

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force	DATE: April 2013
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APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>					PE 0207417F: <i>Airborne Warning and Control System (AWACS)</i>							
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	-	111.779	65.200	186.256	-	186.256	161.657	61.769	27.354	27.866	Continuing	Continuing
67411L: <i>Airborne Warning & Control System (AWACS)</i>	-	111.779	65.200	186.256	-	186.256	161.657	61.769	27.354	27.866	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] 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

A. Mission Description and Budget Item Justification

Mission: AWACS is the premier airborne platform providing command and control (C2)/battle management (BM) for Commander In Chief and combatant commander tasking in joint, allied, and coalition operations, humanitarian relief, and homeland defense. AWACS provides a real-time picture of friendly, neutral, and hostile air activity. Its capabilities include all-altitude/all-weather surveillance of the battle space; early warning of enemy actions; a real-time ability to find, fix, track, and assess airborne or maritime threats; and detection, location, and identification of electronic emitters.

This program element funds four areas in support of the AWACS program: 1. AWACS Modernization, 2. AWACS Infrastructure and Support Systems, 3. Material Solutions Development and Analysis, and 4. Program Management and Administration (PMA). The first three areas include studies and analysis to support both current planning and execution, as well as future program planning.

1. AWACS Modernization (RDT&E, AF):

a. Block 40/45 is replacing AWACS 1970's vintage mission systems that are experiencing Diminishing Manufacturing Sources (DMS) issues, are difficult and expensive to upgrade, and limit overall AWACS system performance. The Block 40/45 upgrade will improve integration, quality and timeliness of sensor data to the shooter, improve Combat Identification (CID), improve AWACS contribution to Time Critical Targeting via Data Link Infrastructure (DLI), improve electronic support measures processing and enable more effective, faster upgrades via an open-system, Ethernet-based architecture. The upgrade will also update the ground support infrastructure including training systems.

b. The Next Generation Identification Friend or Foe (NGIFF) Program provides AWACS with enhanced IFF interrogator operation to add a more secure Mode 5 capability. NSA declared IFF Mode 4 unsecure and obsolete on 5 Nov 2003. Joint Requirements Oversight Council Memo 047-07 requires IFF Mode 5 interrogation capability by FY14. The new Mode 5 interrogation capability extends the effective range of the AWACS interrogator, while helping discriminate against closely spaced cooperative targets. NGIFF developed and integrated a basic Mode 5 capability on Block 30/35 starting in FY09 and began developing a full Mode 5 capability on Block 40/45 in FY11. Hardware will be common between the Block 30/35 and Block 40/45 platforms. NGIFF will also integrate Mode S, a civilian air traffic control capability residing in the NGIFF hardware, as funding allows.

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<p>c. DMS Replacement of Avionics for Global Operations and Navigation (DRAGON) completes the FAA/International Civil Aviation Organization (ICAO)/EUROCONTROL air traffic control mandated safety of flight capabilities. This program will provide the E-3 fleet with the flight instruments and other avionics for the Required Navigation Performance (RNP), and the surveillance and communication capabilities necessary to maintain continued critical unrestricted access to global airspace. Non-compliance will result in airspace restrictions and denials that will impact AWACS ability to support worldwide responses to situations requiring immediate on-scene C2 BM. The DRAGON modifications replace the existing DMS Global Positioning System (GPS) Integrated Navigation System (GINS) with a modern Flight Management System (FMS) that will accommodate new capabilities including Mode 5 IFF and Joint Mission Planning System (JMPS). Also included as part of the modification is the addition of data link communications, voice and data link digital radios, and improved visual displays. Emphasis on employment of Commercial-Off-The-Shelf (COTS) avionics is expected to lower cost, reduce the tech refresh cycle, and enhance life cycle management. Replacement of critical avionics subsystems that became unsustainable beginning in 2010 is included in the DRAGON program. The Engineering and Manufacturing Development (EMD) phase of DRAGON is being executed as a Cooperative Program between the US and NATO.</p> <p>d. The Flight Performance Software (FPS) program automates calculations currently performed manually by the pilot and flight engineer in accordance with the E-3B and C flight manual. Phase I, automates the Takeoff and Landing Data (TOLD) calculations; Phase II automates the high speed calculation. Automated calculations, using the original source data used to create the flight manual charts increases safety, improves on time departure/arrival, improves crew efficiency, and reduces tanker support.</p> <p>e. Electronic Protection (EP): The EP program funds acquisition and retrofit of the E-3 AWACS radar processing capability. EP will provide improved radar processing in a specific flight environment to meet a classified requirement. Processing will initially address radar modes comprising 90% of actual operational AWACS radar usage. EP will install an adjunct processor that works in parallel with the current Radar System Improvement Program (RSIP) system. The EP-processed radar picture will appear on the operator screen in place of the current RSIP output when the EP radar modes are selected. The EP program plans for multi-year advanced buys of COTS equipment due to the short life-cycles in high tech components starting in FY17. The program will buy FY17 and FY18 COTS equipment in FY17 including initial spares. Equipment non-recurring Group B includes efforts for Tech Refresh, Active DMS and Software Releases.</p> <p>2. AWACS Infrastructure and Support Systems (RDT&E, AF): These efforts synchronize modernization requirements and infrastructure support across the entire weapon system from depot and field test equipment, to maintenance trainers and integration labs.</p> <p>a. Training, Support, and Infrastructure (TSI) provides continuing system engineering and management support for AWACS modernization and enhancement. These activities include managing the AWACS developmental infrastructure, AWACS Development Integration Test Support (ADITS), support for equipment concurrency, modernization planning/analysis, trainer/simulator integration and concurrency, as well as the Avionics Integration Laboratory (AIL). The contractor maintained and operated E-3 Radar Systems Integration Lab/Software Development Facility (SIL/SDF) provides US, FMS, and international customers with a functioning E-3 radar configuration to support radar development, production, and sustainment programs. TSI efforts allow new support equipment technologies and test strategies to be analyzed to ensure concurrent capability to sustain existing, modified, and upgraded E-3 equipment. TSI supports trainer/simulator concurrency analysis and requirements definition to ensure trainers and simulators are kept current with the AWACS baseline. The overall DT&E test infrastructure supports both development and sustainment projects, and maintains facilities to support AWACS aircraft during system and sub-system testing at Boeing Field, WA. The TSI assets also support</p>		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0207417F: <i>Airborne Warning and Control System (AWACS)</i>
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multiple international Airborne Early Warning and Control (AEW&C) projects on a maintenance fee basis, including projects for France, Saudi Arabia, United Kingdom, Japan, and NATO AEW&C efforts.

3. Material Solutions Development & Analysis (RDT&E, AF): These efforts look toward the future by investigating enhanced capabilities and exploring new mission areas through C2ISR System Development, while advancing the capabilities of the current weapon system through the Support The War Fighter (STWF) effort.

a. C2ISR system improvements investigate and develop future capabilities of the AWACS weapon system, or next C2ISR platform. These efforts also include investigation, analysis and development to ensure that AWACS successfully integrates with joint and coalition forces in a net-centric environment. C2ISR primarily supports pre-systems acquisition in the areas of material solution analysis and technology development. This is accomplished by prototyping and demonstrating capabilities required by the warfighter but also includes developing an E-3 Modernization & Sustainment Roadmap that projects user capability needs, as well as material solutions for the user needs.

b. Internet Protocol Enabled Communication (IPEC): IPEC will provide the Block 40/45 E-3 with a wideband communications capability to connect to the Global Information Grid and will support net-centric operations/warfare. The E-3 lacks an IP-enabled communication capability. As a result, the E-3 is not able to support a shortened digitized kill-chain of time sensitive targets. IPEC will provide a roll-on/roll-off IP-enabled communications package supporting warfighter identified requirements for higher bandwidth SIPRNet and multi-domain networks.

4. Program Management and Administration (PMA)(RDT&E, AF): This effort is PMA support for all AWACS Modernizations, AWACS Infrastructure and Support Systems, and Material Solutions Development and Analysis.

This program is in Budget Activity 7, Operational Systems Development, because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	117.880	65.200	192.562	-	192.562
Current President's Budget	111.779	65.200	186.256	-	186.256
Total Adjustments	-6.101	0.000	-6.306	-	-6.306
• Congressional General Reductions	-	0.000			
• Congressional Directed Reductions	-	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	-	0.000			
• Congressional Directed Transfers	-	0.000			
• Reprogrammings	-2.511	0.000			
• SBIR/STTR Transfer	-3.590	0.000			
• Other Adjustments	0.000	0.000	-6.306	-	-6.306

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207417F: Airborne Warning and Control System (AWACS)		
<u>Change Summary Explanation</u> 1. The increase from FY2013 to FY2014 is primarily due to the use of NATO and US funding on the DRAGON cooperative EMD program. Under the terms of the co-operative agreement, the US-NATO cost share for the program remains the same but NATO is paying for the majority of 2013 common requirements and the US is paying for the majority of FY14 common requirements. 2. The increase between the Previous President's Budget and the Current President's Budget in FY14 is due to re-phasing of funds in prior years to better align for the current execution plan (\$20M) and a decrease in material solution development and analysis efforts (-\$14.123M).				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Title: AWACS Modernization		81.508	48.121	164.850
Description: Focuses on development activities associated with modification efforts.				
FY 2012 Accomplishments: Block 40/45: Continued development of Mission Crew Training Set (MCTS) (to include beginning development of the Airborne Training Set (ATS) portion of the MCTS), Avionics Integration Support Facility (AISF) upgrade and Mission Computing Maintenance Trainer (MCMT). Continued the development of DLI improvements for seamless transition from Block 30/35. Continued to administer DMS and COTS hardware tech refresh for future aircraft buys. Commenced development of Secure Iridium Chat (SIC). SIC is a satellite based communications system which provides Beyond Line of Sight (BLOS) Internet Protocol (IP) connectivity enabling E-3 participation in Area of Responsibility (AOR) Tactical Chat. This capability is a follow on to the Transitional Networking Capability (TNC) which is currently in use on the AWACS Block 30/35 aircraft. NGIFF: Closed all hardware and CAT 1 deficiencies for IFF 30/35. Ensured IFF 30/35 time compliance tech orders (TCTOs) and Technical Orders (TO) were available. Conducted production design decision and began manufacturing plans. For IFF 40/45, certified software functionality and completed system verification on mission computing Block 1.0 SW. Began software system integration in lab environment. Reviewed requirements, interfaces, manufacturing plans, and conducted Final Design and Manufacturing Review (FDMR). Completed final Human User Working Group (HUWG). DRAGON: Completed major subcontractors' System Requirements Review, Preliminary Design Review and Critical Design Review. Completed Prime Contractor's System Requirements Review, Integrated Baseline Review and Preliminary Design Review. Purchased EMD Kit. Developed familiarization training course. FPS: Accomplished DT and OT&E, completed development, and released FPS Phase 1 software. Continued development of FPS Phase 2 software.				
FY 2013 Plans:				

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Block 40/45: Block 40/45: Complete development of MCTS and SIC. Continue to develop the ATS and MCMT. Complete initial AISF Upgrade and commence development of AISF spiral 2. Continue development of DLI improvements for seamless transition from Block 30/35.				
NGIFF: Continue resolving IFF 30/35 CAT 2 software deficiencies. Continue Block 40/45 EMD effort.				
DRAGON: Submit PDR Assessment Review to the Milestone Decision Authority. Conduct Critical Design Reviews (CDR). Complete detailed drawings. Perform Handover Testing of NATO development test aircraft (N-1), transfer aircraft to Boeing (via DD Form 1149) and begin the aircraft modification. Coordinate availability of major subcontractors' hardware (Group B) and installation readiness. Complete development labs I&CO and begin lab testing of software.				
FPS: Complete development and accomplish DT and OT&E testing of FPS Phase 2 software.				
EP: Begin development of classified technology solutions to mitigate issues/concerns identified under the Radar Modernization Program (RMP) study.				
FY 2014 Plans: Block 40/45: Will finish development of the ATS and MCMT. Will complete AISF Spiral 2 development. Will continue development of DLI improvements for seamless transition from Block 30/35.				
NGIFF: Will complete final system verification review for IFF 40/45. Will conduct data analysis for IFF 40/45 flight test. Will release IFF 40/45 Build 3.0 software. Will complete verification of Technical Requirements Document (TRD) for IFF 40/45. Will complete final TCTO's and TO's for IFF 40/45.				
DRAGON: Will perform Handover Test of US development test aircraft (D-1), transfer aircraft to Boeing (via DD Form 1149) and will begin the aircraft modification. Will coordinate availability of N-1 and D-1 parts to support modification efforts. Will complete lab software testing. Will complete N-1 modification and ground testing and will initiate the N-1 flight test program. Will complete D-1 modification and will begin the ground test. Will complete system training for both N-1 and D-1. Will initiate N-1 draft flight manual review.				
EP: Will continue development of classified technology solutions to mitigate issues/concerns identified under the RMP study.				
Title: AWACS Infrastructure and Systems Support		13.494	5.277	9.543

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
<p>Description: Continuing systems engineering to synchronize all modernization requirements and infrastructure support across the entire weapon system-- from depot and field test equipment, to maintenance trainers, to simulators, to integration labs, to test aircraft development and support.</p> <p>FY 2012 Accomplishments: TSI: Supported Network Enabled Enclave (NEE) lab integration efforts. Continued to mature emerging technologies, net-centric operations and next generation C2/BM activities. Provided system lab support to Block 40/45, NCIFF, Net-Centric Communications (NCC), RMP, and Japan and RSAF radar improvement integration and test. Supported AEW&C OSD mandated interoperability testing and E-3 Operational, Safety, Suitability and Effectiveness program. Provided radar system labs in support of US and FMS radar improvement programs/sustainment efforts--major activities include Japan and RSAF Radar improvement activities.</p> <p>TS-3/ADITS: Divested TS-3. Continued support of the E-3 AWACS Developmental Test and Evaluation AIL.</p> <p>FY 2013 Plans: TSI: Support C2ISR lab integration efforts that continue to mature emerging technologies. Provide system lab support to EP, Block 40/45, NCIFF, TNC, SADL, C2ISR, Japan and RSAF radar improvement integration and test. Support AEW&C OSD mandated interoperability testing and support mandatory E-3 Operational, Safety, Suitability, and Effectiveness program. Support the E-3 AWACS Developmental Test and Evaluation AIL.</p> <p>FY 2014 Plans: TSI: Will support Command, Control, Intelligence, Surveillance, & Reconnaissance (C2ISR) lab integration efforts that continue to mature emerging technologies. Will provide system lab support to EP, Block 40/45, Next Generation IFF, TNC, SADL, C2ISR, Japan and RSAF radar improvement integration and test. Will support AEW&C OSD mandated interoperability testing and support mandatory E-3 Operational, Safety, and Suitability and Effectiveness program. Will support the E-3 AWACS Developmental Test and Evaluation Avionics Integration Laboratory (AIL).</p>				
<p>Title: Material Solutions Development and Analysis</p> <p>Description: Focuses on emerging requirements by investigating enhanced capabilities and exploring new mission areas.</p> <p>FY 2012 Accomplishments: C2ISR: Conducted engineering / integration studies to determine required modifications and associated costs to upgrade and supported Risk Reduction activities for program planning including but not limited to RMP/EP. Executed key program risk-reduction elements via NCC-NEE, International Cooperative Research & Development (ICR&D), Joint Track Management Capability (JTMC) and Cooperative Engagement Capability (CEC).</p>		3.381	0.168	0.282

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0207417F: Airborne Warning and Control System (AWACS)							
C. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014	
STWF: Addressed required communication upgrades to ensure viability of AWACS Link 16 capabilities. Provided digital control of platform communication systems such as ARC-210s, Single Channel Ground and Airborne Radio System (SINCGARS), Have Quick and Demand Assigned Multiple Access Satellite Communications (DAMA SATCOM). FY 2013 Plans: C2ISR: Conduct engineering / integration studies to determine required modifications and associated costs to upgrade and support Risk Reduction activities for program planning including but not limited to CEC and IPEC. Continue to execute International Cooperative Research & Development (ICR&D). FY 2014 Plans: C2ISR: Will conduct engineering / integration studies to determine required modifications and associated costs to upgrade and support Risk Reduction activities for program planning including but not limited to CEC and IPEC. Will continue to execute International Cooperative Research & Development (ICR&D).												
Title: Program Management and Administration (PMA) Description: Focuses on the PMA support for all AWACS Modernizations, AWACS Infrastructure and Support Systems, and Material Solutions Development and Analysis. FY 2012 Accomplishments: PMA: Provided PMA support for all AWACS Modernizations, AWACS Infrastructure and Support Systems, and Material Solutions Development and Analysis. FY 2013 Plans: PMA: Provide PMA support for all AWACS Modernizations, AWACS Infrastructure and Support Systems, and Material Solutions Development and Analysis. FY 2014 Plans: PMA: Will provide PMA support for all AWACS Modernizations, AWACS Infrastructure and Support Systems, and Material Solutions Development and Analysis.									13.396	11.634	11.581	
Accomplishments/Planned Programs Subtotals									111.779	65.200	186.256	
D. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• APAF: BA05: E00300: E-3 Mods	134.795	193.099	196.987		196.987	195.793	262.064	302.246	239.944	Continuing	Continuing	

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APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>					R-1 ITEM NOMENCLATURE PE 0207417F: <i>Airborne Warning and Control System (AWACS)</i>						
D. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF: BA06: E00300: <i>E-3 Initial Spares</i>	3.749	17.498	13.587		13.587	23.450	16.101	13.920	14.170	Continuing	Continuing
Remarks											
E. Acquisition Strategy											
Most major programs (Block 40/45, DRAGON, and lab support) will be sole source to the Boeing Corporation, Seattle, WA.											
F. Performance Metrics											
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						PE 0207417F: Airborne Warning and Control System (AWACS)				67411L: Airborne Warning & Control System (AWACS)					
Product Development (\$ 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
(U) AWACS Modernization - Block 40/45 EMD, Pre-Production, and MCT EMD	SS/CPAF	Boeing:Seattle, WA	-	19.373	Jan 2012	5.562	Jan 2013	27.857	Jan 2014	-		27.857	Continuing	Continuing	TBD
(U) AWACS Modernization - Next Generation Identification Friend or Foe (IFF)	SS/CPIF	Boeing:Seattle, WA	-	29.758	Feb 2012	7.624	Jan 2013	19.890	Jan 2014	-		19.890	Continuing	Continuing	TBD
(U) AWACS Modernization - DRAGON	SS/FPIF	Boeing:Seattle, WA	-	31.803	Jan 2012	18.835	Jan 2013	98.268	Jan 2014	-		98.268	Continuing	Continuing	TBD
(U) AWACS Modernization- FPS	SS/FFP	Boeing:Seattle, WA	-	0.574	Nov 2011	0.000		0.000		-		0.000	0.000	0.574	TBD
(U) Material Solutions Development and Analysis - Support the War Fighter (STWF)	Various	Various:Various, NA	-	0.372	Jan 2012	0.000		0.000		-		0.000	Continuing	Continuing	TBD
(U) Material Solutions Development and Analysis - C2ISR System Improvement	SS/ Various	Boeing:Seattle, WA	-	3.009	Oct 2011	0.168	Oct 2012	0.282	Jan 2014	-		0.282	Continuing	Continuing	TBD
(U) Material Solutions Development and Analysis - EP	TBD	TBD:TBD,	-	0.000		16.100	Jan 2013	18.836	Jan 2014	-		18.836	Continuing	Continuing	TBD
(U) Prior Platform Modifications	Various	Various:Various, NA	-	0.000		0.000		0.000		-		0.000	Continuing	Continuing	
Subtotal			0.000	84.889		48.289		165.133		0.000		165.133			
Remarks															
Total Program does not include NATO funds.															

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>						R-1 ITEM NOMENCLATURE PE 0207417F: <i>Airborne Warning and Control System (AWACS)</i>						PROJECT 67411L: <i>Airborne Warning & Control System (AWACS)</i>			
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
(U) Support/ITSP, MITRE, travel, other	Various	AWACS Program Office:Hanscom AFB, MA	-	9.589	Oct 2011	8.717	Oct 2012	7.269	Oct 2013	-		7.269	Continuing	Continuing	TBD
Subtotal			0.000	9.589		8.717		7.269		0.000		7.269			
Test and Evaluation (\$ 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
(U) AWACS Infrastructure and Systems Support - AWACS Development Integration Test Support (ADITS) Contract / Other test activities	SS/ Various	Boeing:Seattle, WA	-	7.911	Oct 2011	0.000	Oct 2012	0.000		-		0.000	0.000	7.911	TBD
(U) AWACS Infrastructure and Systems Support - Training, Support & Infrastructure (TSI)	SS/ Various	Boeing:Seattle, WA	-	5.583	Jan 2012	5.277	Jan 2013	9.542	Jan 2014	-		9.542	Continuing	Continuing	TBD
Subtotal			0.000	13.494		5.277		9.542		0.000		9.542			
Remarks In FY13, the remaining ADITS effort will be captured under Training, Support & Infrastructure (TSI). This effort includes the Avionics Integration Laboratory (AIL) and will continue through the FYDP.															
Management Services (\$ 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
(U) Program Management Administration (PMA)	Various	AWACS Program Office:Hanscom AFB, MA	-	3.807	Oct 2011	2.917	Oct 2012	4.312	Oct 2013	-		4.312	Continuing	Continuing	TBD
Subtotal			0.000	3.807		2.917		4.312		0.000		4.312			

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0207417F: Airborne Warning and Control System (AWACS)					PROJECT 67411L: Airborne Warning & Control System (AWACS)				
		All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		0.000	111.779		65.200		186.256		0.000		186.256			

Remarks

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

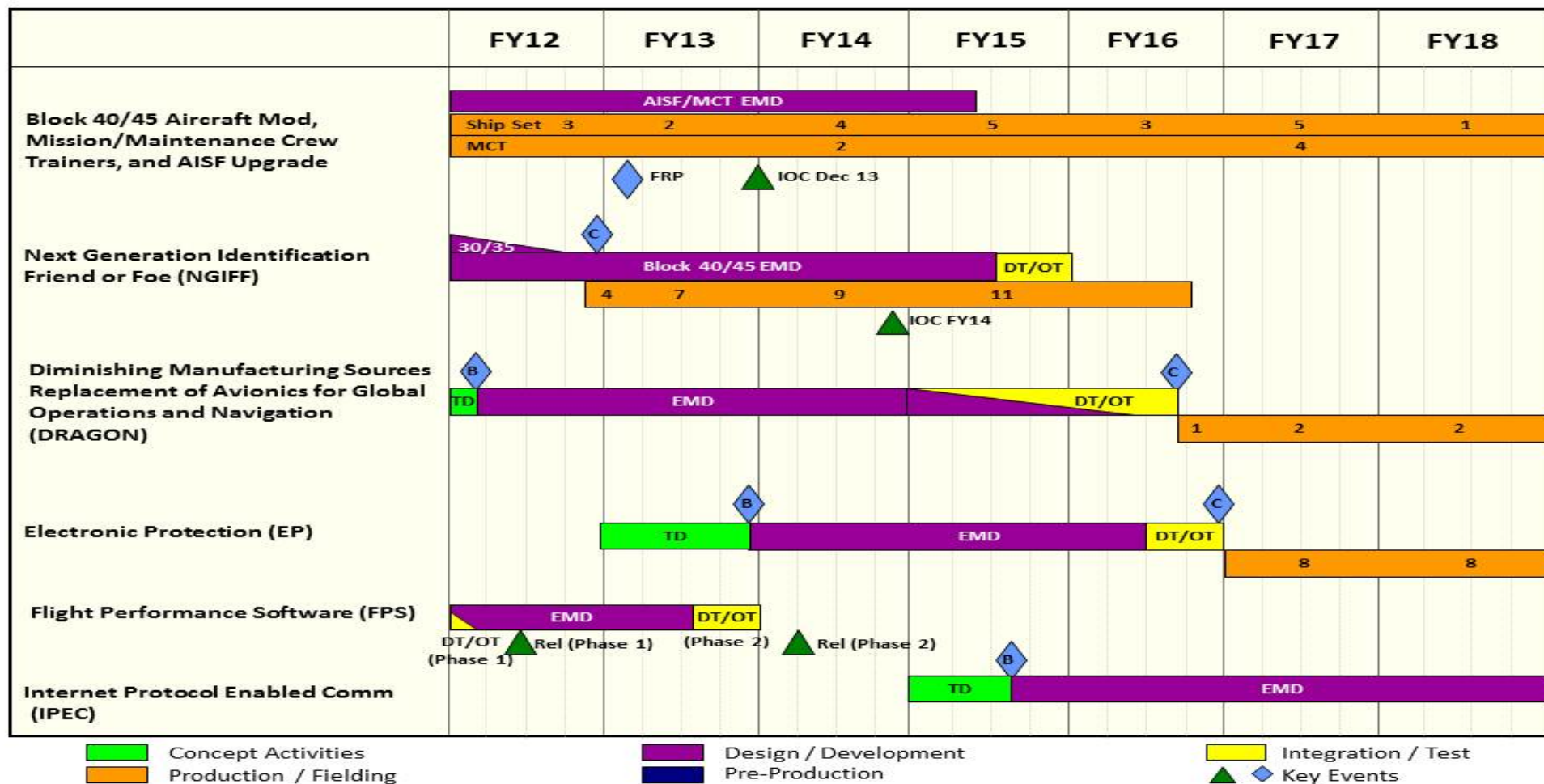
3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207417F: Airborne Warning and Control System (AWACS)

PROJECT

67411L: Airborne Warning & Control System (AWACS)



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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0207417F: <i>Airborne Warning and Control System (AWACS)</i>	PROJECT 67411L: <i>Airborne Warning & Control System (AWACS)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
40/45 MCT EMD	1	2012	1	2014
40/45 FRP Decision	4	2012	4	2012
40/45 IOC	4	2013	4	2013
NGIFF EMD (Deficiency resolution for UPX-40 software developed for Block 30/35)	1	2012	3	2012
NGIFF EMD (UPX-40 software and firmware development for Block 40/45)	1	2012	1	2015
NGIFF Milestone C	3	2012	3	2012
NGIFF 40/45 DT	3	2015	4	2015
NGIFF 40/45 OT	3	2015	4	2015
NGIFF IOC	4	2014	4	2014
DRAGON Technology Development	1	2012	1	2012
DRAGON Milestone B	1	2012	1	2012
DRAGON EMD	1	2012	2	2016
DRAGON DT/OT	1	2015	3	2016
DRAGON Milestone C	2	2016	2	2016
EP Technology Development	1	2013	4	2013
EP Milestone B	1	2014	1	2014
EP EMD	1	2014	4	2016
EP Milestone C	4	2016	4	2016
EP DT/OT	2	2016	4	2016
FPS Phase 1 DT/OT	1	2012	2	2012
FPS Phase 1 Release	2	2012	2	2012
FPS Phase 2 EMD	1	2012	2	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force				DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207417F: Airborne Warning and Control System (AWACS)		PROJECT 67411L: Airborne Warning & Control System (AWACS)	
		Start		End	
Events		Quarter	Year	Quarter	Year
FPS Phase 2 DT/OT		3	2013	4	2013
FPS Phase 2 Release		4	2013	4	2013
IPEC Technology Development		1	2015	3	2015
IPEC Milestone B		3	2015	3	2015
IPEC EMD		3	2015	4	2018