Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy												Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604234N *I Advanced Hawkeye*							
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	4,387.199	211.146	363.792	292.535	-	292.535	218.671	186.251	169.629	173.004	0.000	6,002.227
3051: *E-2D Adv Hawkeye*	4,387.199	202.939	363.792	292.535	-	292.535	218.671	186.251	169.629	173.004	0.000	5,994.020
9999: *Congressional Adds*	0.000	8.207	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.207
Program MDAP/MAIS Code: **Project MDAP/MAIS Code(s):** 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.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604234N *I Advanced Hawkeye*

DSSC-3 is planned for operational test and Fleet release in FY19. DSSC-3 is comprised of the following capabilities:
E-2D Accelerated Mid-Term Interoperability Improvement Program, NIFC-CA enhancements, Automatic Identification System, Embedded National Tactical Receiver, and Crypto Modernization/Frequency Remapping.

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.

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, Tactical Targeting Networking Technology, Secret Internet Protocol Router Chat, Data Fusion, Fighter to Fighter Backlink, E-2D Navigation Warfare and E-2D Counter Electronic Attack.

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, and E-2D AN/ALQ-217 Electronic Support Measures.

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	217.645	363.792	290.359	-	290.359
Current President's Budget	211.146	363.792	292.535	-	292.535
Total Adjustments	-6.499	0.000	2.176	-	2.176
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.010	0.000			
• SBIR/STTR Transfer	-6.489	0.000			
• Program Adjustments	0.000	0.000	1.400	-	1.400
• Rate/Misc Adjustments	0.000	0.000	0.776	-	0.776

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2016	FY 2017
Project: 9999: *Congressional Adds*		
Congressional Add: *Adv Radar Innovation Fund - Air (Cong)*	8.207	0.000

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604234N *I Advanced Hawkeye*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2016	FY 2017
Congressional Add Subtotals for Project: 9999	8.207	0.000
Congressional Add Totals for all Projects	8.207	0.000

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 Aerial Refueling to move PRR to 4QFY17, to wait for aircraft installation to be completed.

Updated all FY17 New Starts program schedules to reflect 3Q FY17 start date.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy											Date: May 2017	
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604234N / *Advanced Hawkeye*				Project (Number/Name) 3051 / *E-2D Adv Hawkeye*			
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
3051: *E-2D Adv Hawkeye*	4,387.199	202.939	363.792	292.535	-	292.535	218.671	186.251	169.629	173.004	0.000	5,994.020
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project 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 (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:

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

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.

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.

3. 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.

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 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 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-CA mission.

2. The E-2D Secret Internet Protocol Router 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. E-2D Data Fusion provides a fusion engine to blend off-board tactical data (e.g. Electronic Surveillance and Satellite Receiver System data) with already blended radar, Identify Friend or Foe and Cooperative Engagement Capability 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.

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4. 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 and shortens kill-chain timelines (including NIFC-CA).

5. 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.

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. 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. 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. 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Full Scale Fatigue Test	12.332	19.333	18.236	0.000	18.236
Articles:	-	-	-	-	-
Description: Full Scale Fatigue Test efforts for the E-2D Advanced Hawkeye 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					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
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. ***FY 2016 Accomplishments:*** Funds provided for continued support of Full Scale Fatigue Tests. The test program achieved approximately 8000 test hours. Inspections and analysis were performed at 500 effective flight hour intervals through approximately 7,500 effective flight hours. Effort began to configure and instrument replacement Outer Wing Panels. The current Outer Wing Panels are projected to reach the end of their service life. Repairs of the test article were conducted. ***FY 2017 Plans:*** Funds provided for continued support of Full Scale Fatigue Tests. 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. Effort to configure and instrument replacement Outer Wing Panels will continue. Repairs of the test article will be conducted as required. ***FY 2018 Base Plans:*** Funds provided for continued support of Full Scale Fatigue Tests. 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. Effort to configure and instrument replacement Outer Wing Panels will continue at the 10,000 hour interval. Repairs of the test article will be conducted as required. ***FY 2018 OCO Plans:*** N/A					
Title: Delta System/Software Configuration (DSSC) Integration and Test	11.172	13.411	15.266	0.000	15.266
Articles:	-	-	-	-	-
Description: Funds integration, engineering, risk reduction efforts, developmental and operational test of E-2D. ***FY 2016 Accomplishments:*** Funding provided for the continuation of DSSC 2 integration, developmental test and operational test. ***FY 2017 Plans:*** Funds provided for risk reduction integration and engineering test to support DSSC 3. ***FY 2018 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Funding provided for the continuation of DSSC 3 risk reduction integration and engineering test. ***FY 2018 OCO Plans:*** N/A					
Title: E-2D Classified Programs	6.898	19.833	0.000	0.000	0.000
Articles:	-	-	-	-	-
Description: Provides support for the E-2D Advanced Hawkeye Classified Development efforts. Development and Integration of E-2D specific NIFC-CA Increment 2-3 improvements. ***FY 2016 Accomplishments:*** Funding provides for the continuation of E-2D Advanced Hawkeye (AHE) Classified Development efforts. ***FY 2017 Plans:*** Funds provided for the continuation of E-2D AHE Classified Development efforts. Conduct test and evaluation and integrate capability into DSSC-3 baseline. FY17 increase is due to significant test requirements to validate capability. ***FY 2018 Base Plans:*** N/A ***FY 2018 OCO Plans:*** N/A					
Title: Mode 5/S	3.058	0.225	0.000	0.000	0.000
Articles:	-	-	-	-	-
Description: Mode 5/S is the replacement/upgrade to the existing Identification Friend or Foe Interrogator system. ***FY 2016 Accomplishments:*** Continue APX-122A system test and evaluation. ***FY 2017 Plans:*** 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. ***FY 2018 Base Plans:***					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A ***FY 2018 OCO Plans:*** N/A					
Title: Aerial Refueling	69.692	81.486	64.326	0.000	64.326
Articles:	-	-	-	-	-
Description: 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 ***FY 2016 Accomplishments:*** Funding provided for continued E&MD of AR, continued Systems Integration Laboratory 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. ***FY 2017 Plans:*** 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 representative operational test aircraft. Funding provided for production readiness review and developmental flight test to include hardware functionality handling qualities evaluation and envelope expansion with four threshold tankers (F/A-18,KC-130,KC-10 and KC135). ***FY 2018 Base Plans:*** Funding provided for developmental flight test to include hardware functionality, handling qualities evaluation and envelope expansion with five threshold tankers (F/A-18,KC-130,KC-10,KC-135 and OMEGA). Additionally, funding provided for physical configuration audit (PCA). ***FY 2018 OCO Plans:*** N/A					
Title: E-2D Counter Electronic Attack	19.969	28.512	22.214	0.000	22.214
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Description: 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. ***FY 2016 Accomplishments:*** 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). ***FY 2017 Plans:*** 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. ***FY 2018 Base Plans:*** 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 Test Readiness Review, Functional Readiness Review and begin developmental test. ***FY 2018 OCO Plans:*** N/A					
Title: Multifunctional Information Distribution System/Joint Tactical Radio System (MIDS/JTRS)Tactical Targeting Networking Technology (TTNT) ***Articles:*** ***Description:*** MIDS/JTRS 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 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. ***FY 2016 Accomplishments:***	30.630 -	41.734 -	11.539 -	0.000 -	11.539 -

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Funding provides for continued Design, Development, hardware, software, System Readiness Review and Preliminary Design Review for phase I associated with MIDS/JTRS/CMN-4 integration. ***FY 2017 Plans:*** Funds provided for continued Design and Development. Conduct Preliminary Design Review for Phase II aircraft integration. ***FY 2018 Base Plans:*** Funds provided for continuation of phase II aircraft integration development. Conduct Critical Design Review. Start lab testing for preparation for Test Readiness Review. ***FY 2018 OCO Plans:*** N/A					
Title: SIPR Chat ***Articles:*** ***Description:*** 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. ***FY 2016 Accomplishments:*** Funds provided for continued System Development & Design, Software and Router Aircraft Integration to support and enable SIPRChat capability. ***FY 2017 Plans:*** Funds provided for continued System Development & Design, Software and Router Aircraft Integration, Preliminary Design Review and Critical Design Review to support and enable SIPRChat capability. ***FY 2018 Base Plans:*** Funds provided for Test Readiness Review, Functional Readiness Review and Developmental Test to support and enable SIRPCaht capability. ***FY 2018 OCO Plans:*** N/A	16.595 -	15.000 -	5.500 -	0.000 -	5.500 -
Title: Naval Integrated Fire Control - Counter Air Testing (NIFC-CA) ***Articles:***	19.823 -	37.588 -	38.296 -	0.000 -	38.296 -

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Description: 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. ***FY 2016 Accomplishments:*** 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. ***FY 2017 Plans:*** 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. Funds trainer and training development so the fleet can fully train to NIFC-CA capabilities. ***FY 2018 Base Plans:*** Funds provided for continued NIFC-CA flight test. Additionally, continues E-2D participation in NIFC-CA increment 1-3 developmental and operational systems of systems ground, simulation, and flight testing. Continues fleet training development for NIFCCA capabilities. ***FY 2018 OCO Plans:*** N/A					
Title: Accelerated Mid-Term Interoperability Improvement Program (AMIIP)	12.770	11.988	3.779	0.000	3.779
Articles:	-	-	-	-	-
Description: 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. ***FY 2016 Accomplishments:*** Funds provided for continued systems engineering, systems development support and software integration. Preliminary Design Review, Critical Design Review and Test Readiness Review. ***FY 2017 Plans:***					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Funds provided for finishing integration of software into DSSC-3 build. Fleet Readiness Review. Completing developmental flight test of software changes. ***FY 2018 Base Plans:*** Funds provided to complete software integration development. ***FY 2018 OCO Plans:*** N/A					
Title: Sensor Netting ***Articles:*** ***Description:*** 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. ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** 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. ***FY 2018 Base Plans:*** Funds provided for continuation of system requirements development. Start of software development & integration of the mission computer and associated systems to provide the Sensor Netting solution. Program will conduct System Requirements Review(SRR) and Integrated Baseline Review(IBR). ***FY 2018 OCO Plans:*** N/A	0.000 -	11.349 -	17.380 -	0.000 -	17.380 -
Title: Data Fusion ***Articles:*** ***Description:*** 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.	0.000 -	15.847 -	18.617 -	0.000 -	18.617 -

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
FY 2016 Accomplishments: N/A ***FY 2017 Plans:*** Funds provided for requirements assessment of E-2D Data Fusion program, and to conduct trade studies for the system integration development. ***FY 2018 Base Plans:*** Funds provided to continue trade studies for the requirement development/system integration development. Begin Systems Engineering and Integration. Program will conduct system requirements review, preliminary design review and critical design review. ***FY 2018 OCO Plans:*** N/A					
Title: Fighter to Fighter Backlink ***Articles:*** ***Description:*** 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). ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** Funds provided for requirements assessment of the E-2D Fighter to Fighter backlink program, and to conduct trade studies for the system integration development. ***FY 2018 Base Plans:*** Funds provided to continue trade studies for the requirement development/system integration development. Begin Systems Engineering and Integration. Program will conduct system requirements review, preliminary design review and critical design review. ***FY 2018 OCO Plans:*** N/A	0.000 -	9.777 -	11.789 -	0.000 -	11.789 -
Title: Navigation Warfare (NAVWAR)	0.000	6.883	10.272	0.000	10.272

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Articles:	-	-	-	-	-
Description: 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 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. ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** Funds provided for system engineering and integration development and Government Furnished Hardware contract award. ***FY 2018 Base Plans:*** Funds provided to continue system engineering and integration development. Program will conduct system requirements review/system functional review (SRR/SFR), preliminary design review and critical design review. Begin hardware & software development. ***FY 2018 OCO Plans:*** N/A					
Title: Stores Performance Assessment Requested Quality (SPARQ)	0.000	7.595	9.799	0.000	9.799
Articles:	-	-	-	-	-
Description: 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. ***FY 2016 Accomplishments:***					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A ***FY 2017 Plans:*** 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. ***FY 2018 Base Plans:*** Funds provided for continuation of system requirements development. Start of software development of the mission computer and associated systems to provide the SPARQ solution. Program will conduct System Requirements Review (SRR) and Integrated Baseline Review(IBR). ***FY 2018 OCO Plans:*** N/A					
Title: ALQ-217 Electronic Support Measures Upgrade ***Articles:*** ***Description:*** 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. ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** 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. ***FY 2018 Base Plans:*** Funds provided for the continuation of system requirement development. Start hardware and software development & integration, providing increase Electronic Support Measures (ESM)capability against advanced enemy threats. Program will conduct System Requirements Review & System Functional Review. Conduct Preliminary Design Review. ***FY 2018 OCO Plans:***	0.000 -	27.799 -	28.956 -	0.000 -	28.956 -

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A					
Title: Crypto Modernization/Frequency Remapping	0.000	15.432	16.566	0.000	16.566
Articles:	-	-	-	-	-
Description: 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. Planned for DSSC-4. ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** 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. ***FY 2018 Base Plans:*** Funds are provided to continue hardware & software development & integration. Conduct Critical Design Review and Test Readiness Review. Begin lab testing. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	202.939	363.792	292.535	0.000	292.535

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• APN/0195: *E-2D AHE*	1,020.945	1,154.569	1,004.913	-	1,004.913	937.784	974.465	977.756	1,154.033	2,200.793	19,330.161
• APN/0605: *Initial Spares - E-2*	1,478.401	1,710.767	1,717.940	18.850	1,736.790	1,359.495	1,379.020	1,400.602	1,084.857	Continuing	Continuing
• APN/0544: *E-2 Series*	19.046	32.949	97.563	-	97.563	85.186	118.308	212.685	240.185	454.133	2,709.662

Remarks

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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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 on 01 March 2013. Initial Operational Capability achieved on 10 October 2014.

E. Performance Metrics

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

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy			Date: May 2017
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware-Fatigue	C/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	7.543	10.933	Dec 2015	19.019	Dec 2016	17.436	Dec 2017	-		17.436	31.942	86.873	86.873
Primary Hardware Dev-AMIIP/SIPRChat & TTNT	C/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	30.200	30.430	Mar 2016	36.364	Dec 2016	10.525	Dec 2017	-		10.525	18.353	125.872	125.872
Primary Hardware Dev-TTNT	SS/FFP	Data Link Solutions : Cedar Rapids, IA	10.456	2.900	May 2016	4.568	Apr 2017	1.365	Dec 2017	-		1.365	0.000	19.289	19.289
Primary Hardware Dev - TTNT	SS/CPFF	ViaSat : Carlsbad, CA	0.000	1.100	May 2016	1.000	Apr 2017	0.000		-		0.000	0.000	2.100	2.100
Primary Hardware-Aerial Refueling	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	133.387	64.178	Oct 2015	56.464	Oct 2016	31.797	Oct 2017	-		31.797	12.662	298.488	298.488
Primary Hardware Dev-NAVWAR	SS/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		2.380	May 2017	7.807	Dec 2017	-		7.807	9.054	19.241	19.241
Primary Hardware Dev - TTNT	SS/CPFF	NorthStar Scientific Corp. : Kapole, HI	0.000	4.914	Jun 2016	0.000		0.000		-		0.000	0.000	4.914	4.914
Primary Hardware Dev - CMFR	C/CPFF	Northrop Grumman Corporation : Melbourne, FL	0.000	0.000		5.000	May 2017	5.000	Dec 2017	-		5.000	0.000	10.000	10.000
Primary Hardware Dev - ESM	C/CPFF	Lockheed Martin : New York, NY	0.000	0.000		15.004	May 2017	6.079	Jan 2018	-		6.079	100.389	121.472	121.472
Training Development	SS/FFP	Rockwell Collins : Cedar Rapids, IA	1.580	1.167	May 2016	16.600	Feb 2017	18.383	Dec 2017	-		18.383	23.675	61.405	61.405
Primary Software Development	Various	Navy Syst Mgt Activity : Arlington, VA	0.000	29.477	Apr 2016	34.796	Dec 2016	14.111	Dec 2017	-		14.111	12.061	90.445	90.445
Primary Software Development	Various	Various : Various	0.000	1.961	May 2016	1.961	Feb 2017	0.000		-		0.000	0.000	3.922	3.922
Primary Software Development - ESM	C/CPFF	Lockheed Martin : New York, NY	0.000	0.000		8.129	Jul 2017	5.836	Jan 2018	-		5.836	88.113	102.078	102.078
System Engineering	Various	Various : Various	0.000	0.913	May 2016	0.225	Dec 2016	0.000		-		0.000	0.000	1.138	1.138

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various : Various	3,598.030	0.000		0.000		0.000		-		0.000	0.000	3,598.030	-
		Subtotal	3,781.196	147.973		201.510		118.339		-		118.339	296.249	4,545.267	-

Remarks

Totals may not add due to rounding.
Primary HW NAVWAR increase from FY17 to FY18 is for continued systems & integration development. Also to begin the hardware development, conduct SRR/SFR, PDR & CDR.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	Various	Navy Syst Mgt Activity : Arlington, VA	22.608	0.312	Apr 2016	10.714	Dec 2016	10.097	Dec 2017	-		10.097	46.254	89.985	-
Software Development-SN	Various	Navy Syst Mgt Activity : Arlington, VA	0.000	0.000		8.035	May 2017	14.784	Dec 2017	-		14.784	43.970	66.789	-
Software Development-Data Fusion	Various	Navy Syst Mgt Activity : Arlington, VA	0.000	0.000		13.449	May 2017	14.821	Dec 2017	-		14.821	39.376	67.646	-
Software Development-CEA	Various	Navy Syst Mgt Activity : Arlington, VA	1.370	0.000		2.630	Dec 2016	1.822	Dec 2017	-		1.822	1.843	7.665	-
Software Development-SIPRChat	WR	SPAWAR : San Diego	4.478	4.081	Dec 2015	3.902	Dec 2016	0.000		-		0.000	0.000	12.461	12.461
Software Development-TTNT	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.200	0.000		6.667	Dec 2016	1.583	Dec 2017	-		1.583	0.000	8.450	8.450
Software Development-F2F	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		7.191	May 2017	9.712	Dec 2017	-		9.712	17.200	34.103	34.103

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy			Date: May 2017
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development-NAVWAR	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		2.900	May 2017	0.931	Dec 2017	-		0.931	1.950	5.781	5.781
Software Development - SPARQ	SS/CPIF	Northrop Grumman Corporation (NGC) : Melbourne, FL	0.000	0.000		6.543	May 2017	8.774	Dec 2017	-		8.774	18.745	34.062	34.062
Software Development - ESM	SS/CPIF	Northrop Grumman Corporation : Melbourne, FL	0.000	0.000		2.582	May 2017	2.215	Dec 2017	-		2.215	26.583	31.380	31.380
Software Development - CMFR	SS/CPIF	Northrop Grumman Corporation : Melbourne, FL	0.000	0.000		9.280	May 2017	9.416	Dec 2017	-		9.416	24.654	43.350	43.350
Government Engineering Support	WR	Naval Air Warfare Center Aircraft Division (NAWCAD : Pax River, MD	96.754	13.902	Nov 2015	20.698	Nov 2016	18.619	Nov 2017	-		18.619	56.441	206.414	-
Government Engineering Support	WR	Naval Air Warfare Center Training Systems Division : Orlando, FL	11.546	0.722	Dec 2015	0.528	Nov 2016	0.472	Nov 2017	-		0.472	0.000	13.268	-
Government Engineering Support	Various	Various : Various	15.126	1.015	Nov 2015	0.581	Nov 2016	0.497	Nov 2017	-		0.497	0.749	17.968	-
Integrated Logistics Support	Various	Various : Various	9.667	0.179	Nov 2015	4.176	Nov 2016	4.089	Nov 2017	-		4.089	26.709	44.820	-
Contractor Engineering Support ETS	C/CPFF	Imagine One : Colonial Beach, VA	5.149	2.510	Jan 2016	0.000		0.000		-		0.000	0.000	7.659	7.659
Contractor Engineering Support ETS	C/CPFF	Precise : Lexington Park, MD	0.000	0.000		1.841	Jan 2017	1.257	Jan 2018	-		1.257	3.399	6.497	6.497
Technical Data	Various	Various : Various	1.544	0.000		0.310	Dec 2016	0.000		-		0.000	0.000	1.854	-
Prior Year Support costs no longer funded in FYDP	Various	Various : Various	100.725	0.000		0.000		0.000		-		0.000	0.000	100.725	-
		Subtotal	269.167	22.721		102.027		99.089		-		99.089	307.873	800.877	-

Remarks

Totals may not add due to rounding.

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy			Date: May 2017
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistic Support, Government Engineering Support, Contractor Engineering Support, and Technical Data - various contractors and award dates throughout the fiscal year. Software Dev SN & SPARQ - Increase in FY17 to FY18 to continue requirements development. Also, conduct a System Requirements Review (SRR) and Integrated Baseline Review (IBR), & start software development and complex integration of multiple weapon & communication (internal & external) systems.															

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental T&E	WR	NAWCAD : Pax River, MD	115.031	24.553	Nov 2015	49.254	Nov 2016	50.377	Nov 2017	-		50.377	666.965	906.180	-
Developmental T&E	Various	Various : Various	35.703	0.577	Jul 2016	0.100	Oct 2016	0.100	Oct 2017	-		0.100	0.800	37.280	-
Developmental T&E-ROR	SS/CPFF	Northrop Grumman Corporation (NGC) : Melbourne, FL	2.000	1.000	Dec 2016	4.840	May 2017	5.980	Nov 2017	-		5.980	29.272	43.092	43.092
Developmental T&E ETS	Various	Various : Various	12.402	0.152	Dec 2015	0.000		0.000		-		0.000	0.000	12.554	12.554
Developmental T&E ETS	C/CPFF	JF Taylor Inc : Lexington Park, MD	8.244	1.564	Feb 2016	1.361	Feb 2017	1.703	Feb 2018	-		1.703	17.944	30.816	30.816
Operational T&E	WR	NAWCAD : Pax River, MD	23.849	0.000		1.326	Nov 2016	2.801	Nov 2017	-		2.801	3.152	31.128	-
Operational T&E	Various	Various : Various	5.032	2.743	Apr 2016	1.595	Nov 2016	1.013	Nov 2017	-		1.013	91.726	102.109	-
Test Assets	Various	Various : Various	3.900	1.292	Apr 2016	1.409	Nov 2016	12.783	Nov 2017	-		12.783	9.682	29.066	-
Prior Year T&E costs no longer funded in FYDP	Various	Various : Various	61.440	0.000		0.000		0.000		-		0.000	0.000	61.440	-
		Subtotal	267.601	31.881		59.885		74.757		-		74.757	819.541	1,253.665	-

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.
The test asset increase from FY17 to FY18 is for the pre-production test articles needed to support SIL testing and I-file development for the ESM. There is 0 9-12 month lead time.

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy			Date: May 2017
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Various	Various : Various	2.621	0.270	Oct 2015	0.370	Oct 2016	0.350	Oct 2017	-		0.350	2.237	5.848	-
Program Mgmt Supt	Various	Various : Various	0.000	0.094	Dec 2015	0.000		0.000		-		0.000	0.000	0.094	-
Prior Year Mgmt costs no longer funded in FYDP	Various	Various : Various	66.614	0.000		0.000		0.000		-		0.000	0.000	66.614	-
		Subtotal	69.235	0.364		0.370		0.350		-		0.350	2.237	72.556	-

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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4,387.199	202.939		363.792		292.535		-		292.535	1,425.900	6,672.365	-

Remarks

Totals may not add due to rounding.

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
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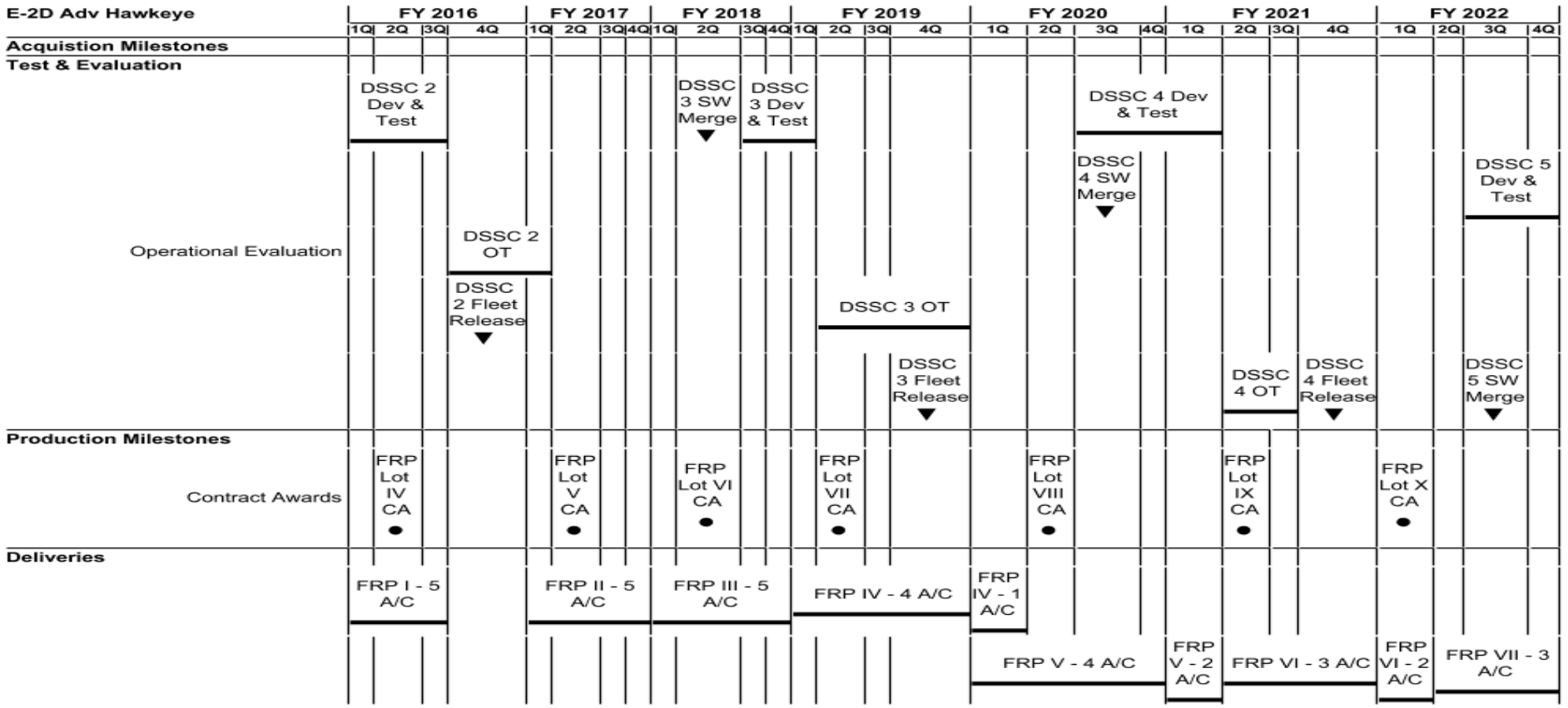

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
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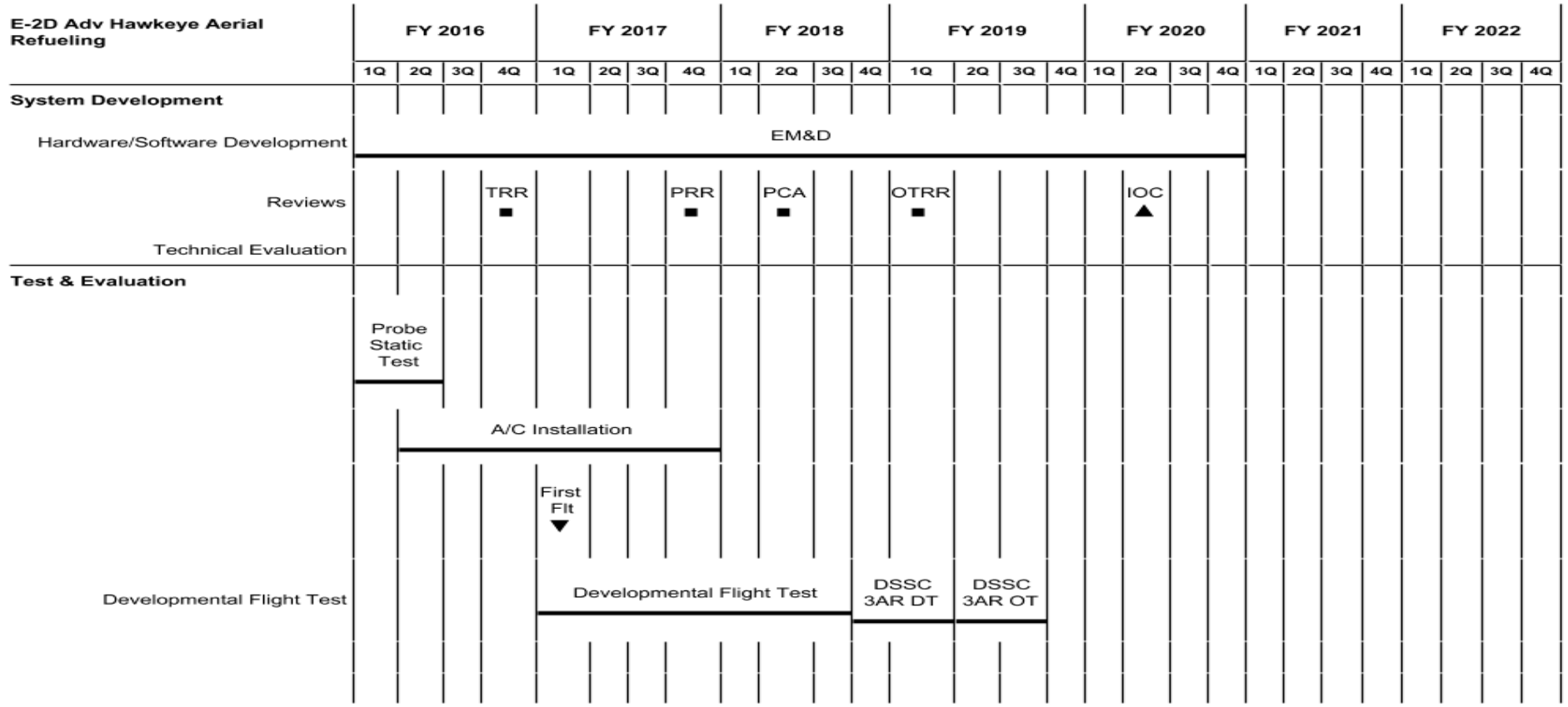

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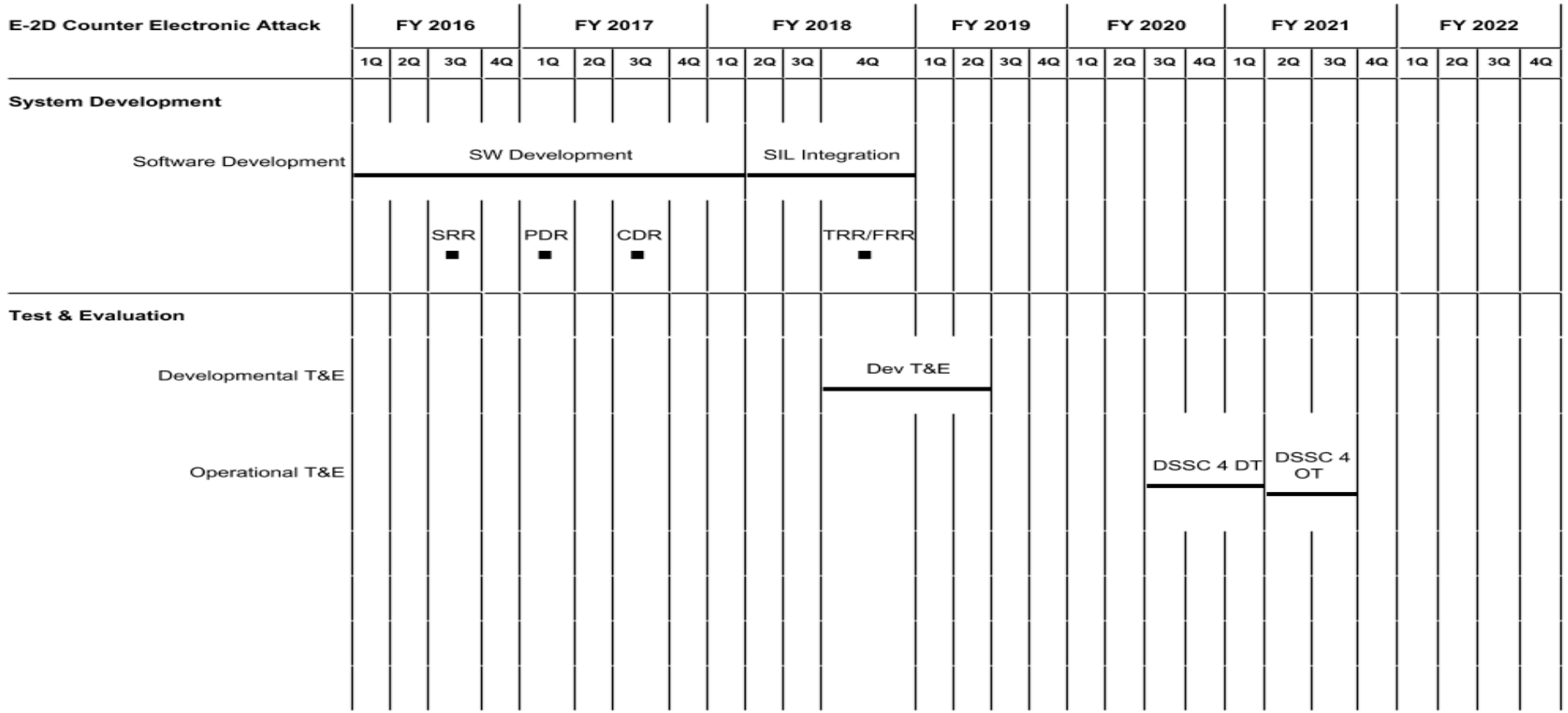
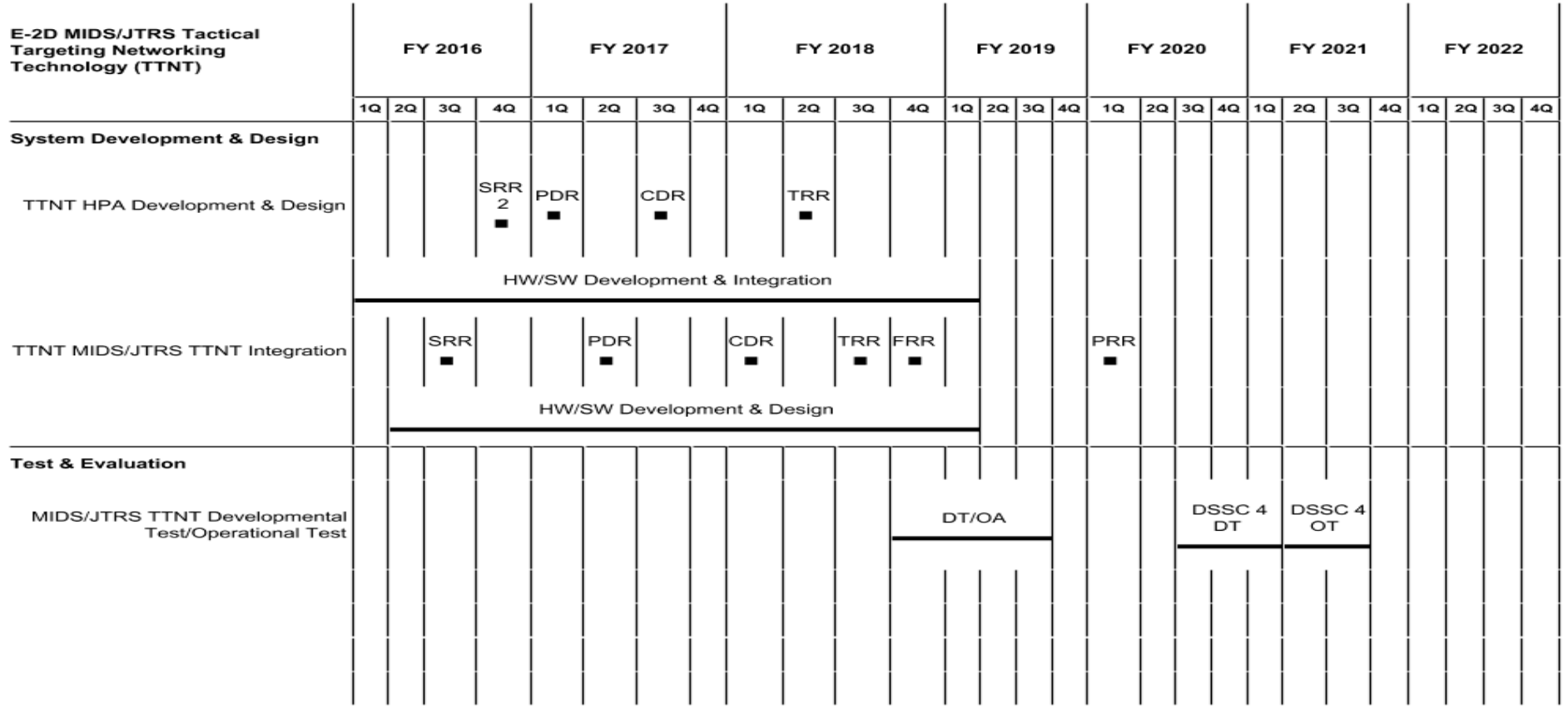
Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



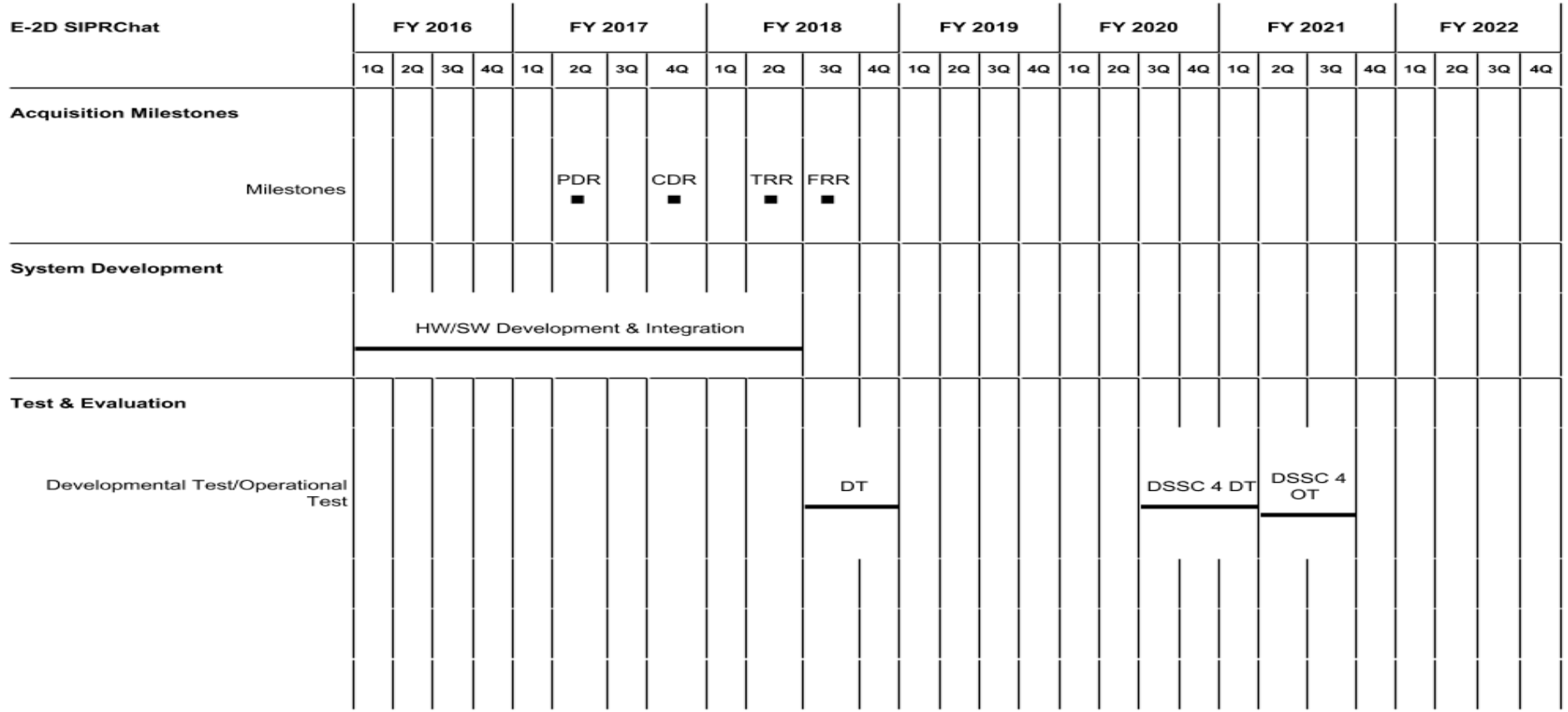
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



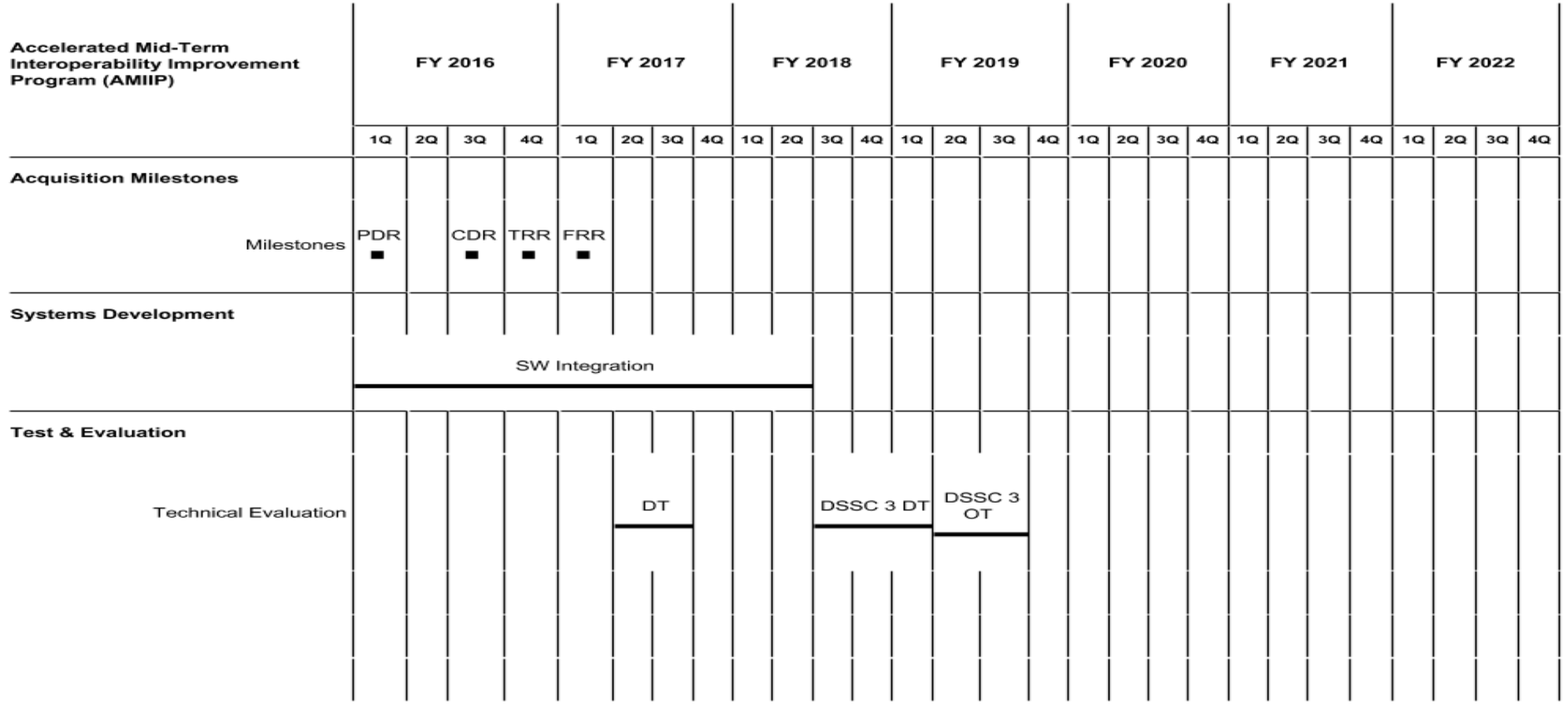
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



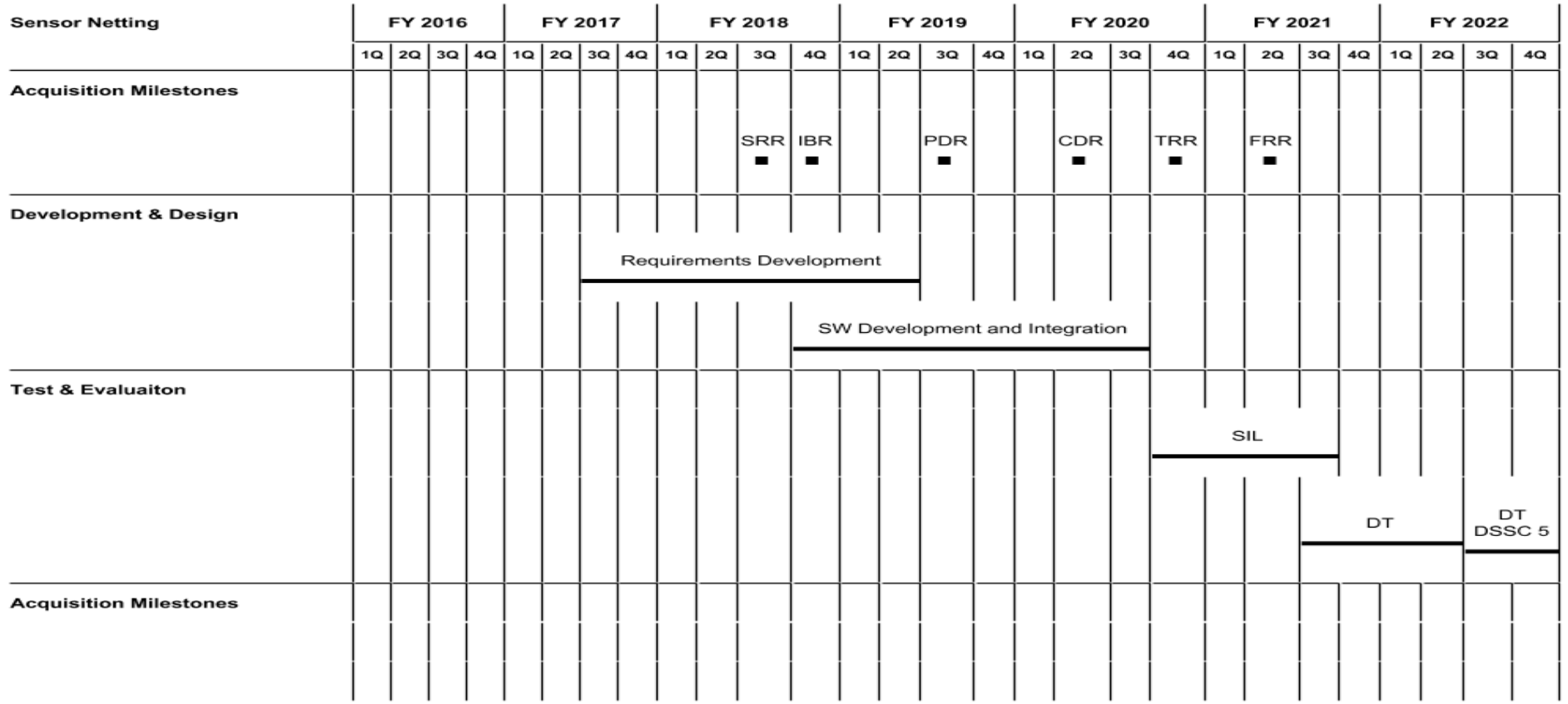
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



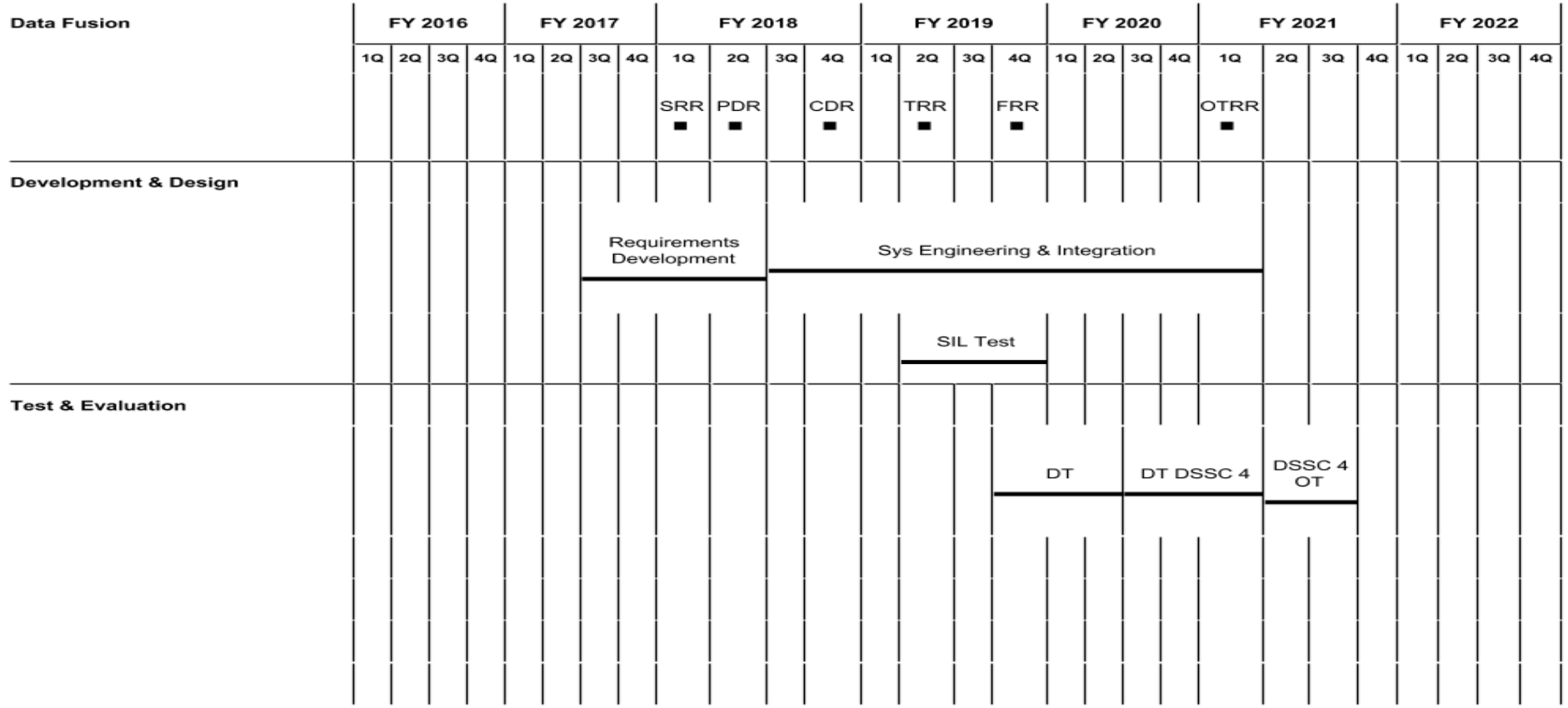
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



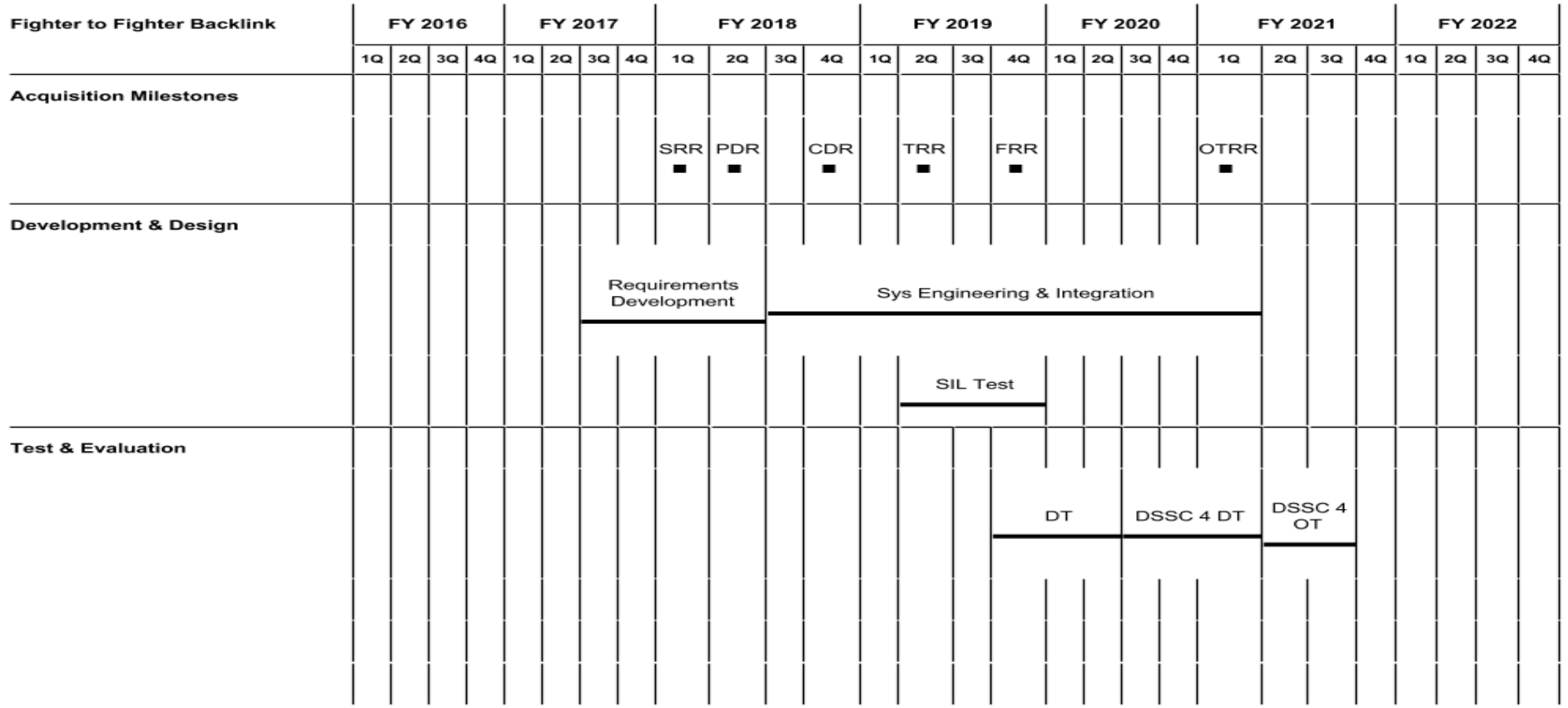
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



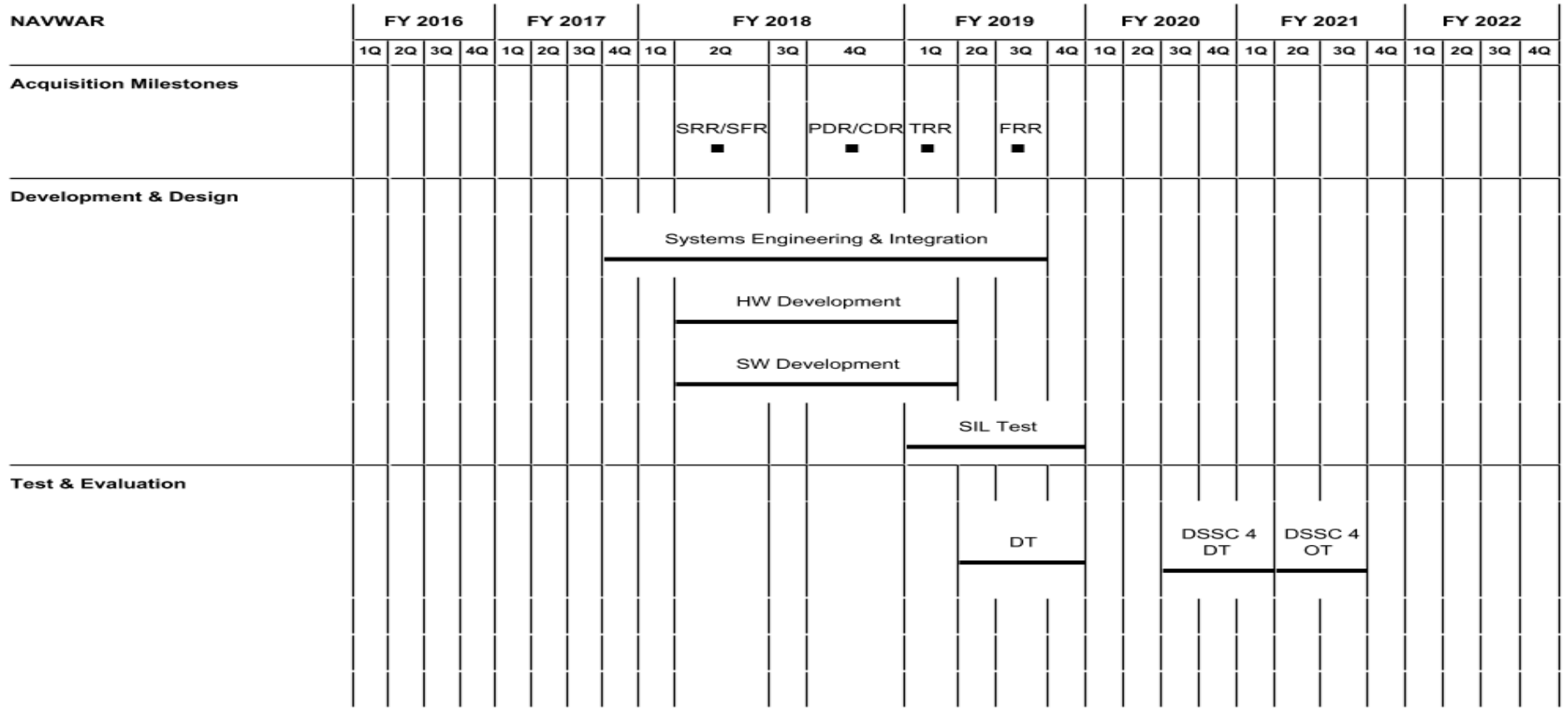
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



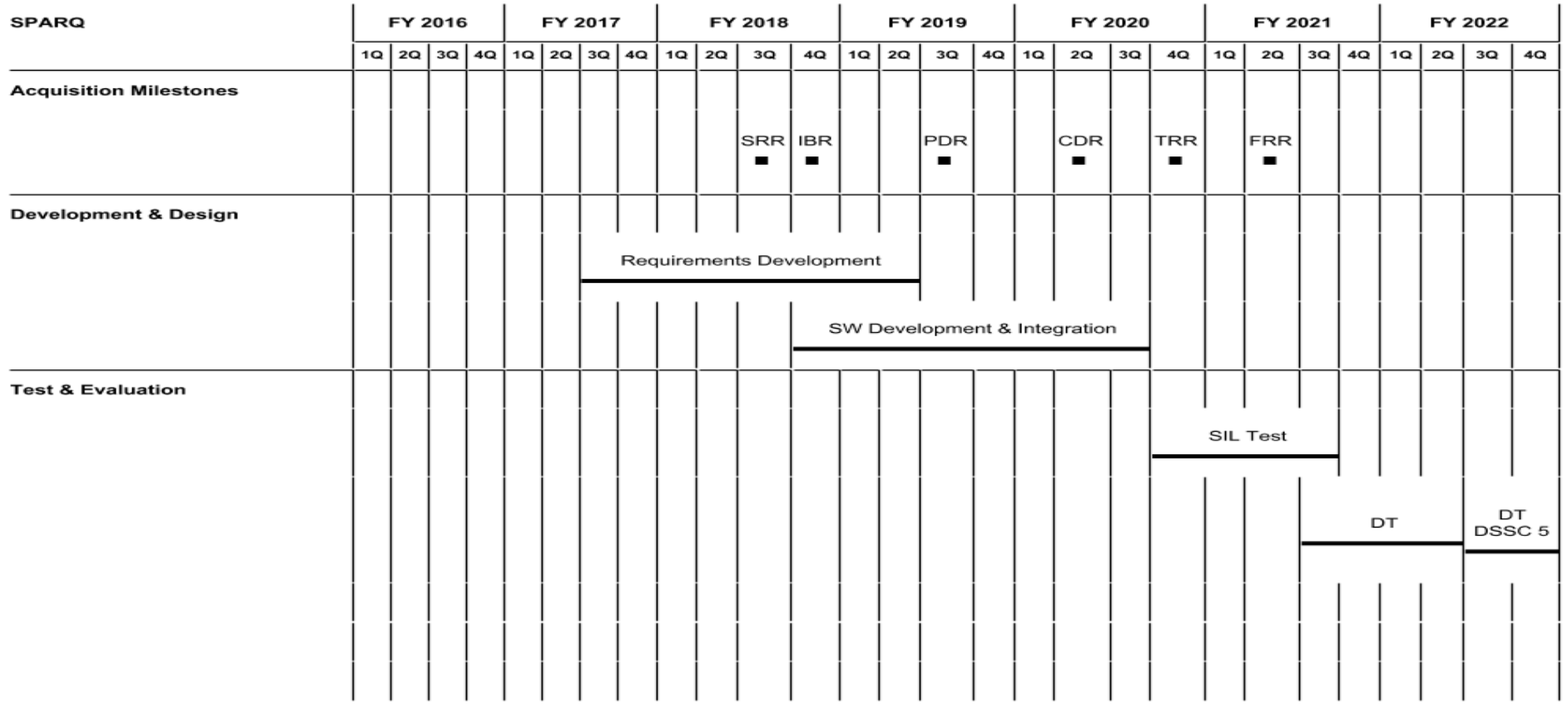
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



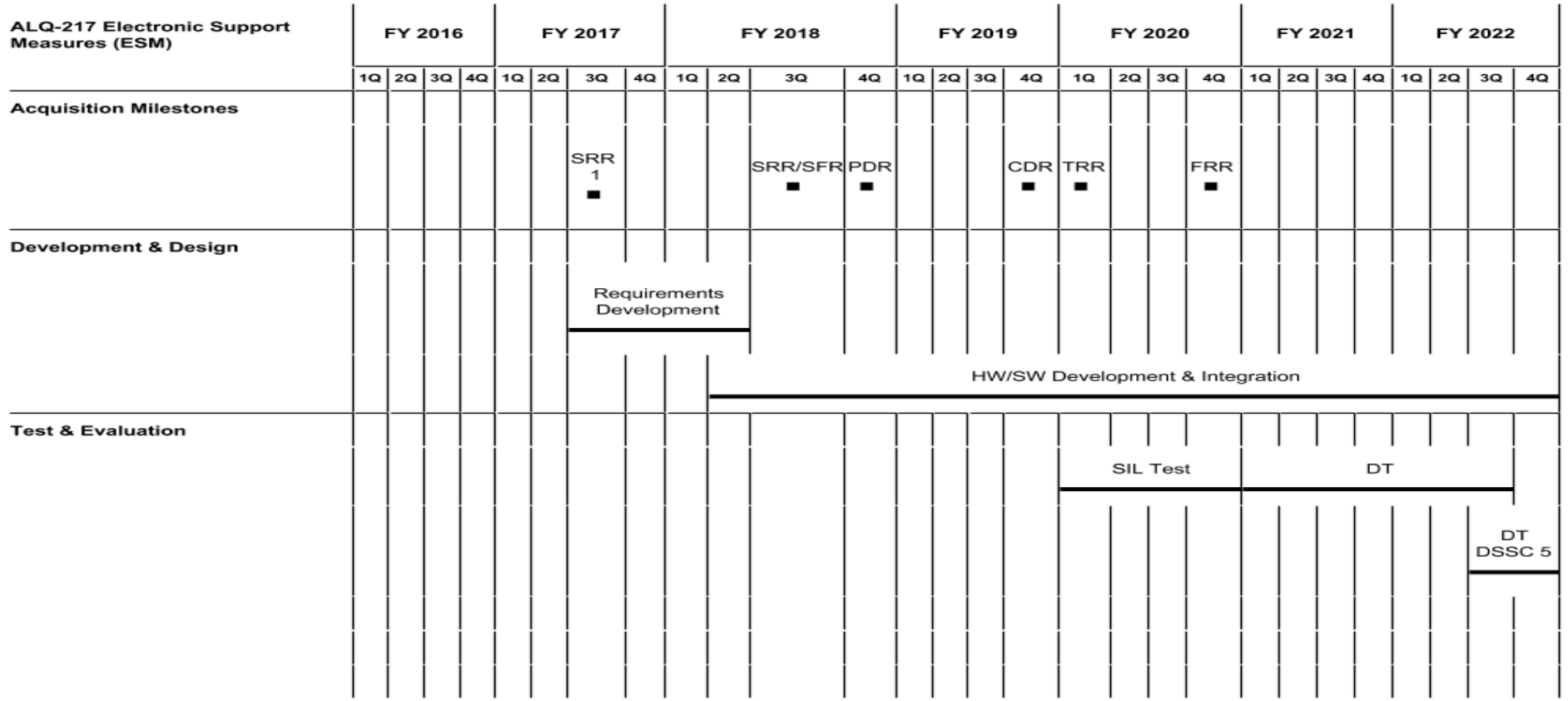
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



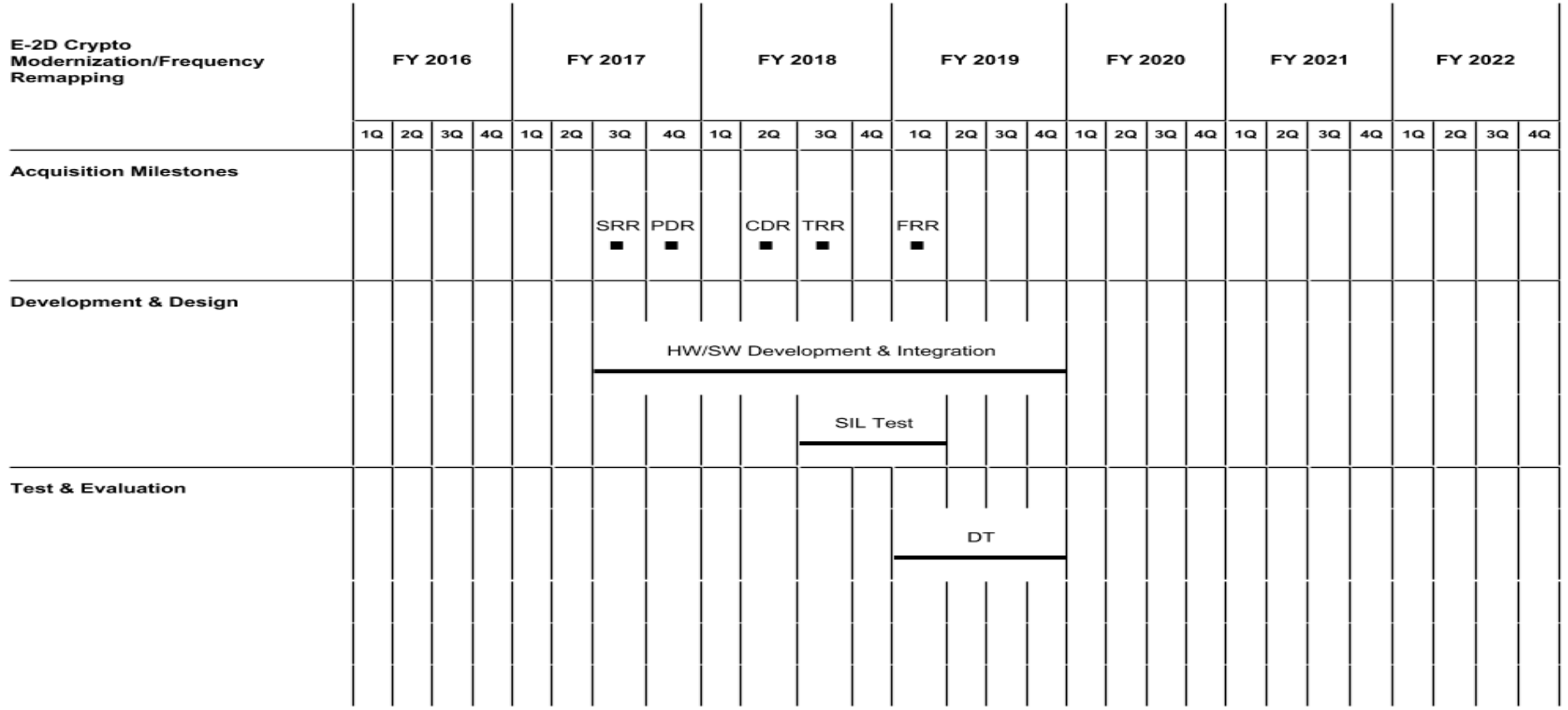
2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



2018PB - 0604234N - 3051

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*



2018PB - 0604234N - 3051

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
E-2D Adv Hawkeye				
Test & Evaluation: DSSC 2 Capability Dev & Testing	1	2016	3	2016
Test & Evaluation: DSSC 3 Capability Dev & Testing	3	2018	1	2019
Test & Evaluation: Software Merge - DSSC 3	2	2018	2	2018
Test & Evaluation: DSSC 4 Capability Dev & Testing	3	2020	1	2021
Test & Evaluation: Software Merge DSSC 4	3	2020	3	2020
Test & Evaluation: DSSC 5 Capability Dev & Testing	3	2022	4	2022
Test & Evaluation: Operational Evaluation: DSSC 2 Operational Test	4	2016	1	2017
Test & Evaluation: Operational Evaluation: DSSC 2 Fleet Release	4	2016	4	2016
Test & Evaluation: Operational Evaluation: DSSC 3 Operational Test	2	2019	4	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
Test & Evaluation: Operational Evaluation: Software Merge DSSC 5	3	2022	3	2022
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
Production Milestones: Contract Awards: Production Milestones - FRP Lot X CA	1	2022	1	2022
Deliveries: Production Deliveries - FRP I (5 A/C)	1	2016	3	2016
Deliveries: Production Deliveries - FRP II (5 A/C)	1	2017	4	2017

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Deliveries: Production Deliveries - FRP III (5 A/C)	1	2018	4	2018
Deliveries: Production Deliveries - FRP IV (4 A/C)	1	2019	4	2019
Deliveries: Production Deliveries - FRP IV (1 A/C)	1	2020	1	2020
Deliveries: Production Deliveries - FRP V (4 A/C)	1	2020	4	2020
Deliveries: Production Deliveries - FRP V (2 A/C)	1	2021	1	2021
Deliveries: Production Deliveries - FRP VI (3 A/C)	2	2021	4	2021
Deliveries: Production Deliveries - FRP VI (2 A/C)	1	2022	1	2022
Deliveries: Production Deliveries - FRP VII (3 A/C)	2	2022	4	2022
E-2D Adv Hawkeye Aerial Refueling				
System Development: Hardware/Software Development: Aerial Refueling - Engineering & Manufacturing Development	1	2016	4	2020
System Development: Reviews: Aerial Refueling - Test Readiness Review	4	2016	4	2016
System Development: Reviews: Aerial Refueling - Production Readiness Review	4	2017	4	2017
System Development: Reviews: Aerial Refueling - Physical Configuration Audit	2	2018	2	2018
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 - Probe Static Test	1	2016	2	2016
Test & Evaluation: Aerial Refueling - Aircraft Installation	2	2016	4	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	1	2019
Test & Evaluation: Developmental Flight Test: Opertational Flight Test	2	2019	3	2019
E-2D Counter Electronic Attack				
System Development: Software Development: Counter Electronic Attack - SW Development	1	2016	1	2018
System Development: Software Development: Counter Electronic Attack - SIL Integration	2	2018	4	2018

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**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 - Critcial 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	1	2021
Test & Evaluation: Operational T&E: Operational Test	2	2021	3	2021
E-2D MIDS/JTRS Tactical Targeting Networking Technology (TTNT)				
System Development & Design: TTNT HPA Development & Design: TTNT - System Requirements Review	4	2016	4	2016
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Preliminary Design Review	1	2017	1	2017
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Critical Design Review	3	2017	3	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	2016	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	2	2017	2	2017
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - Critical Design Review	1	2018	1	2018

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT -Test Readiness Review	3	2018	3	2018
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - Functional Readiness Review	4	2018	4	2018
System Development & Design: TTNT MIDS/JTRS TTNT Integration: TTNT - Production Readiness Review	1	2020	1	2020
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	4	2018	3	2019
Test & Evaluation: MIDS/JTRS TTNT Developmental Test/Operational Test: MIDS/ JTRS/TTNT - Developmental Test DSSC 4	3	2020	1	2021
Test & Evaluation: MIDS/JTRS TTNT Developmental Test/Operational Test: MIDS/ JTRS/TTNT Operational Test DSSC 4	2	2021	3	2021
E-2D SIPRChat				
Acquisition Milestones: Milestones: SIPRChat - Preliminary Design Review	2	2017	2	2017
Acquisition Milestones: Milestones: SIPRChat - Critical Design Review	4	2017	4	2017
Acquisition Milestones: Milestones: SIPRChat -Test Readiness Review	2	2018	2	2018
Acquisition Milestones: Milestones: SIPRChat - Functional Readiness Review	3	2018	3	2018
System Development: Hardware & Software Integration	1	2016	2	2018
Test & Evaluation: Developmental Test/Operational Test: Developmental Test	3	2018	4	2018
Test & Evaluation: Developmental Test/Operational Test: Developmental Test DSSC 4	3	2020	1	2021
Test & Evaluation: Developmental Test/Operational Test: Operational Test	2	2021	3	2021
Accelerated Mid-Term Interoperability Improvement Program (AMIIP)				
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
Acquisition Milestones: Milestones: Fleet Readiness Review	1	2017	1	2017

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Systems Development: Software Integration	1	2016	2	2018
Test & Evaluation: Technical Evaluation: Developmental Test	2	2017	3	2017
Test & Evaluation: Technical Evaluation: Developmental Test DSSC 3	3	2018	1	2019
Test & Evaluation: Technical Evaluation: Operational Test DSSC 3	2	2019	3	2019
Sensor Netting				
Acquisition Milestones: System Requirements Review	3	2018	3	2018
Acquisition Milestones: Integrated Baseline Review	4	2018	4	2018
Acquisition Milestones: Preliminary Design Review	3	2019	3	2019
Acquisition Milestones: Critical Design Review	2	2020	2	2020
Acquisition Milestones: Test Readiness Review	4	2020	4	2020
Acquisition Milestones: Functional Readiness Review	2	2021	2	2021
Development & Design: Requirement Development	3	2017	2	2019
Development & Design: Software Development and Integration	4	2018	3	2020
Test & Evaluaiton: SIL Test	4	2020	3	2021
Test & Evaluaiton: Development Test	3	2021	2	2022
Test & Evaluaiton: Development Test DSSC 5	3	2022	4	2022
Data Fusion				
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	3	2017	2	2018
Development & Design: Systems Engineering & Integration	3	2018	1	2021
Development & Design: SIL Test	2	2019	4	2019

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Test & Evaluation: Developmental Test	4	2019	2	2020
Test & Evaluation: Developmental Test DSSC 4	3	2020	1	2021
Test & Evaluation: Operational Test DSSC 4	2	2021	3	2021
Fighter to Fighter Backlink				
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	3	2017	2	2018
Development & Design: Systems Engineering & Integration	3	2018	1	2021
Development & Design: SIL Test	2	2019	4	2019
Test & Evaluation: Developmental Test	4	2019	2	2020
Test & Evaluation: Developmental Test DSSC 4	3	2020	1	2021
Test & Evaluation: Operational Test DSSC 4	2	2021	3	2021
NAVWAR				
Acquisition Milestones: System Rquirements Review/System Functional Review	2	2018	2	2018
Acquisition Milestones: Preliminary Design Review/Critical Design Review	4	2018	4	2018
Acquisition Milestones: Test Readiness Reivew	1	2019	1	2019
Acquisition Milestones: Functional Readiness Review	3	2019	3	2019
Development & Design: Systems Engineering & Integration	4	2017	3	2019
Development & Design: Hardware Development	2	2018	1	2019
Development & Design: Software Development	2	2018	1	2019
Development & Design: System Integration Lab Test	1	2019	4	2019
Test & Evaluation: Developmental Test	2	2019	4	2019

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Test & Evaluation: Developmental Test DSSC 4	3	2020	1	2021
Test & Evaluation: Operational Testing DSSC 4	2	2021	3	2021
SPARQ				
Acquisition Milestones: System Requirements Review	3	2018	3	2018
Acquisition Milestones: Integrated Baseline Review	4	2018	4	2018
Acquisition Milestones: Preliminary Design Review	3	2019	3	2019
Acquisition Milestones: Critical Design Review	2	2020	2	2020
Acquisition Milestones: Test Readiness Review	4	2020	4	2020
Acquisition Milestones: Functional Readiness Review	2	2021	2	2021
Development & Design: Requirement Development	3	2017	2	2019
Development & Design: Software Development and Integration	4	2018	3	2020
Test & Evaluation: SIL Test	4	2020	3	2021
Test & Evaluation: Developmental Test	3	2021	2	2022
Test & Evaluation: Developmental Test DSSC 5	3	2022	4	2022
ALQ-217 Electronic Support Measures (ESM)				
Acquisition Milestones: System Requirements Review 1	3	2017	3	2017
Acquisition Milestones: System Requirements Review 2/System Functional Review	3	2018	3	2018
Acquisition Milestones: Preliminary Design Review	4	2018	4	2018
Acquisition Milestones: Critical Design Review	4	2019	4	2019
Acquisition Milestones: Test Readiness Review	1	2020	1	2020
Acquisition Milestones: Functional Readiness Review	4	2020	4	2020
Development & Design: Requirements Development	3	2017	2	2018
Development & Design: HW/SW Development & Integration	2	2018	4	2022
Test & Evaluation: SIL Test	1	2020	4	2020
Test & Evaluation: Developmental Test	1	2021	3	2022
Test & Evaluation: Developmental Test DSSC 5	3	2022	4	2022

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604234N / *Advanced Hawkeye*	**Project (Number/Name)** 3051 / *E-2D Adv Hawkeye*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
E-2D Crypto Modernization/Frequency Remapping				
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
Development & Design: Hdw/SW Development & Integration	3	2017	4	2019
Development & Design: SIL Test	3	2018	1	2019
Test & Evaluation: Developmental Test	1	2019	4	2019

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604234N / *Advanced Hawkeye*	Project (Number/Name) 9999 / *Congressional Adds*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
9999: *Congressional Adds*	0.000	8.207	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.207
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017
Congressional Add: Adv Radar Innovation Fund - Air (Cong)	8.207	0.000
FY 2016 Accomplishments: N/A		
FY 2017 Plans: N/A		
Congressional Adds Subtotals	8.207	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Not required for Congressional Add.

E. Performance Metrics

Not required for Congressional Add.