unambiguous tactical picture and the shortest possible decision timeline.

4. FY17 start: E-2D Fighter to Fighter backlink implements Link-16 Network Participation Group 20 messages for Fighter-to-Fighter backlink capability in E-2D. This functionality improves interoperability between E-2D and participating US Navy fighters, including 5th generation aircraft, enhancing combat effectiveness of E-2D, increases situational awareness (SA), and shortens kill-chain timelines (including NIFC-CA ).

5. FY17 start: 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.

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

DSSC-5 is planned for operational test in FY23 and Fleet release in FY23. DSSC-5 provides the capabilities necessary for E-2D to meet NIFC-CA increment 3 requirements and is comprised of the following capabilities:

1. FY17 start: E-2D Sensor Netting provides fusion of data from off-board sources via a high bandwidth network that will allow E-2D to support the second spiral of performance improvement for NIFC-CA capability. Additional details are classified.
2. FY17 start: E-2D Stores Performance Assessment Requested Quality (SPARQ) establishes real-time requirements for E-2D sensor contribution to system of system NIFC-CA solutions. SPARQ expands and optimizes operational employment envelopes, improving Air Wing ability to take advantage of System of System capabilities of NIFC-CA, reducing kill chain timelines.
3. FY17 start: E-2D AN/ALQ-217 Electronic Support Measures (ESM) Combat Identification (CID) upgrades integrates digital receiver and processing technology, enables E-2 multi-ship geo-location and Time Difference Of Arrival with other sensors across L-16 and Tactical Targeting Networking Technology (TTNT), and provides a precision internal clock source to enable netted detection of advanced threat radar systems. Connectivity to Electronic Warfare (EW) netted sensors will provide multiple nodes, real time, enhanced CID capabilities.
4. FY17 start: 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.

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p><b>Title:</b> System Development and Demonstration</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Northrop Grumman Corporation System Development and Demonstration (SDD), Pilot Production efforts for the E-2D Advanced Hawkeye (AHE) Program.</p> <p><b>FY 2015 Accomplishments:</b> Funds provided to complete deliverables under SDD contract.</p> <p><b>FY 2016 Plans:</b></p>	1.664	0.000	0.000	0.000	0.000
	-	-	-	-	-

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
N/A					
<b>FY 2017 Base Plans:</b> N/A					
<b>FY 2017 OCO Plans:</b> N/A					
<b>Title:</b> Full Scale Fatigue Test	9.815	25.731	19.333	0.000	19.333
<b>Articles:</b>	-	-	-	-	-
<b>Description:</b> Full Scale Fatigue Test efforts for the E-2D Advanced Hawkeye (AHE) Program. The USN requires that a fatigue test be conducted on the E-2D aircraft to determine the design service life of the airframe. Durability testing is being performed on a test article that is representative of production aircraft. The objective of the 20,000 equivalent flight hours fatigue test is to identify fatigue critical locations, substantiate the 10,000 flight hours service life for the E-2D airframe fuselage and horizontal stabilizer, and demonstrate that the E-2D aircraft structure satisfies the program service life requirement.					
<b>FY 2015 Accomplishments:</b> The Fatigue Test Article has accumulated 4800 effective flight hours. The test article developed an upper rib crack at WS83. Repair was made and test article was returned to test. Additional data points were added to the scope of test in support of wing center section cracks. This required the installation of additional instrumentation.					
<b>FY 2016 Plans:</b> Funds provided for continued support of Full Scale Fatigue Tests. Inspections and analysis will be performed at 500 effective flight hour intervals beginning with the 500 hour inspection and continuing through approximately 10,000 effective flight hours. Configure and instrument Outer Wing Panels that are projected to reach the end of service life.					
<b>FY 2017 Base Plans:</b> Funds provided for continued support of Full Scale Fatigue Tests. Inspections will be performed at 500 effective flight hour intervals beginning with the 10,500 hour inspection and continuing through approximately 15,000 effective flight hours. Perform repairs of the test article as required.					
<b>FY 2017 OCO Plans:</b> N/A					
<b>Title:</b> Delta System/Software Configuration (DSSC) Integration and Test	15.448	11.172	13.411	0.000	13.411
<b>Articles:</b>	-	-	-	-	-



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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
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<p><b><i>FY 2015 Accomplishments:</i></b> Funded APX-122A operational testing.</p> <p><b><i>FY 2016 Plans:</i></b> Continue APX-122A system test and evaluation.</p> <p><b><i>FY 2017 Base Plans:</i></b> Funds provided for resumption of Mode 5/S flight test to identify software deficiencies and Weapon System Specification compliance. Continue APX-122A system test and evaluation.</p> <p><b><i>FY 2017 OCO Plans:</i></b> N/A</p>					
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<p><b><i>Title:</i></b> Aerial Refueling</p> <p align="right"><b><i>Articles:</i></b></p> <p><b><i>Description:</i></b> Funds the system development and testing to support the incorporation of Aerial Refueling (AR) capability into the E-2D AHE aircraft. Emphasis during system development is on system redesign, air vehicle design, human systems integration and design, including interior/lighting modifications and seat replacement. Flight testing is required to evaluate fuel systems changes, aerial refueling capability, field of view, thermal and aerodynamic loads, kinematic performance, and handling qualities. Planned for DSSC-3AR</p> <p><b><i>FY 2015 Accomplishments:</i></b> Funded the continuation of Engineering and Manufacturing Development (E&amp;MD) of AR, System Integration Laboratory (SIL) testing, Fuel Rig Testing, Integrated Program Review, Critical Design Review and installation, instrumentation and flight test planning activities. Funding also provided to ramp up subcontractor support that was slowed down due to the mark in FY 2014.</p> <p><b><i>FY 2016 Plans:</i></b> Funding provided for continued E&amp;MD of AR, continued SIL testing, Probe Static Test and instrumentation and installation of an aerial refueling capability on the first developmental test aircraft and the start of the second developmental test aircraft. Additionally, funding provided for flight test planning activities.</p> <p><b><i>FY 2017 Base Plans:</i></b> Funding provided for completion of the instrumentation and installation of an aerial refueling capability on the second developmental test aircraft and the installation of an aerial refueling capability on the first production</p>	66.343 -	57.070 -	81.486 -	0.000 -	81.486 -
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
representative operational test aircraft. Funding provided for test readiness review and production readiness review, developmental flight test and operational assessment.  <b>FY 2017 OCO Plans:</b> N/A					
<b>Title:</b> E-2D Counter Electronic Attack  <b>Description:</b> Funds the mission system development and testing of the capability to counter advanced radar electronic attack threats. The E&MD effort will focus on integration of capabilities in the radar and mission computer display systems that include system integration, and laboratory and flight test validation. Planned for DSSC-4.  <b>FY 2015 Accomplishments:</b> Funded the Change Request drafts for the E-2D Weapons System Specification (WSS) and conducted analysis for expanding the CEA capability. Funding includes Congressional Add for Radar improvements.  <b>FY 2016 Plans:</b> Funds provided for the continuation of the software development of the radar and mission computer systems that will provide the capabilities to counter advanced radar electronic attack threats. Funding provided for System Requirements Review (SRR).  <b>FY 2017 Base Plans:</b> Funds provided for the continuation of software development, mission computer and radar system development to provide the Counter Electronic Attack (CEA) solution. Program will conduct Preliminary Design Review and Critical Design Review.  <b>FY 2017 OCO Plans:</b> N/A	10.898	20.685	28.512	0.000	28.512
<b>Articles:</b>	-	-	-	-	-
<b>Title:</b> Multifunctional Information Distribution System/Joint Tactical Radio System (MIDS/JTRS) Tactical Targeting Networking Technology (TTNT)  <b>Description:</b> Multifunctional Information Distribution System/Joint Tactical Radio System (MIDS/JTRS) Tactical Targeting Networking Technology (TTNT) provides Advanced Tactical Data Link functionality 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 TTNT. MIDS/JTRS	34.220	34.804	41.734	0.000	41.734
<b>Articles:</b>	-	-	-	-	-

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>TTNT is a key enabler for E-2D sensor netting capability in support of the Naval Integrated Fire Control-Counter Air mission. Planned for DSSC-4.</p> <p><b>FY 2015 Accomplishments:</b> Funded the continuation of Design, Development, hardware and software associated with MIDS/JTRS/ Concurrent Multiple Network (CMN04) integration and lab testing. Funding is provided for System Requirements Review 1 and 2.</p> <p><b>FY 2016 Plans:</b> Funding provides for continued Design, Development, hardware, software, Preliminary Design and Critical Design Reviews for phase I associated with MIDS/JTRS/CMN-4 integration.</p> <p><b>FY 2017 Base Plans:</b> Funds provided for continued Design and Development. PDR and CDR for Phase II aircraft integration.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>					
<p><b>Title:</b> SIPR Chat</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> The 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. Planned for DSSC-4.</p> <p><b>FY 2015 Accomplishments:</b> Funded the start of System Development &amp; Design, Software and Router Integration.</p> <p><b>FY 2016 Plans:</b> Funds provided for continued System Development &amp; Design, Software and Router Aircraft Integration.</p> <p><b>FY 2017 Base Plans:</b> Funds provided for continued System Development &amp; Design, Software and Router Aircraft Integration, Preliminary Design Review and Critical Design Review. Decrease funding due to completion of software aircraft integration.</p> <p><b>FY 2017 OCO Plans:</b></p>	9.893	18.505	15.000	0.000	15.000
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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy	<b>Date:</b> February 2016
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<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
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N/A					
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<p><b>Title:</b> Naval Integrated Fire Control - Counter Air Testing (NIFC-CA)</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> NIFC-CA requires System of Systems level testing. CNO-mandate to address Naval weapon systems' Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance gaps. Planned for DSSC-3.</p> <p><b>FY 2015 Accomplishments:</b> Funded the continuation of software development support and developmental flight tests.</p> <p><b>FY 2016 Plans:</b> Funds provided for continued software development support and developmental flight tests. NIFC-CA includes increased flights for E-2D participation NIFC-CA increment 1 developmental and operational systems of systems testing.</p> <p><b>FY 2017 Base Plans:</b> Funds provided for continued NIFC-CA program support and flight testing. NIFC-CA requires increased E-2D participation in NIFC-CA increment 1-3 developmental and operational systems of systems ground, simulation, and flight testing. Trainer and training development so the fleet can fully train to NIFC-CA capabilities.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>	9.289	18.474	37.588	0.000	37.588
	-	-	-	-	-

<p><b>Title:</b> Accelerated Mid-Term Interoperability Improvement Program (AMIIP)</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Address the most severe data link related interoperability issues. This capability will significantly improve the quality of the tactical surveillance picture, reduce the possibility of leakers, mitigate Blue on Blue engagements and mid-identification of tracks. Provides stable sensor fusion foundation to support sensor/ weapon coordination requirements. Planned for DSSC-3.</p> <p><b>FY 2015 Accomplishments:</b> Funded the continuation of software development support and developmental flight tests.</p> <p><b>FY 2016 Plans:</b></p>	8.782	15.180	11.988	0.000	11.988
	-	-	-	-	-

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>Funds provided for continued systems engineering, systems development support, software integration, Functional and Flight testing, Preliminary Design Review, Critical Design Review and Test Readiness Review.</p> <p><b>FY 2017 Base Plans:</b> Funds provided for finishing integration of software into DSSC-3 build. Fleet Readiness Review. Completing developmental flight test of software changes.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>					
<p><b>Title:</b> Sensor Netting</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Provides fusion of data from off-board sources via a high bandwidth network that will allow E-2D to support second spiral of performance improvements for Naval Integrated Fire Control-Counter Air Testing (NIFC-CA) capabilities. Additional details are classified. Planned for DSSC-5.</p> <p><b>FY 2015 Accomplishments:</b> N/A</p> <p><b>FY 2016 Plans:</b> N/A</p> <p><b>FY 2017 Base Plans:</b> FY17 New Start: Funds provided for development of System Requirements at the Weapon System Specification level. The program will begin the System Engineering Technical Review (SETR) process with the vendor.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>	0.000 -	0.000 -	11.349 -	0.000 -	11.349 -
<p><b>Title:</b> Data Fusion</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> E-2D Data Fusion provides a fusion engine to blend off-board tactical data (e.g. Electronic Surveillance and Satellite Receiver System (SRS) data) with already blended radar, Identify Friend or Foe (IFF) and Cooperative Engagement Capability (CEC) track-files, greatly enhancing Situational Awareness and tactical decision making. Successful E-2D NIFC-CA engagements depend on a clear/unambiguous tactical picture and the shortest possible decision timeline. Planned for DSSC-4.</p>	0.000 -	0.000 -	15.847 -	0.000 -	15.847 -

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p><b>FY 2015 Accomplishments:</b> N/A</p> <p><b>FY 2016 Plans:</b> N/A</p> <p><b>FY 2017 Base Plans:</b> FY17 New Start: Funds provided for requirements assessment of E-2D Data Fusion program, and to conduct trade studies for the system integration development.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>					
<p><b>Title:</b> Fighter to Fighter Backlink</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Fighter to Fighter backlink implements Link-16 Network Participation Group 20 messages for Fighter-to-Fighter backlink capability in E-2D. This functionality improves interoperability between E-2D and participating US Navy fighters, including 5th generation aircraft, enhancing combat effectiveness of E-2D, increases Situational Awareness (SA), and shortens kill-chain timelines (including NIFC-CA).</p> <p><b>FY 2015 Accomplishments:</b> N/A</p> <p><b>FY 2016 Plans:</b> N/A</p> <p><b>FY 2017 Base Plans:</b> FY17 New Start: Funds provided for requirements assessment of the E-2D Fighter to Fighter backlink program, and to conduct trade studies for the system integration development.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>	0.000 -	0.000 -	9.777 -	0.000 -	9.777 -
<p><b>Title:</b> Navigation Warfare (NAVWAR)</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> 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</p>	0.000 -	0.000 -	6.883 -	0.000 -	6.883 -

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy	<b>Date:</b> February 2016
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<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>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 provides 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. Planned for DSSC-4.</p> <p><b>FY 2015 Accomplishments:</b> N/A</p> <p><b>FY 2016 Plans:</b> N/A</p> <p><b>FY 2017 Base Plans:</b> FY17 New Start: Funds provided for System Engineering and integration development and Government Furnished Hardware contract award.</p> <p><b>FY 2017 OCO Plans:</b> N/A</p>					
<p><b>Title:</b> Stores Performance Assessment Requested Quality (SPARQ)</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> E-2D Stores Performance Assessment Requested Quality (SPARQ) establishes real-time requirements for E-2D sensor contribution to system of system Naval Integrated Fire Control-Counter Air (NIFC-CA) solutions. SPARQ expands and optimizes operational employment envelopes, improving Air Wing ability to take advantage of System of System capabilities of NIFC-CA, reduces operational workload and latency of execution. Planned for DSSC-5.</p> <p><b>FY 2015 Accomplishments:</b> N/A</p> <p><b>FY 2016 Plans:</b> N/A</p> <p><b>FY 2017 Base Plans:</b></p>	0.000	0.000	7.595	0.000	7.595
	-	-	-	-	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy			<b>Date:</b> February 2016			
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>				
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>						
		<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
FY17 New Start: Funds provided for development of System Requirements at the Weapon System Specification level. The program will begin the System Engineering Technical Review (SETR) process with the vendor.						
<b>FY 2017 OCO Plans:</b> N/A						
<b>Title:</b> ALQ-217 Electronic Support Measures Upgrade		0.000	0.000	27.799	0.000	27.799
<b>Articles:</b>		-	-	-	-	-
<b>Description:</b> ALQ-217 digital upgrade greatly enhances Combat Identification (CID), battle space awareness, and effectiveness of blue forces. Combat Identification (#3) requirements and networked sensor systems are specifically called out on COMACCLOGWING's FY15 E-2D Naval Aviation Readiness Group (NARG). Planned for DSSC-5.						
<b>FY 2015 Accomplishments:</b> N/A						
<b>FY 2016 Plans:</b> N/A						
<b>FY 2017 Base Plans:</b> FY17 New Start - Funds provided for development of System Requirements at the Weapon System Specification level. The program will begin the System Engineering Technical Review (SETR) process with the vendor. System Requirements Review and System Functional Review. Stand up Software Support Activity capability to develop and integrate the ESM software into the Mission Computer. Also procures two RDT&E ALQ-217 development and test assets.						
<b>FY 2017 OCO Plans:</b> N/A						
<b>Title:</b> Crypto Modernization/Frequency Remapping		0.000	0.000	15.432	0.000	15.432
<b>Articles:</b>		-	-	-	-	-
<b>Description:</b> 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						

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

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
with a Link-16 High Power Amplifier which will address Crypto Modernization and Frequency Remapping. Planned for DSSC-4.					
<b><i>FY 2015 Accomplishments:</i></b> N/A					
<b><i>FY 2016 Plans:</i></b> N/A					
<b><i>FY 2017 Base Plans:</i></b> FY17 New Start - Funds are provided to begin System Engineering Technical Review process which will facilitate requirements updates, required changes to technical drawings and other relevant documentation in order to develop an Engineering Change Proposal that incorporates MIDS JTRS CMN-4. System Requirements Review and Preliminary Design Review.					
<b><i>FY 2017 OCO Plans:</i></b> N/A					
<b>Accomplishments/Planned Programs Subtotals</b>	171.189	209.145	363.792	0.000	363.792

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APN/0195: <i>E-2D AHE</i>	1,044.691	1,023.831	1,154.569	-	1,154.569	1,009.223	780.195	987.798	1,156.603	4,490.306	20,507.428
• APN/0605: <i>Initial Spares - E-2</i>	11.635	7.786	20.371	-	20.371	14.039	17.703	11.900	7.797	24.778	477.110
• APN/0544: <i>E-2 Series</i>	21.059	19.113	32.949	-	32.949	100.925	101.608	133.694	138.149	356.359	2,332.404

**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 Production (FRP) on 01 March 2013. Initial Operational Capability (IOC) achieved on 10 October 2014.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

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**E. Performance Metrics**

Successfully met the Delta System/Software Configuration (DSSC) milestones.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

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<b>Product Development (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 Hardware Development	SS/CPAF	Northrop Grumman Corporation (NGC) : Melbourne, FL	2,928.409	5.657	Nov 2014	0.225	Nov 2015	15.023	Nov 2016	-		15.023	0.000	2,949.314	2,949.314
Primary Hardware-Fatigue	C/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	7.526	0.017	Mar 2015	18.625	Mar 2016	17.491	Mar 2017	-		17.491	69.082	112.741	112.741
Primary Hardware Development-SIPRChat	C/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.392	5.036	Apr 2015	9.668	Nov 2015	6.521	Nov 2016	-		6.521	14.310	35.927	35.927
Primary Hardware Development-TTNT	C/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	7.502	22.200	Apr 2015	18.264	Nov 2015	14.364	Nov 2016	-		14.364	46.975	109.305	109.305
Primary Hardware Development-TTNT	SS/FFP	Data Link Solutions : Cedar Rapids, IA	1.005	9.451	Dec 2014	4.346	Dec 2015	7.753	Dec 2016	-		7.753	0.000	22.555	22.555
Primary Hardware Development-NAVWAR	SS/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		0.000		1.247	Feb 2017	-		1.247	17.140	18.387	18.387
Primary Hardware-Aerial Refueling	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	69.588	63.799	Oct 2014	51.799	Nov 2015	66.604	Nov 2016	-		66.604	45.042	296.832	296.832
Training Development	SS/FFP	Rockwell Collins : Cedar Rapids, IA	0.000	1.580	Dec 2014	1.889	Feb 2016	17.028	Feb 2017	-		17.028	49.677	70.174	70.174
GFE	Various	Various : Various	33.726	0.000		4.913	Feb 2016	2.452	Feb 2017	-		2.452	0.000	41.091	-
Primary Software Development	Various	Navy Syst Mgt Activity : Arlington, VA	0.000	0.000		18.559	Nov 2015	11.925	Dec 2016	-		11.925	1.699	32.183	-
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various : Various	625.308	0.000		0.000		0.000		-		0.000	0.000	625.308	-
<b>Subtotal</b>			3,673.456	107.740		128.288		160.408		-		160.408	243.925	4,313.817	-

**Remarks**  
 Totals may not add due to rounding.  
 Award Fee for SDD contract N00019-03-C-0057:  
 Period 1 FY04 - 90%    Period 7 FY08 - 94%    Period 13 FY13 - 93%  
 Period 2 FY04 - 91%    Period 8 FY09 - 93%    Period 14 FY14 - 97%

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

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<b>Product Development (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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				
Period 3 FY05 - 80%	Period 9 FY09 - 95%															
Period 4 FY06 - 94%	Period 10 FY10 - 100%															
Period 5 FY06 - 100%	Period 11 FY11 - 95%															
Period 6 FY07 - 95%	Period 12 FY12 - 95%															

<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Software Development	Various	Navy Syst Mgt Activity : Arlington, VA	13.019	9.589	Apr 2015	4.059	Nov 2015	35.402	Nov 2016	-		35.402	14.639	76.708	-
Software Development-SN	Various	Navy Syst Mgt Activity : Arlington, VA	0.000	0.000		0.000		6.260	Mar 2017	-		6.260	95.484	101.744	-
Software Development-Data Fusion	Various	Navy Syst Mgt Activity : Arlington, VA	0.000	0.000		0.000		12.549	Mar 2017	-		12.549	21.224	33.773	-
Software Development-CEA	Various	Navy Syst Mgt Activity : Arlington, VA	0.200	1.170	Apr 2015	6.362	Mar 2016	28.601	Mar 2017	-		28.601	88.793	125.126	-
Software Development-SIPRChat	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	1.720	2.758	Jan 2015	4.512	Dec 2015	2.600	Dec 2016	-		2.600	0.000	11.590	11.590
Software Development-AMIIP	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.493	4.500	Dec 2014	9.196	Dec 2015	2.855	Dec 2016	-		2.855	1.987	19.031	19.031
Software Development-TTNT	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.200	Jan 2015	3.391	Dec 2015	6.667	Dec 2016	-		6.667	11.266	21.524	21.524
Software Development-F2F	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		0.000		5.649	Mar 2017	-		5.649	23.601	29.250	29.250

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

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<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Software Development-NAVWAR	SS/CPPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		0.000		0.210	Mar 2017	-		0.210	1.418	1.628	1.628
Government Engineering Support	WR	Naval Air Warfare Center Aircraft Division (NAWCAD) : Pax River, MD	88.569	8.185	Nov 2014	17.029	Nov 2015	24.611	Nov 2016	-		24.611	71.230	209.624	-
Government Engineering Support	WR	Naval Air Warfare Center Training Systems Division : Orlando, FL	11.352	0.194	Dec 2014	0.000		0.000		-		0.000	0.622	12.168	-
Government Engineering Support	Various	Various : Various	12.118	3.008	Nov 2014	0.539	Nov 2015	0.000		-		0.000	0.000	15.665	-
Integrated Logistics Support	Various	Various : Various	8.270	1.397	Nov 2014	4.049	Nov 2015	4.058	Nov 2016	-		4.058	11.048	28.822	-
Contractor Engineering Support ETS	C/CPFF	Imagine One : Colonial Beach, VA	3.376	1.773	Jan 2015	1.525	Jan 2016	3.000	Jan 2017	-		3.000	4.707	14.381	14.381
Technical Data	Various	Various : Various	0.994	0.550	Dec 2014	0.560	Dec 2015	0.310	Dec 2016	-		0.310	0.843	3.257	-
Configuration Management	Various	Various : Various	0.252	0.100	Dec 2014	0.102	Dec 2015	0.103	Dec 2016	-		0.103	0.339	0.896	-
Prior Year Support costs no longer funded in FYDP	Various	Various : Various	95.380	0.000		0.000		0.000		-		0.000	0.000	95.380	-
<b>Subtotal</b>			235.743	33.424		51.324		132.875		-		132.875	347.201	800.567	-

**Remarks**  
 Totals may not add due to rounding.  
 Integrated Logistics Support, Government Engineering Support, Contractor Engineering Support, Technical Data and Configuration Management - various contractors and award dates throughout the fiscal year.

<b>Test and Evaluation (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 T&E	WR	NAWCAD : Pax River, MD	95.440	19.591	Nov 2014	5.675	Nov 2015	35.652	Nov 2016	-		35.652	185.927	342.285	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>Test and Evaluation (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 T&E 1	Various	Various : Various	35.703	0.000		4.245	Dec 2015	4.189	Nov 2016	-		4.189	4.751	48.888	-
Developmental T&E	WR	Various : Various	18.189	0.000		9.123	Dec 2015	9.075	Nov 2016	-		9.075	23.099	59.486	-
Developmental T&E	C/CPFF	Wyle Labs - ESTEL : Huntsville, AL	5.473	0.000		1.500	Jan 2016	0.000		-		0.000	0.000	6.973	6.973
Developmental T&E-ROR	SS/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.500	1.500	Mar 2015	2.252	Mar 2016	4.840	Mar 2017	-		4.840	24.687	33.779	33.779
Developmental T&E ETS	Various	Various : Various	7.166	5.236	Jun 2015	0.275	Dec 2015	0.000		-		0.000	0.000	12.677	-
Developmental T&E ETS	C/CPFF	JF Taylor Inc : Lexington Park, MD	5.693	2.551	Feb 2015	2.942	Feb 2016	2.409	Feb 2017	-		2.409	11.379	24.974	24.974
Operational T&E	WR	NAWCAD : Pax River, MD	22.954	0.895	Nov 2014	0.900	Nov 2015	1.041	Nov 2016	-		1.041	38.941	64.731	-
Operational T&E	Various	Various : Various	5.032	0.000		0.400	Nov 2015	0.050	Nov 2016	-		0.050	0.100	5.582	-
Test Assets	Various	Various : Various	3.900	0.000		1.688	Nov 2015	13.081	Nov 2016	-		13.081	9.199	27.868	-
Prior Year T&E costs no longer funded in FYDP	Various	Various : Various	37.778	0.000		0.000		0.000		-		0.000	0.000	37.778	-
<b>Subtotal</b>			237.828	29.773		29.000		70.337		-		70.337	298.083	665.021	-

**Remarks**  
 Totals may not add due to rounding.  
 Developmental Test & Evaluation (T&E), Developmental T&E, Engineering & Technical Services and Operational T&E - various contractors and award dates throughout the fiscal year.

<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Prog Management Supp	Various	Various : Various	2.370	0.080	Nov 2014	0.036	Nov 2015	0.037	Nov 2016	-		0.037	0.163	2.686	-
Travel	Various	Various : Various	2.449	0.172	Oct 2014	0.497	Oct 2015	0.135	Oct 2016	-		0.135	3.337	6.590	-
Prior Year Mgmt costs no longer funded in FYDP	Various	Various : Various	64.164	0.000		0.000		0.000		-		0.000	0.000	64.164	-
<b>Subtotal</b>			68.983	0.252		0.533		0.172		-		0.172	3.500	73.440	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			

**Remarks**  
 Totals may not add due to rounding.  
 Contractor Engineering Support, Government Engineering Support, Program Support and Travel - various contractors and/or award dates throughout the fiscal year.

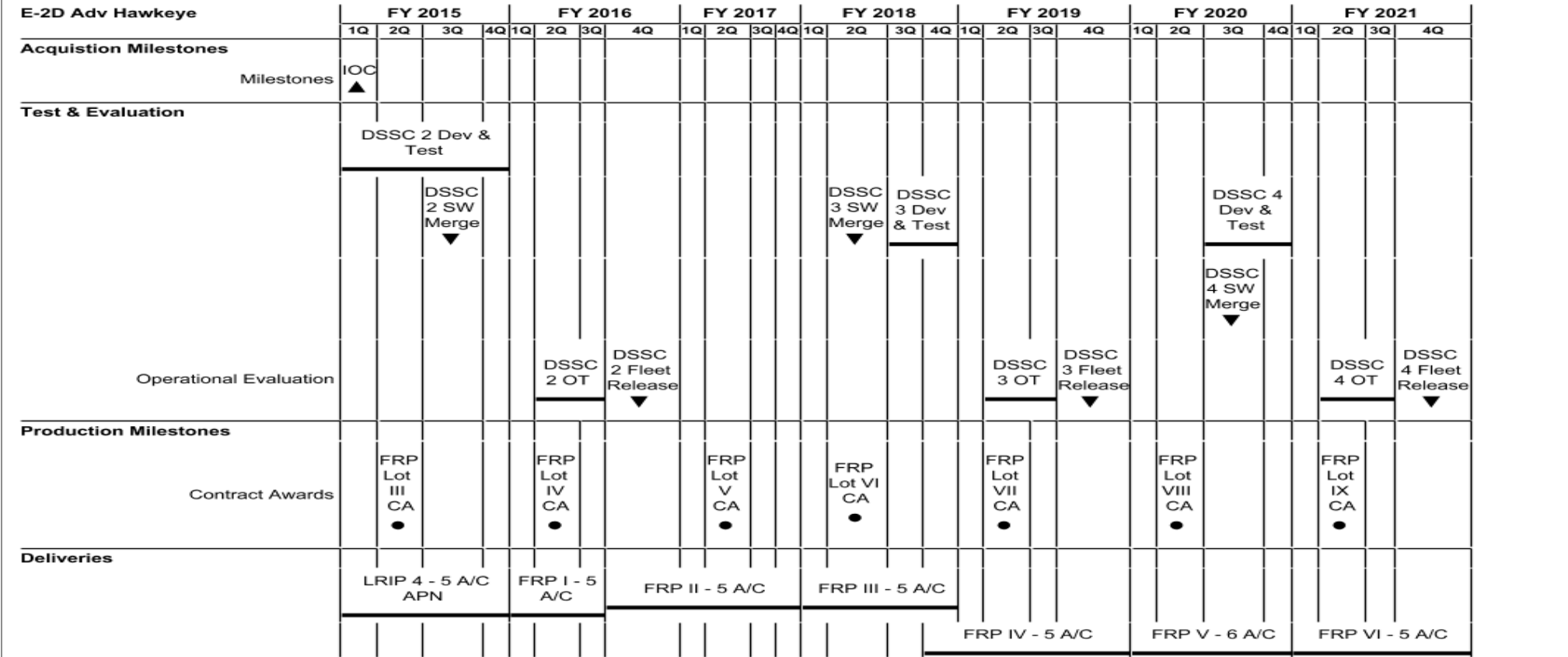
	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	4,216.010	171.189	209.145	363.792	-	363.792	892.709	5,852.845	-

**Remarks**  
 Totals may not add due to rounding.

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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E-2D Counter Electronic Attack	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021																			
	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																
<b>System Development</b>																																												
Software Development	SW Development								SIL Integration																																			
							SRR		PDR				CDR				TRR/FRR																											
<b>Test &amp; Evaluation</b>																																												
Developmental T&E																																												
Operational T&E																																												







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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
<b>Sensor Netting</b>																												
<b>Acquisition Milestones</b>																												
<b>Development &amp; Design</b>																												
<b>Test &amp; Evaluaiton</b>																												
<b>Acquisition Milestones</b>																												

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>Data Fusion</b>	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021					
	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		
													SRR	PDR		CDR	TRR			FRR					OTRR					
<b>Development &amp; Design</b>									Requirements Development								Sys Engineering & Integration													
																	SIL Test													
<b>Test &amp; Evaluation</b>																					DT		DSSC 4 DT						DSSC 4 OT	

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Fighter to Fighter Backlink	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021											
	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								
<b>Acquisition Milestones</b>													SRR ■	PDR ■		CDR ■		TRR ■		FRR ■									OTRR ■							
<b>Development &amp; Design</b>									Requirements Development				Sys Engineering & Integration								SIL Test															
<b>Test &amp; Evaluation</b>																																				

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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SPARQ	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	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				
<b>Acquisition Milestones</b>																																
<b>Development &amp; Design</b>																																
<b>Test &amp; Evaluation</b>																																

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>ALQ-217 Electronic Support Measures (ESM)</b>	<b>FY 2015</b>				<b>FY 2016</b>				<b>FY 2017</b>				<b>FY 2018</b>				<b>FY 2019</b>				<b>FY 2020</b>				<b>FY 2021</b>											
	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								
<b>Acquisition Milestones</b>												SRR/SFR ■				PDR ■				CDR ■								TRR ■				FRR ■				
<b>Development &amp; Design</b>									Requirements Development				Hdw/SW Development & Integration																							
<b>Test &amp; Evaluation</b>																				SIL Test					DT											

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>E-2D Crypto Modernization/Frequency Remapping</b>	<b>FY 2015</b>				<b>FY 2016</b>				<b>FY 2017</b>				<b>FY 2018</b>				<b>FY 2019</b>				<b>FY 2020</b>				<b>FY 2021</b>							
	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				
<b>Acquisition Milestones</b>											SRR ■	PDR ■			CDR ■	TRR ■			FRR ■													
<b>Development &amp; Design</b>									Hdw/SW Development & Integration																							
<b>Test &amp; Evaluation</b>																	SIL Test															
																					DT											

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

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

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>E-2D Adv Hawkeye</b>				
Acquistion Milestones: Milestones: Acquistion Milestones - Initial Operational Capabilities	1	2015	1	2015
Test & Evaluation: DSSC 2 Capability Dev & Testing	1	2015	4	2015
Test & Evaluation: Software Merge DSSC 2	3	2015	3	2015
Test & Evaluation: DSSC 3 Capability Dev & Testing	3	2018	4	2018
Test & Evaluation: Software Merge - DSSC 3	2	2018	2	2018
Test & Evaluation: DSSC 4 Capability Dev & Testing	3	2020	4	2020
Test & Evaluation: Software Merge DSSC 4	3	2020	3	2020
Test & Evaluation: Operational Evaluation: DSSC 2 Operational Test	2	2016	3	2016
Test & Evaluation: Operational Evaluation: DSSC 2 Fleet Release	4	2016	4	2016
Test & Evaluation: Operational Evaluation: DSSC 3 Operational Test	2	2019	3	2019
Test & Evaluation: Operational Evaluation: DSSC 3 Fleeet Release	4	2019	4	2019
Test & Evaluation: Operational Evaluation: DSSC 4 Operational Test	2	2021	3	2021
Test & Evaluation: Operational Evaluation: DSSC 4 Fleet Release	4	2021	4	2021
Production Milestones: Contract Awards: Production Milestones - FRP Lot III CA	2	2015	2	2015
Production Milestones: Contract Awards: Production Milestones - FRP Lot IV CA	2	2016	2	2016
Production Milestones: Contract Awards: Production Milestones - FRP Lot V CA	2	2017	2	2017
Production Milestones: Contract Awards: Production Milestones - FRP Lot VI CA	2	2018	2	2018
Production Milestones: Contract Awards: Production Milestones - FRP Lot VII CA	2	2019	2	2019
Production Milestones: Contract Awards: Production Milestones - FRP Lot VIII CA	2	2020	2	2020
Production Milestones: Contract Awards: Production Milestones - FRP Lot IX CA	2	2021	2	2021
Deliveries: Production Deliveries - LRIP IV (5 A/C APN)	1	2015	4	2015

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Deliveries: Production Deliveries - FRP I (5 A/C)	1	2016	3	2016
Deliveries: Production Deliveries - FRP II (5 A/C)	4	2016	4	2017
Deliveries: Production Deliveries - FRP III (5 A/C)	1	2018	4	2018
Deliveries: Production Deliveries - FRP IV (5 A/C)	4	2018	4	2019
Deliveries: Production Deliveries - FRP V (6 A/C)	1	2020	4	2020
Deliveries: Production Deliveries - FRP VI (5 A/C)	1	2021	4	2021
<b><i>E-2D Adv Hawkeye Aerial Refueling</i></b>				
System Development: Hardware/Software Development: Aerial Refueling - Engineering & Manufacturing Development	1	2015	4	2020
System Development: Reviews: Aerial Refueling - Critical Design Review	4	2015	4	2015
System Development: Reviews: Aerial Refueling - Test Readiness Review	1	2017	1	2017
System Development: Reviews: Aerial Refueling - Production Readiness Review	3	2017	3	2017
System Development: Reviews: Aerial Refueling - Operational Test Readiness Review	1	2019	1	2019
System Development: Reviews: Aerial Refueling - Initial Operational Capability	2	2020	2	2020
Test & Evaluation: Aerial Refueling - Fuel Rig Test	3	2015	4	2015
Test & Evaluation: Aerial Refueling - Probe Static Test	1	2016	2	2016
Test & Evaluation: Aerial Refueling - Aircraft Installation	1	2016	3	2017
Test & Evaluation: Aerial Refueling - First Flight	1	2017	1	2017
Test & Evaluation: Developmental Flight Test: Developmental Flight Test	1	2017	3	2018
Test & Evaluation: Developmental Flight Test: Developmental Test	4	2018	4	2018
Test & Evaluation: Developmental Flight Test: Operational Flight Test	2	2019	3	2019
<b><i>E-2D Counter Electronic Attack</i></b>				
System Development: Software Development: Counter Electronic Attack - SW Development	3	2015	1	2017
System Development: Software Development: Counter Electronic Attack - SIL Integration	2	2017	4	2018

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
System Development: Software Development: Counter Electronic Attack - System Requirements Review	3	2016	3	2016
System Development: Software Development: Counter Electronic Attack - Preliminary Design Review	1	2017	1	2017
System Development: Software Development: Counter Electronic Attack - Critical Design Review	3	2017	3	2017
System Development: Software Development: Counter Electronic Attack - TRR/FRR	4	2018	4	2018
Test & Evaluation: Developmental T&E: Counter Electronic Attack - DT&E Tech Evaluation	4	2018	2	2019
Test & Evaluation: Operational T&E: Developmental Test	3	2020	4	2020
Test & Evaluation: Operational T&E: Operational Test	2	2021	3	2021
<b><i>E-2D MIDS/JTRS Tactical Targeting Networking Technology (TTNT)</i></b>				
System Development & Design: TTNT HPA Development & Design: TTNT - System Requirements Review 1	1	2015	1	2015
System Development & Design: TTNT HPA Development & Design: TTNT - System Requirements Review 2	4	2015	4	2015
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Preliminary Design Review	1	2016	1	2016
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Critical Design Review	2	2017	2	2017
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Test Readiness Review	2	2018	2	2018
System Development & Design: TTNT HPA Development & Design: System Development & Design	1	2015	1	2019
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - System Requirements Review	3	2016	3	2016
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - Preliminary Design Review	1	2017	1	2017

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - Critical Design Review	4	2017	4	2017
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT -Test Readiness Review	1	2018	1	2018
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - Functional Readiness Review	3	2018	3	2018
System Development & Design: TTNT MIDS/JTRS TTNT Integration: System Development & Design	2	2016	1	2019
Test & Evaluation: MIDS/JTRS TTNT Developmental Test/Operational Test: MIDS/ JTRS/TTNT - Developmental Test	3	2018	4	2018
Test & Evaluation: MIDS/JTRS TTNT Developmental Test/Operational Test: MIDS/ JTRS/TTNT - Developmental Test DSSC 4	3	2020	4	2020
Test & Evaluation: MIDS/JTRS TTNT Developmental Test/Operational Test: MIDS/ JTRS/TTNT Operational Test DSSC 4	2	2021	3	2021
<b><i>E-2D SIPRChat</i></b>				
Acquisition Milestones: Milestones: SIPRChat - Preliminary Design Review	1	2017	1	2017
Acquisition Milestones: Milestones: SIPRChat - Critical Design Review	4	2017	4	2017
Acquisition Milestones: Milestones: SIPRChat -Test Readiness Review	1	2018	1	2018
Acquisition Milestones: Milestones: Functional Readiness Review	3	2018	3	2018
System Development: Hardware & Software Integration	3	2015	4	2019
Test & Evaluation: Developmental Test/Operational Test: Developmental Test	3	2018	4	2018
Test & Evaluation: Developmental Test/Operational Test: Developmental Test DSSC 4	3	2020	4	2020
Test & Evaluation: Developmental Test/Operational Test: Operational Test	2	2021	3	2021
<b><i>Accelerated Mid-Term Interoperability Improvement Program (AMIIP)</i></b>				
Acquisition Milestones: Milestones: System Requirements Review	4	2015	4	2015
Acquisition Milestones: Milestones: Preliminary Design Review	1	2016	1	2016
Acquisition Milestones: Milestones: Critical Design Review	3	2016	3	2016
Acquisition Milestones: Milestones: Test Readiness Review	4	2016	4	2016

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Acquisition Milestones: Milestones: Fleet Readiness Review	1	2017	1	2017
Systems Development: Software Integration	3	2015	2	2018
Test & Evaluation: Technical Evaluation: Developmental Test	1	2017	3	2017
Test & Evaluation: Technical Evaluation: Developmental Test DSSC 3	3	2018	4	2018
Test & Evaluation: Technical Evaluation: Operational Test DSSC 3	2	2019	3	2019
<b>Sensor Netting</b>				
Acquisition Milestones: System Requirements Review	2	2018	2	2018
Acquisition Milestones: Preliminary Design Review	2	2019	2	2019
Acquisition Milestones: Critical Design Review	1	2020	1	2020
Acquisition Milestones: Functional Readiness Review	1	2021	1	2021
Acquisition Milestones: Test Readiness Review	3	2020	3	2020
Development & Design: Requirement Development	2	2017	4	2018
Development & Design: Software Development	4	2018	2	2020
Test & Evaluation: System Integration Lab Test	3	2020	2	2021
Test & Evaluation: Developmental Test & Evaluation	2	2021	4	2021
<b>Data Fusion</b>				
System Requirements Review	1	2018	1	2018
Preliminary Design Review	2	2018	2	2018
Critical Design Review	4	2018	4	2018
Test Readiness Review	2	2019	2	2019
Functional Readiness Review	4	2019	4	2019
Operational Test Readiness Review	1	2021	1	2021
Development & Design: Development & Integration	2	2017	2	2018
Development & Design: Systems Engineering & Integration	2	2018	1	2021
Development & Design: System Integration Lab Test	2	2019	4	2019
Test & Evaluation: Developmental Testing	4	2019	2	2020

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Test & Evaluation: Dev Test - Software Release	3	2020	4	2020
Test & Evaluation: Operational Test & Evaluation	2	2021	3	2021
<b><i>Fighter to Fighter Backlink</i></b>				
Acquisition Milestones: System Requirements Review	1	2018	1	2018
Acquisition Milestones: Preliminary Design Review	2	2018	2	2018
Acquisition Milestones: Critical Design Review	4	2018	4	2018
Acquisition Milestones: Test Readiness Review	2	2019	2	2019
Acquisition Milestones: Functional Readiness Review	4	2019	4	2019
Acquisition Milestones: Operational Test Readiness Review	1	2021	1	2021
Development & Design: Development & Integration	2	2017	2	2018
Development & Design: Systems Engineering & Integration	2	2018	1	2021
Development & Design: System Integration Lab Test	2	2019	4	2019
Test & Evaluation: Developmental Test & Evaluation	4	2019	2	2020
Test & Evaluation: Dev Test - Software Release	3	2020	4	2020
Test & Evaluation: Operational Test & Evaluation	2	2021	3	2021
<b><i>NAVWAR</i></b>				
Acquisition Milestones: System Rquirements Review	1	2018	1	2018
Acquisition Milestones: Preliminary Design Review/Critical Design Review	2	2018	2	2018
Acquisition Milestones: Test Readiness Reivew/Functional Readiness Review	3	2018	3	2018
Development & Design: Systems Engineering & Integration	4	2017	4	2019
Development & Design: Hardware Development	2	2018	3	2018
Development & Design: Software Development	2	2018	3	2018
Development & Design: System Integration Lab Test	3	2018	4	2018
Test & Evaluation: Developmental Test	1	2019	2	2019
Test & Evaluation: Developmental Test DSSC 4	3	2020	4	2020
Test & Evaluation: Operational Testing DSSC 4	2	2021	3	2021

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>SPARQ</b>				
Acquisition Milestones: System Requirements Review	2	2018	2	2018
Acquisition Milestones: Preliminary Design Review	2	2019	2	2019
Acquisition Milestones: Critical Design Review	1	2020	1	2020
Acquisition Milestones: Functional Readiness Review	1	2021	1	2021
Acquisition Milestones: Test Readiness Review	3	2020	3	2020
Development & Design: Requirement Development	2	2017	4	2018
Development & Design: Software Development	4	2018	4	2021
Test & Evaluation: System Integration Lab Test	3	2020	2	2021
Test & Evaluation: Developmental Test & Evaluation	2	2021	4	2021
<b>ALQ-217 Electronic Support Measures (ESM)</b>				
Acquisition Milestones: System Requirements Review 2/System Functional Review	4	2017	4	2017
Acquisition Milestones: Preliminary Design Review	2	2018	2	2018
Acquisition Milestones: Critical Design Review	4	2018	4	2018
Acquisition Milestones: Test Readiness Review	2	2019	2	2019
Acquisition Milestones: Functional Readiness Review	1	2020	1	2020
Development & Design: Requirements Development	2	2017	1	2018
Development & Design: Software Integration	1	2018	4	2019
Test & Evaluation: Software Integration Lab	2	2019	4	2019
Test & Evaluation: Developmental Test	1	2020	2	2021
<b>E-2D Crypto Modernization/Frequency Remapping</b>				
Acquisition Milestones: System Requirements Review	3	2017	3	2017
Acquisition Milestones: Preliminary Design Review	4	2017	4	2017
Acquisition Milestones: Critical Design Review	2	2018	2	2018
Acquisition Milestones: Test Readiness Review	3	2018	3	2018
Acquisition Milestones: Functional Readiness Review	1	2019	1	2019

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 3051 / <i>E-2D Adv Hawkeye</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Development & Design: Developmental Test	2	2017	4	2019
Development & Design: SIL Test	3	2018	1	2019
Test & Evaluation: Developmental Test	1	2019	4	2019

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.000	0.000	8.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.500
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

Program increase for E-2D Advanced Hawkeye (AHE) radar development.

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

	FY 2015	FY 2016
<b>Congressional Add:</b> Adv Radar Innovation Fund - Air (Cong)	0.000	8.500
<b>FY 2015 Accomplishments:</b> N/A		
<b>FY 2016 Plans:</b> N/A		
<b>Congressional Adds Subtotals</b>	0.000	8.500

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

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A



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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604234N / <i>Advanced Hawkeye</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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<b>Advanced Radar Congressional Add</b>	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	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				
<b>Systems Development</b>																																
										</																						

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Navy **Date:** February 2016

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

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Advanced Radar Congressional Add</i></b>				
Systems Development: Systems Requirements	2	2016	4	2017