Exhibit R-2, **RDT&E Budget Item Justification:** PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604234N: Advanced Hawkeye

BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
Total Program Element	3,891.368	129.414	119.065	152.041	-	152.041	190.742	201.692	220.186	149.144	127.455	5,181.107	
3051: E-2D Adv Hawkeye	3,891.368	109.414	119.065	152.041	-	152.041	190.742	201.692	220.186	149.144	127.455	5,161.107	
9999: Congressional Adds	0.000	20.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	20.000	

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 modernize 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 will provide 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/S 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/S replaces the National Security Administration de-certified Mode 4 IFF capability, which is no longer effective or suitable for modern military operations. Mode 5/S will support the Joint Initial Operational Capability (IOC) as defined by the Joint Requirements Oversight Council.

An In-Flight Refueling 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). IFR 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.

Link-16 Crypto Modernization and frequency remap are required to satisfy the National Security Agency and Federal Aviation Administration mandates. E-2D AHE uses Link-16 to exchange and provide tactical information with other tactical units. The Link-16 Crypto Modernization and frequency remap effort requires the integration of a modified Multifunctional Information Distribution System - Low Volume Terminal (1) terminal and software modification to the E-2D AHE mission computer operational flight program.

The Ultra High Frequency (UHF) Guard Radio allows the aircrew to monitor the emergency UHF Guard frequency without having to dedicate a specific radio, freeing that radio up for use in the tactical mission. Because of the UHF Tunable Filter Amplifiers, the ARC-210 radios cannot provide continuous UHF guard monitoring,

PE 0604234N: Advanced Hawkeye

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[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
1319: Research, Development, Test & Evaluation, Navy	PE 0604234N: Advanced Hawkeye	
BA 5: System Development & Demonstration (SDD)		

although the internal guard receiver is operational. A separate UHF guard receiver is provided for monitoring the UHF guard (243 MHz) frequency. It is powered by the Guard switch located on the Communication/Control Display Unit Power Panel.

FY2013 starts a Counter Electronic Attack (CEA) capability which will allow the E-2D radar system to maintain performance in an advanced hostile intentional electromagnetic interference environment. 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.

FY2014 starts an E-2D Secret Internet Protocol Router (SIPR)Chat program. The SIPRChat 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.

FY2014 starts an effort to integrate the Tactical Targeting Networking Technology (TTNT) 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 Multifunctional Information Distribution System - Joint Tactical Radio System(MIDS-JTRS) that has incorporated the TTNT. MIDS JTRS with TTNT is a key enabler for E-2D sensor netting capability in support of the NIFC-CA mission.

FY2014 starts a Link-16/Cooperative Engagement Capability (CEC) Interoperability Program. Funding is to 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.

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.

PE 0604234N: Advanced Hawkeye

Navy

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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy DATE: April 2013 APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE 1319: Research, Development, Test & Evaluation, Navy PE 0604234N: Advanced Hawkeye BA 5: System Development & Demonstration (SDD) FY 2012 FY 2013 FY 2014 Base FY 2014 OCO FY 2014 Total **B. Program Change Summary (\$ in Millions)** Previous President's Budget 130.994 119.065 124.988 124.988 Current President's Budget 129.414 119.065 152.041 152.041 **Total Adjustments** -1.5800.000 27.053 27.053 Congressional General Reductions Congressional Directed Reductions Congressional Rescissions Congressional Adds Congressional Directed Transfers Reprogrammings 0.892 0.000 SBIR/STTR Transfer 0.000 -2.472 Program Adjustments 0.000 0.000 10.199 10.199 Rate/Misc Adjustments 0.000 0.000 16.854 16.854 Congressional Add Details (\$ in Millions, and Includes General Reductions) FY 2013 FY 2012 Project: 9999: Congressional Adds Congressional Add: Adv Radar Innovation Fund - Air (Cong) 20.000 Congressional Add Subtotals for Project: 9999 20.000 0.000

Change Summary Explanation

Technical: The E-2D portion of Link-16/CEC Interoperability funding was moved, in FY14 and out, from RDTEN PE 0204152N, project 0463 E-2C Improvements, and properly aligned into this PE.

Schedule: Updated E-2D Advanced Hawkeye Aircraft Delivery Schedule, updated E-2D Counter Electronic Attack Schedule due to a funding rephase, updated In-Flight Refueling Schedule to update technical reviews and Flying Quality/Envelope Expansion Test. Added Secret Internet Protocol Router (SIPR) Chat, Tactical Targeting Networking Technology (TTNT). Added Link-16/Cooperative Engagement Capability (CEC) Interoperability schedule; and added a performance evaluation test in FY17. Schedule updated to reflect change in Full Rate Production (FRP) Decision date, added Verification of Correction of Deficiencies Testing as well as Integrated Tests D2 and D3, IFR schedule updated to extend SIL Testing, update the Flying Qualities Evaluation Test into two phases, add the Probe Static Test and update the first flight, Link-16 Crypto Modernization schedule updated to reflect incorporation of effort into Tactical Targeting Networking Technology (TTNT), Counter Electronic Attack (CEA) updated to reflect shift in the start of software development due to this effort being funded as a New Start and budgets are currently under a Continuing Resolution (CR).

PE 0604234N: Advanced Hawkeye

Navy

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Congressional Add Totals for all Projects

20.000

0.000

DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

R-1 ITEM NOMENCLATURE APPROPRIATION/BUDGET ACTIVITY **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604234N: Advanced Hawkeye 3051: E-2D Adv Hawkeye BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3051: E-2D Adv Hawkeye	3,891.368	109.414	119.065	152.041	-	152.041	190.742	201.692	220.186	149.144	127.455	5,161.107
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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 modernize the E-2 weapon system to maintain open ocean mission capability while providing the United States Navy with an effective littoral surveillance, battle management, and Naval Integrated Fire Control - Counter Air (NIFC-CA) 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 will provide 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/S 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/S replaces the National Security Administration de-certified Mode 4 IFF capability, which is no longer effective or suitable for modern military operations. Mode 5/S will support the Joint Initial Operational Capability (IOC) as defined by the Joint Requirements Oversight Council.

An In-Flight Refueling 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). IFR 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.

Link-16 Crypto Modernization and frequency remap are required to satisfy the National Security Agency and Federal Aviation Administration mandates. E-2D AHE uses Link-16 to exchange and provide tactical information with other tactical units. The Link-16 Crypto Modernization and frequency remap effort requires the integration of a modified Multifunctional Information Distribution System - Low Volume Terminal (1) terminal and software modification to the E-2D AHE mission computer operational flight program.

The Ultra High Frequency (UHF) Guard Radio allows the aircrew to monitor the emergency UHF Guard frequency without having to dedicate a specific radio, freeing that radio up for use in the tactical mission. Because of the UHF Tunable Filter Amplifiers, the ARC-210 radios cannot provide continuous UHF guard monitoring, although the internal guard receiver is operational. A separate UHF guard receiver is provided for monitoring the UHF guard (243 MHz) frequency. It is powered by the Guard switch located on the Communication/Control Display Unit Power Panel.

PE 0604234N: Advanced Hawkeye

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT]
1319: Research, Development, Test & Evaluation, Navy	PE 0604234N: Advanced Hawkeye	3051: <i>E-2E</i>	O Adv Hawkeye	
BA 5: System Development & Demonstration (SDD)				

FY2013 starts a Counter Electronic Attack (CEA) capability which will allow the E-2D radar system to maintain performance in an advanced hostile intentional electromagnetic interference environment. 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.

FY2014 starts an E-2D Secret Internet Protocol Router (SIPR)Chat program. The SIPRChat 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.

FY2014 starts an effort to integrate the Tactical Targeting Networking Technology (TTNT) 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 Multifunctional Information Distribution System - Joint Tactical Radio System (MIDS-JTRS) that has incorporated the TTNT. MIDS JTRS with TTNT is a key enabler for E-2D sensor netting capability in support of the NIFC-CA mission.

FY2014 starts an Advanced Mid-Term Interoperability Improvement Program (AMIIP) to 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 engagments and mididentification of tracks. Provides stable sensor fusion foundation to support sensor/weapon coordination requirements.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: System Development and Demonstration	9.477	1.000	14.736
Articles:	0	0	0
Description: System Development and Demonstration (SDD) contract with Northrop Grumman Corporation for SDD and Pilot			
Production efforts for the E-2D Advanced Hawkeye (AHE) Program.			
FY 2012 Accomplishments:			
Conduct OPEVAL.			
FY 2013 Plans:			
Funds provided to correct flight test deficiencies discovered during Initial Operational Test & Evaluation.			
FY 2014 Plans:			
Funds provided for Upper Transponder and Full Scale Fatigue Tests.			
Title: Naval Air Warfare Center Aircraft Division Engineering and Test Support	44.002	28.708	12.089
Articles:	0	0	0
Description: Fund Government Engineering, Contractor Engineering, and Classified Engineering Support. Perform Government oversight. Execute test program risk reduction efforts.			

PE 0604234N: Advanced Hawkeye

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	JECT : E-2D Adv Hawkeye				
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Funding provided for Operational Evaluation (OPEVAL), Naval Intelligence (IFR) and Follow-On Test & Evaluation (FOT&E) efforts.	egrated Fire Control - Counter Air (NIFC-CA), In-Flight	Refueling			
FY 2013 Plans: Funding provides continued support for Follow-On Test & Evaluati Integrated Fire Control - Counter Air (NIFC-CA) efforts. Funding le					
FY 2014 Plans: Funds provided for continued support of Follow-On Test & Evaluate Cooperative Engagement Capability Interoperability. Funding level Integrated Fire Control - Counter Air (NIFC-CA) efforts.	•				
Title: NC-130H/E-2D Classified Programs		Autiology	14.103	5.700	5.762
Description: Provides support for the E-2D Advanced Hawkeye (A	AHE) Classified Development efforts.	Articles:	O	U	·
FY 2012 Accomplishments: Funding is for the continuation of E-2D AHE Classified Development	ent efforts.				
FY 2013 Plans: Funding is for the continuation of E-2D AHE Classified Development	ent efforts.				
FY 2014 Plans: Funding is for the continuation of E-2D AHE Classified Development	ent efforts.				
Title: Trainers		Articles:	16.163 0	4.122 0	0.000
Description: Funds the design, development and delivery of the t	rainers in support of the E-2D AHE program.				
FY 2012 Accomplishments: Funding is for the development of the Weapon System Trainer and the Operational Flight Trainer.	d the Simulated Maintenance Trainer, also funds the d	elivery of			
the operational right trainer.			1		

PE 0604234N: Advanced Hawkeye Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013				
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)		PROJECT 3051: E-2D Adv Hawkeye						
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	uantities in Each)		17.047 34.637 0 0		FY 2014			
Funding is for Cooperative Engagement Capability Training Device Operations Tactical Training efforts.	Capability to train Theater Air Missile Defense and D	ual E-2D						
Title: Mode 5/S		Articles:			6.803 (
Description: Mode 5/S is the replacement/upgrade to the existing lo	dentification Friend or Foe system.							
FY 2012 Accomplishments: Funding is for system development, integration and testing to suppo AHE IFF Interrogator mission equipment. Integration testing will inc		the E-2D						
FY 2013 Plans: Funding is for continued system development, integration and test to the E-2D AHE IFF Interrogator mission equipment. Integration testil levels increase due to software development and flight test efforts.								
FY 2014 Plans: Funding is for continued system development, integration and testin into the E-2D AHE IFF Interrogator mission equipment. Integration is levels decrease due to reduced efforts for system development, soft	testing will include laboratory, ground and flight tests.							
Title: In-Flight Refueling		Articles:	6.696 0	33.100 0	68.900			
Description: Funds the system development and testing to support E-2D AHE aircraft. Emphasis during system development is on syst and design, including interior/lighting modifications and seat replace thermal and aerodynamic loads, kinematic performance, and handling	tem redesign, air vehicle design, human systems inte ement. Flight testing is required to evaluate field of vio	the gration		Š	·			
FY 2012 Accomplishments: Funding is for the system development and risk reduction efforts.								
FY 2013 Plans: Funding is provided for the start of Engineering & Manufacturing De system development efforts.	velopment (E&MD) of In-Flight Refueling and continu	ed						
FY 2014 Plans:								

PE 0604234N: Advanced Hawkeye

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604234N: Advanced Hawkeye	PROJ I 3051: <i>i</i>	ECT E-2D Adv Ha	wkeye	
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	antities in Each)		FY 2012	FY 2013	FY 2014
Funding provided for continued Engineering & Manufacturing Develop Laboratory (SIL) testing.	oment (E&MD) of In-Flight Refueling and System Int	egration			
Title: Guard Radio		Articles:	1.926 0	3.598 0	3.005 0
Description: The Ultra High Frequency (UHF) Guard Radio allows the without having to dedicate a specific radio, freeing that radio up for us Amplifiers, the ARC-210 radios can not provide continuous UHF guard operational. A separate UHF guard receiver is provided for monitoring Guard switch located on the Communication/Control Display Unit Power	e in the tactical mission. Due to the UHF Tunable F d monitoring, although the internal guard receiver is the UHF guard (243 MHz) frequency. It is powered	ilter			
FY 2012 Accomplishments: Funding is for engineering efforts and system integration.					
FY 2013 Plans: Funds provided for continued engineering and systems integration su	ppport.				
FY 2014 Plans: Funds provided for continued engineering, systems integration support	rt and test.				
Title: E-2D Counter Electronic Attack			0.000	7.400	0.000
Description: Funds the mission system development and testing of the Measurement (DRFM) radar threats. The E&MD effort will focus on including systems, system integration, and laboratory and flight test validation.	tegration of capability in the radar and mission com	Articles:		0	
FY 2013 Plans: Funds provided for initiation of E&MD for E-2D Counter Electronic Atta	ack capability.				
Title: Tactical Targeting Networking Technology		Articles:	0.000	0.000	19.220 0
Description: Tactical Targeting Networking Technology (TTNT) provi This effort includes replacing the MIDS LVT radio with MIDS-JTRS that key enabler for E-2D sensor netting capability in support of the Naval	at has incorporated the TTNT. MIDS JTRS with TTN				

PE 0604234N: Advanced Hawkeye

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R-1 Line #89

FY 2014 Plans:

DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 1319: Research, Development, Test & Evaluation, Navy 3051: E-2D Adv Hawkeye PE 0604234N: Advanced Hawkeye BA 5: System Development & Demonstration (SDD) B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2012 **FY 2013** FY 2014 Funding is provided for Development, Design and Support costs. *Title:* Link-16/Crypto Modernization 0.000 0.800 0.000 Articles: Description: This effort was previously included under Naval Air Warfare Center Aircraft Division Engineering and Test Support. FY 2013 Plans: Funds provided for Systems Hardware Development. Title: SIPRChat 0.000 0.000 4.845 Articles: FY 2014 Plans: Funds provided for System Development & Design, Software and Router Integration. Title: Naval Integrated Fire Control Counter Air Inc 1 Testing 0.000 0.000 10.000 Articles: FY 2014 Plans: Funds provided for software development support and developmental flight tests. Title: Link-16/Cooperative Engagement Capability (CEC) Interoperability Program 0.000 0.000 6.681 Articles: FY 2014 Plans: Funds provided for systems engineering and systems development support. **Accomplishments/Planned Programs Subtotals** 109.414 119.065 152.041 C. Other Program Funding Summary (\$ in Millions) FY 2014 Cost To FY 2014 FY 2014 FY 2018 Complete Total Cost Line Item FY 2012 FY 2013 **Base** OCO Total FY 2015 FY 2016 FY 2017 APN/0195 : E-2D AHE 1.044.813 984.677 1,263.649 1,263,649 1,242,758 1,323,427 1,393,566 1,262,206 4,067,297 18,631,376 • APN/0605: Initial Spares - E-2 11.403 15.069 17.511 26.534 30.012 55.383 16.612 16.612 24.135 484.508 APN/0544: E-2 Series 0.000 0.000 8.953 8.953 13.798 18.886 22.546 76.561 304.832 445.576 Remarks

PE 0604234N: Advanced Hawkeye

Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604234N: Advanced Hawkeye	3051: E-2D Adv Hawkeye
BA 5: System Development & Demonstration (SDD)		

D. Acquisition Strategy

Acquisition Strategy was signed by Milestone Decision Authority, Under Secretary of Defense for Acquisition, Technology and Logistics on 29 Dec 2008. Milestone C

approval to proceed into Production and Deployment was given 11 June 2009 by the Defense Acquisition Board (DAB). Certification for entrance into Initial Operational Test & Evaluation was received on 14 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 31 January 2013.
E. Performance Metrics
Successfully held a Defense Acquisition Board for Full Rate Production on 31 January 2013 for 55 aircraft.

PE 0604234N: Advanced Hawkeye

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604234N: Advanced Hawkeye

PROJECT

3051: E-2D Adv Hawkeye

DATE: April 2013

Product Developmer	nt (\$ in Mi	llions)		FY 2	2012	FY 2	2013		2014 ise	FY 2 OC		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	SS/CPAF	Northrop Grumman Corporation (NGC):Bethpage, NY	2,873.687	18.815	Feb 2012	13.834	Feb 2013	0.000		-		0.000	0.000	2,906.336	2,906.336
Primary Hardware Development - Follow On	TBD	TBD:TBD	0.000	0.000		0.000		28.204	Feb 2014	-		28.204	161.712	189.916	
Primary Hardware - In- Flight Refueling	SS/CPAF	NGC:Bethpage, NY	0.000	5.102	May 2012	24.459	May 2013	56.320	May 2014	-		56.320	178.649	264.530	264.530
Training Development	C/CPIF	Rockwell Collins:Cedar Rapids, IA	105.067	15.204	May 2012	4.122	May 2013	0.000		-		0.000	0.000	124.393	124.393
Training Development	C/CPIF	Lockheed Martin:Liverpool, NY	6.734	0.238	May 2012	0.000		0.000		-		0.000	0.000	6.972	6.972
Systems Engineering	PO	Navy Syst Mgt Activity:Arlington, VA	162.273	14.103	Mar 2012	0.500	Mar 2013	0.000		-		0.000	0.000	176.876	
GFE	Various	Various:Various	31.509	0.000		0.000		3.690	May 2014	-		3.690	1.458	36.657	
Award Fees	SS/CPAF	NGC:Bethpage, NY	142.874	5.017	Oct 2012	3.012	Oct 2013	0.000		-		0.000	0.000	150.903	150.903
Training Development	TBD	TBD:TBD	0.000	0.000		0.000		0.000		-		0.000	1.226	1.226	
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various:Various	168.042	0.000		0.000		0.000		-		0.000	0.000	168.042	
	_	Subtotal	3,490.186	58.479		45.927		88.214		0.000		88.214	343.045	4,025.851	

Remarks

Totals may not add due to rounding.

Award Fee:

Period 1 FY04 - 90%
Period 2 FY04 - 91%
Period 3 FY05 - 80%
Period 4 FY06 - 94%
Period 5 FY06 - 100%
Period 6 FY07 - 95%
Period 1 FY11 - 95%
Period 12 FY12 - 95%

PE 0604234N: Advanced Hawkeye Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

PE 0604234N: Advanced Hawkeye

3051: E-2D Adv Hawkeye

DATE: April 2013

Support (\$ in Millions	s)		FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Development Support	Various	Various:Various	9.400	0.000		0.000		0.250	Nov 2013	-		0.250	3.127	12.777	
Software Development	SS/CPIF	NGC:Bethpage, NY	24.223	2.050	Apr 2012	15.726	Apr 2013	14.222	Apr 2014	-		14.222	61.824	118.045	118.045
Integrated Logistics Support	Various	Various:Various	7.825	0.000		0.250	Nov 2012	1.263	Nov 2013	-		1.263	6.007	15.345	
Integrated Logistics Support	C/CPAF	NGC:Bethpage, NY	0.000	0.000		0.720	Mar 2013	1.667	Mar 2014	-		1.667	3.257	5.644	5.644
Government Engineering Sup	WR	Naval Air Warfare Center Aircraft Division (NAWCAD:Pax River, MD	82.202	5.756	Nov 2011	7.646	Nov 2012	13.258	Nov 2013	-		13.258	68.663	177.525	
Government Engineering Support	WR	Naval Air Warfare Center Training Systems Division:Orlando, FL	9.404	0.722	Nov 2011	0.000		0.000		-		0.000	0.000	10.126	
Government Engineering Sup	Various	Various:Various	11.262	0.503	Nov 2011	1.262	Nov 2012	2.102	Nov 2013	-		2.102	8.873	24.002	
Contractor Engineering Supt ETS	C/CPFF	Wyle Labs:Huntsville, AL	21.353	2.162	Dec 2011	1.600	Dec 2012	3.570	Dec 2013	-		3.570	9.313	37.998	37.988
Contractor Engineering Support ETS	C/CPFF	Deloitte:Lexington Park, MD	3.356	0.427	Dec 2011	0.000		0.000		-		0.000	0.000	3.783	3.783
Technical Data	Various	Various:Various	0.133	0.120	Mar 2012	0.491	Mar 2013	1.108	Mar 2014	-		1.108	3.450	5.302	
Configuration Management	TBD	Various:Various	0.000	0.000		0.151	Dec 2012	0.347	Dec 2013	-		0.347	1.021	1.519	
Software Development	Various	NSMA:Arlington, VA	0.000	0.000		7.019	Nov 2012	0.236	Nov 2013	-		0.236	67.271	74.526	
Software Development	TBD	Various:Various	0.000	0.000		0.000		5.103	Apr 2014	-		5.103	108.719	113.822	
Prior Year Support costs no longer funded in FYDP	Various	Various:Various	29.908	0.000		0.000		0.000		-		0.000	0.000	29.908	
		Subtotal	199.066	11.740		34.865		43.126		0.000		43.126	341.525	630.322	

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.

PE 0604234N: Advanced Hawkeye Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

APPROPRIATION/BUDGET ACTIVITY

PE 0604234N: Advanced Hawkeye

3051: E-2D Adv Hawkeye

DATE: April 2013

BA 5: System Development & Demonstration (SDD)

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		FY 2014 Total			
	Contract														Target
	Method	Performing	All Prior		Award		Award		Award		Award		Cost To	Total	Value of
Cost Category Item	& Type	Activity & Location	Years	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Cost	Complete	Cost	Contract
Covernment Engineering	Support and	Contractor Support in	croscoc in E	V11 for NIE	C CA Incr 1	A Tacting	and multiple	Now Starte	in that waar	which inclu	do TTNT C	IDDChat			

Government Engineering Support and Contractor Support increases in FY14 for NIFC-CA Incr 1A Testing and multiple New Starts in that year which include TTNT, SIPRChat

and Link-16/CEC.

Test and Evaluation	(\$ in Milli	ions)		FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (T&E)	WR	NAWCAD:Pax River, MD	68.918	0.000		20.844	Nov 2012	8.301	Nov 2013	-		8.301	112.895	210.958	
Developmental T & E	Various	Various:Various	25.965	1.411	Dec 2011	6.338	Dec 2012	5.073	Dec 2013	-		5.073	20.398	59.185	
Developmental T & E 1	WR	Various:Various	0.000	4.572	Mar 2012	3.898	Mar 2013	2.616	Mar 2014	-		2.616	25.451	36.537	
Developmental T&E ETS	C/CPFF	Wyle Labs:Huntsville, AL	9.373	2.972	Dec 2011	2.040	Dec 2012	0.000		-		0.000	0.000	14.385	14.385
Developmental T&E ETS	C/FFP	L-3 Communications:New News, VA	port 7.023	1.809	Dec 2011	1.125	Dec 2012	0.225	Dec 2013	-		0.225	1.741	11.923	11.923
Operational T & E	WR	NAWCAD:Pax River, MD	0.146	21.172	Nov 2011	0.865	Nov 2012	0.880	Nov 2013	-		0.880	14.467	37.530	
Operational T & E	Various	Various:Various	4.273	0.759	Dec 2011	0.000		0.000		-		0.000	0.500	5.532	
Developmental T & E	C/CPFF	Airborne Tactical Advantage Co, LLC:Pax River, MD	0.000	0.000		0.000		0.000		-		0.000	2.767	2.767	2.767
Developmental T&E ETS	Various	Various:Various	4.476	2.097	Dec 2011	0.000		0.000		-		0.000	0.000	6.573	
Developmental T & E	C/CPFF	Wyle Labs - ESTEL:Huntsville, AL	0.000	2.000	Jan 2012	2.060	Jan 2013	2.122	Jan 2014	-		2.122	16.228	22.410	22.410
Test Assets	TBD	NGC:Bethpage, NY	0.000	0.000		0.000		0.000		-		0.000	4.493	4.493	4.493
Prior Year T&E costs no longer funded in FYDP	Various	Various:Various	13.055	0.000		0.000		0.000		-		0.000	0.000	13.055	
		Subtotal	133.229	36.792		37.170		19.217		0.000		19.217	198.940	425.348	

PE 0604234N: Advanced Hawkeye Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

PE 0604234N: Advanced Hawkeye

3051: E-2D Adv Hawkeye

BA 5: System Development & Demonstration (SDD)

Test and Evaluation (\$	in Milli	ons)		FY:	2012	FY	2013		2014 ise	FY 2	2014 CO	FY 2014 Total			
l N	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract

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.

Management Service	s (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Cont Eng Supp Management & Prof Supp Services (MSS)	Various	Various:Various	2.691	0.903	Dec 2011	0.192	Dec 2012	0.158	Dec 2013	-		0.158	0.783	4.727	
Cont Eng Supp MSS	C/CPFF	Wyle Labs:Huntsville, AL	10.938	0.345	Dec 2011	0.000		0.000		-		0.000	0.000	11.283	11.283
Govt Eng Support	WR	NAWCAD:Pax River, MD	10.562	0.610	Nov 2011	0.402	Nov 2012	0.848	Dec 2013	-		0.848	2.881	15.303	
Prog Management Supp	Various	Various:Various	1.920	0.095	Nov 2011	0.104	Nov 2012	0.068	Nov 2013	-		0.068	0.156	2.343	
Travel	Various	Various:Various	2.144	0.450	Oct 2011	0.405	Oct 2012	0.410	Oct 2013	-		0.410	1.888	5.297	
Prior Year Mgmt costs no longer funded in FYDP	Various	Various:Various	40.632	0.000		0.000		0.000		-		0.000	0.000	40.632	
		Subtotal	68.887	2.403		1.103		1.484		0.000		1.484	5.708	79.585	

Remarks

Totals may not add due to rounding.

Contractor Engineering Support, Government Enginnering Support, Program Support and Travel - various contractors and/or award dates throughout the fiscal year.

	All Prior Years	FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		- 1	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	3,891.368	109.414		119.065		152.041		0.000	1	152.041	889.218	5,161.106	

Remarks

Navy

Totals may not add due to rounding.

PE 0604234N: Advanced Hawkeye

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604234N: Advanced Hawkeye

PROJECT

3051: E-2D Adv Hawkeye

E-2D Adv Hawkeye		FY 201	2			FY	2013			FY 20	014			FY 20	015		<u></u>	FY 2	016			FY 2	017			FY 2	018	į.
	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	4
Acquistion Milestones																												Γ
Milestones						FRP							IOC															
Test & Evaluation		İ	i i	\neg		İ	i	i			İ	一			i		İ		İ	i	i	i						H
Technical Evaluation		İ	Ιİ	İ		İ	İ	İ		İ	i i	i			İ	İ	İ	İ	İ	İ	İ	i i			ĺ			İ
Operational Evaluation		OTRR	0	E			\perp	/CD																				
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Production Milestones																												r
Contract Awards		LRIP 4 CA 5 A/C APN					FRP CA			FRP Lot 2 CA				FRP Lot 3 CA				FRP Lot 4 CA										
Deliveries			ļΠ				<u> </u>															İ						İ
	LRIP 1 - 2 A/C APN			-RIF	2 -	3 A/	C APN	ı	LI	RIP 3 API		С		IP 4 - C API		FR	P 1 :	5 A/C	FF	RP 2	- 5 /	A/C		P3 A/C			P IV A/C	

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hibit R-4, RDT&E Schedule Profi PROPRIATION/BUDGET ACTIVI		PB	201	4 N	avy					R	1-1 ITE	EM N	ION	IEN	CLA	ruri	<u> </u>				PR	OJI	ECT	JA	TE: A	prii 2	2013	
9: Research, Development, Test of 5: System Development & Demor	& E					,					E 060							eye						Aa	lv Hav	vkey	⁄e	
-2D Adv Hawkeye IFR		FY	201	2		FY 2	2013	Ц	FY	201	14			FY 2	2015			FY 2	201	6		FY	2017	_		FY	2018	
System Development	1Q	2Q	30	4Q	1Q	2Q	3Q /	ŧQ.	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3C	4Q	1Q	2Q	3Q	44	Q 1Q	2Q	3Q	4Q
Hardware/Software Development	F	 Risk	Red	l ducti	l on		1 1	١				ı	ı	- 1		E8	ME	,	l	ı	ı	l	1	ı	1	ı	ı	ı
Reviews									SRR/SFR		PDR			(CDR						TRR		PRR				OTRR	:
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Technical Evaluation		İ	İ	İ	İ	İ	İΪ	İ								' '			5	SIL T	est	<u> </u>	<u>'</u>	<u>'</u>		'		
Developmental Flight Test									Q Eval hase 1		FQ E Phase						P	el F Fest Probe	9		First	Str-A	rn.	ent	tal Fliç	l l l l l l l l l l l l l l l l l l l	est	
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PE 0604234N: *Advanced Hawkeye* Navy

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604234N: Advanced Hawkeye

PROJECT

3051: E-2D Adv Hawkeye

-2D Adv Hawkeye Guard Radio	FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 1Q 2Q 3Q 4Q 4Q 4Q 4Q 4Q 4Q 4Q 4Q 4Q 4Q 4Q 4Q 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	1Q	2Q	3Q	4Q
System Development																												
Hardware Development			S	ys Int	tegra	ition I	Desi	gn																				
est & Evaluation																												
Technical Evaluation								SIL	. Inte	gr &	Test																	
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PE 0604234N: *Advanced Hawkeye* Navy

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2D Counter Electronic Attack		FY 2	2012			FY 2	2013	-		FY 20	14	-		FY 2	015			FY 2	2016			FY	2017	,			FY 2	2018
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	Q	2Q 3	3Q 4	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
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Software Development											_	5	SW I	Deve	elopi	mnet	t					Int	SIL egrat	ion				
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Operational T&E																												Operational T&E
14PB - 0604234N - 3051																												

PE 0604234N: *Advanced Hawkeye* Navy

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604234N: Advanced Hawkeye

3051: E-2D Adv Hawkeye

E-2D Tactical Targeting Networking Technology (TTNT)	FY	201	2		FY 2	2013			FY 2	2014	4		FY 2	015			FY 2	016			FY	2017	,		FY 2	018	
	1Q 20	3(2 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
System Development & Design	$\Box \Box$	7	7						$ \Box $	\neg																	
TTNT MIDS/JTRS Integration												М	IDS/J	TRS Ir	ntegra	tion											
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TTNT HPA Development & Design													Н	IPA D	evelop	oment	t & D	esigr	1								
						İΪ						PDR		CDR													
TTNT MIDS/JTRS/TTNT Integration		İ		İ		İΪ			İ	j					'		MID	S/JT	RS/T	TNT	Inte	gratio	on		'	_	
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Test & Evaluation		十	╁	╁	i	\Box			H	一										╁	┪						
MIDS/JTRS Developmental Test/Operational Test																	VAL ▼	_	D	T/O	г						
MIDS/JTRS/TTNT Developmental Test/Operational Test						$ \ $																			DT/	от	
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2014PB - 0604234N - 3051

PE 0604234N: *Advanced Hawkeye* Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604234N: Advanced Hawkeye

PROJECT

3051: E-2D Adv Hawkeye

E-2D Adv Hawkeye Link 16 Crypto Modernization		FY:	2012	:		FY 2	2013			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018	
	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
System Development																												
Hardware Development							Hd	ys lwr																				
							Pr	oc																				
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PE 0604234N: *Advanced Hawkeye* Navy

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2D Iridium SIPRChat		FY 2	2012	2		FY 2	013			FY	2014	ı		FY 2	015			FY 2	016			FY 2	017		l	FY	2018	
	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
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Milestones												PDR		CDR			TRR											
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Software Development													E-20	SIPE	RCha	at Sys	stem	Deve	lopm	ent	& Des	sign						
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Developmental Flight Test																					VAL ▼	Fli	ght T	est				
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Trainer Development																						D	esign evelo VST	op.				
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PE 0604234N: Advanced Hawkeye Navy

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hibit R-4, RDT&E Schedule Profi																												
	ile:	PB:	201،	4 Na	avy																			DATE	: Ap	ril 2	013	
PPROPRIATION/BUDGET ACTIVITY 19: Research, Development, Test & Evaluation, Navy A 5: System Development & Demonstration (SDD)																	PROJECT 3051: <i>E-2D Adv Hawkeye</i>											
Link-16 Cooperative Engagement Capability (CEC) Interoperability Program		FY 2012 FY 2013					FY 2014		14	4		FY 2015				FY 2016			FY 201		201	017		FY 2018				
	1Q	2Q	3Q	4Q	1Q	2Q	3Q 4	Q 1	Q 2	Q 3	Q 4	1Q	10	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Systems Development																												
Software Development								L	Systems Engineering																			
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Test & Evaluation		\vdash	\vdash	\vdash				\dagger		\top	\top	\Box																
Technical Evaluation																Functional Test ▼				Perf Eval Test				Perf Eval Test				Perf Eval Test
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PE 0604234N: *Advanced Hawkeye* Navy

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

PE 0604234N: Advanced Hawkeye

3051: E-2D Adv Hawkeye

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
E-2D Adv Hawkeye					
Acquistion Milestones: Milestones: Acquistion Milestones - Full Rate Production (FRP)	2	2013	2	2013	
Acquistion Milestones: Milestones: Acquistion Milestones - Initial Operational Capabilities	1	2015	1	2015	
Test & Evaluation: Operational Evaluation: Test & Evaluation Milestones - Operational Test - Readiness Review	2	2012	2	2012	
Test & Evaluation: Operational Evaluation: Test & Evaluation Milestones - Operational Evaluation	3	2012	4	2012	
Test & Evaluation: Operational Evaluation: Verification of Correction of Deficiencies (VCD)	3	2013	1	2014	
Test & Evaluation: Operational Evaluation: Integrated Test D2	2	2013	1	2014	
Test & Evaluation: Operational Evaluation: Integrated Test D3	2	2014	4	2014	
Test & Evaluation: Operational Evaluation: Follow On Test & Evaluation	1	2012	4	2017	
Production Milestones: Contract Awards: Production Milestones - LRIP IV CA (5 A/C APN)	2	2012	2	2012	
Production Milestones: Contract Awards: Production Milestones - FRP Lot I CA	3	2013	3	2013	
Production Milestones: Contract Awards: Production Milestones - FRP Lot II CA	2	2014	2	2014	
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	
Deliveries: Production Deliveries - LRIP I (2 A/C APN)	1	2012	1	2012	
Deliveries: Production Deliveries - LRIP II (3 A/C APN)	3	2012	4	2013	
Deliveries: Production Deliveries - LRIP III (5 A/C APN)	1	2014	4	2014	
Deliveries: Production Deliveries - LRIP IV (5 A/C APN)	1	2015	3	2015	

PE 0604234N: *Advanced Hawkeye* Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604234N: Advanced Hawkeye

PROJECT

3051: E-2D Adv Hawkeye

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Deliveries: Production Deliveries - FRP I (5 A/C)	4	2015	2	2016	
Deliveries: Production Deliveries - FRP II (5 A/C)	3	2016	2	2017	
Deliveries: Production Deliveries - FRP III (5 A/C)	3	2017	1	2018	
Deliveries: Production Deliveries - FRP IV (6 A/C)	2	2018	4	2018	
E-2D Adv Hawkeye IFR					
System Development: Hardware/Software Development: In-Flight Refueling - Valve Trade Study - Risk Reduction	1	2012	1	2013	
System Development: Hardware/Software Development: In-Flight Refueling - Engineering & Manufacturing Development	2	2013	4	2018	
System Development: Reviews: In-Flight Refueling - System Requirements Review2/ System Functional Review	1	2014	1	2014	
System Development: Reviews: In-Flight Refueling - Preliminary Design Review	3	2014	3	2014	
System Development: Reviews: In-Flight Refueling - Critical Design Review	3	2015	3	2015	
System Development: Reviews: In-Flight Refueling - Test Readiness Review	1	2017	1	2017	
System Development: Reviews: In-Flight Refueling - Production Readiness Review	3	2017	3	2017	
System Development: Reviews: In-Flight Refueling - Operational Test Readiness Review	3	2018	3	2018	
Test & Evaluation: Technical Evaluation: In-Flight Refueling - SIL Probe Static Test	3	2014	4	2018	
Test & Evaluation: Technical Evaluation: In-Flight Refueling - Fuel Rig Test	1	2016	3	2016	
Test & Evaluation: Technical Evaluation: In-Flight Refueling - Probe Static Test	1	2016	3	2016	
Test & Evaluation: Technical Evaluation: In-Flight Refueling - Instrumentation/Aircraft Mod	1	2017	3	2017	
Test & Evaluation: Technical Evaluation: In-Flight Refueling - First Flight	1	2017	1	2017	
Test & Evaluation: Developmental Flight Test: Developmental Flight Test	1	2017	3	2018	
Test & Evaluation: Developmental Flight Test: Flying Qualities Evaluation Test Phase 1	4	2013	1	2014	
Test & Evaluation: Developmental Flight Test: Flying Qualities Evaluation Test Phase 2	3	2014	4	2014	
E-2D Adv Hawkeye Guard Radio	-				

PE 0604234N: Advanced Hawkeye

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604234N: Advanced Hawkeye

3051: E-2D Adv Hawkeye

PROJECT

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
System Development: Hardware Development: Guard Radio - System Integration Design	3	2012	4	2013	
Test & Evaluation: Technical Evaluation: Guard Radio - SIL Integration & Test	3	2013	4	2014	
Test & Evaluation: Technical Evaluation: Guard Radio - VAL	3	2014	3	2014	
Test & Evaluation: Technical Evaluation: Guard Radio - Flight Test	4	2014	2	2015	
E-2D Counter Electronic Attack					
System Development: Software Development: Counter Electronic Attack - SW Development	4	2013	1	2017	
System Development: Software Development: Counter Electronic Attack - SIL Integration	2	2017	4	2017	
Test & Evaluation: Developmental T&E: Counter Electronic Attack - DT&E Tech Evaluation	1	2018	3	2018	
Test & Evaluation: Operational T&E: Counter Electronic Attack - OT&E	4	2018	4	2018	
E-2D Tactical Targeting Networking Technology (TTNT)	,				
System Development & Design: TTNT MIDS/JTRS Integration: E-2D TTNT MIDS/ JTRS Integration	2	2014	4	2016	
System Development & Design: TTNT MIDS/JTRS Integration: TTNT - Preliminary Design Review	4	2014	4	2014	
System Development & Design: TTNT MIDS/JTRS Integration: TTNT - Critical Design Review	2	2015	2	2015	
System Development & Design: TTNT MIDS/JTRS Integration: TTNT -Test Readiness Review	4	2015	4	2015	
System Development & Design: TTNT HPA Development & Design: TTNT Hight Power Amplifier Development & Design	2	2014	4	2017	
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Preliminary Design Review	1	2015	1	2015	
System Development & Design: TTNT HPA Development & Design: TTNT High Power Amplifier Critical Design Review	3	2015	3	2015	

PE 0604234N: Advanced Hawkeye

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

End

1319: Research, Development, Test & Evaluation, Navy

PE 0604234N: Advanced Hawkeye

Start

3051: E-2D Adv Hawkeye

BA 5: System Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

	Sta	art	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
System Development & Design: TTNT MIDS/JTRS/TTNT Integration: E-2D MIDS/JTRS/TTNT Integration	3	2015	3	2018		
System Development & Design: TTNT MIDS/JTRS/TTNT Integration: TTNT - Preliminary Design Review	1	2016	1	2016		
System Development & Design: TTNT MIDS/JTRS/TTNT Integration: TTNT - Critical Design Review	4	2016	4	2016		
System Development & Design: TTNT MIDS/JTRS/TTNT Integration: TTNT -Test Readiness Review	4	2017	4	2017		
Test & Evaluation: MIDS/JTRS Developmental Test/Operational Test: Developmental Test - Operational Test	3	2016	3	2017		
Test & Evaluation: MIDS/JTRS Developmental Test/Operational Test: MIDS/JTRS VAL	2	2016	2	2016		
Test & Evaluation: MIDS/JTRS/TTNT Developmental Test/Operational Test: Developmental Test - Operational Test	1	2018	4	2018		
Test & Evaluation: MIDS/JTRS/TTNT Developmental Test/Operational Test: MIDS/ JTRS/TTNT VAL	1	2018	1	2018		
Trainers: Trainer Developmnet & Design WST 1	1	2016	1	2017		
E-2D Adv Hawkeye Link 16 Crypto Modernization						
System Development: Hardware Development: Link-16 Crypto Modernization - Multifunctional Information Distribution System Hardware Procurement	3	2013	4	2013		
E-2D Iridium SIPRChat						
Acquisition Milestones: Milestones: SIPRChat - Preliminary Design Review	4	2014	4	2014		
Acquisition Milestones: Milestones: SIPRChat - Critical Design Review	2	2015	2	2015		
Acquisition Milestones: Milestones: SIPRChat -Test Readiness Review	1	2016	1	2016		
System Development: Software Development: E-2D SIPRChat System Development & Design	3	2014	4	2017		
System Development: Software Development: Router Integration	3	2014	4	2016		
System Development: Software Development: Software Integration	4	2014	4	2016		

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

PE 0604234N: Advanced Hawkeye
3051: E-2D Adv Hawkeye

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Test & Evaluation: Developmental Flight Test: SIPRChat VAL	1	2017	1	2017	
Test & Evaluation: Developmental Flight Test: SIPRChat Flight Test	2	2017	4	2017	
Trainers: Trainer Development: SIPRChat Trainer Design & Developo WST 1	2	2017	4	2017	
Link-16 Cooperative Engagement Capability (CEC) Interoperability Program					
Systems Development: Software Development: Systems Engineering	1	2014	4	2018	
Systems Development: Software Development: Systems Development	1	2014	4	2018	
Test & Evaluation: Technical Evaluation: Functional Test	4	2015	4	2015	
Test & Evaluation: Technical Evaluation: Performance Evaluation Test	4	2016	4	2016	
Test & Evaluation: Technical Evaluation: Performance Evaluation Test II	4	2017	4	2017	
Test & Evaluation: Technical Evaluation: Performance Evaluation Test III	4	2018	4	2018	

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0604234N: Advanced Hawkeye 9999: Congressional Adds

BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
9999: Congressional Adds	0.000	20.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	20.000
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Congressional Add

B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013
Congressional Add: Adv Radar Innovation Fund - Air (Cong)		20.000	-
FY 2012 Accomplishments: N/A			
	Congressional Adds Subtotals	20.000	0.000

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

N/A

Navy

Remarks

D. Acquisition Strategy

Not required for Congressional Adds

E. Performance Metrics

Not required for Congressional Adds

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604234N: Advanced Hawkeye

PROJECT

9999: Congressional Adds

Product Development (\$ in Millions)			FY 2012		FY 2013		FY 2 Ba		FY 2014 OCO						
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	SS/FFP	Northrop Grumman Corporation (NGC):Bethpage, NY	0.000	19.150	Apr 2013	0.000		0.000		-		0.000	0.000	19.150	19.150
Primary Hardware Development	Various	NSMA:Arlington, VA	0.000	0.400	Sep 2012	0.000		0.000		-		0.000	0.000	0.400	
		Subtotal	0.000	19.550		0.000		0.000		0.000		0.000	0.000	19.550	

Support (\$ in Millions)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support ETS	C/CPFF	Imagine One Technology and Management LTD:Colonial Beach, VA	0.000	0.450	Apr 2013	0.000		0.000		-		0.000	0.000	0.450	0.450
		Subtotal	0.000	0.450		0.000		0.000		0.000		0.000	0.000	0.450	0.450

	All Prior Years	FY 2012	FY 2	2013	FY 2 Ba	FY 2	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	20.000	0.000		0.000	0.000	0.000	0.000	20.000	

Remarks

PE 0604234N: Advanced Hawkeye

Navy