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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0207417F I Airborne Warning and Control System (AWACS)							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	85.727	151.726	120.664	0.000	120.664	153.600	181.614	172.908	203.121	Continuing	Continuing
67411L: Airborne Warning & Control System (AWACS)	-	85.727	151.726	120.664	0.000	120.664	153.600	181.614	172.908	203.121	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

This program, BA 7, PE 0207417F, project 67411L, E-3 Advanced Battle Management and Surveillance (ABMS) Bridge Capabilities, is a new start.

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

Mission: E-3 Airborne Warning and Control System (AWACS) is the premier airborne platform providing Battle Management (BM)/Command and Control (C2) 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.

1. E-3 DMS Replacement of Avionics for Global Operations and Navigation (DRAGON): DRAGON completes the Federal Aviation Administration (FAA), International Civil Aviation Organization (ICAO), and European Organization for the Safety of Air Navigation (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 BM/C2. DRAGON replaces the existing Diminishing Manufacturing Sources (DMS) Global Positioning System (GPS) Integrated Navigation System (GINS) with a modern Flight Management System (FMS) that will accommodate new capabilities including Mode 5 Identification Friend or Foe (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. Additionally, the acquisition of DRAGON flight simulators also contains DMS efforts which include removal of end-of-life software/hardware within simulator systems and move to a modular, common open system architecture that is sustainable and cyber resilient. The simulator effort also implements requirements and standards defined under the Simulator Common Architecture Requirements and Standards (SCARS) initiative. 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. DRAGON will provide development of support and test equipment needed for DRAGON production; DRAGON will also provide initial DMS and Initial Contractor Support (ICS) needed to support the first US developmental test aircraft (i.e., D-1) prior to the contract award of the DRAGON production effort. The Engineering and Manufacturing Development (EMD) phase of DRAGON was being executed as a Cooperative Program between the US and NATO.

2. E-3 Electronic Protection (EP): 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 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 battle manager's display in place of the current RSIP output when the EP radar modes are selected.

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<p>3. E-3 Training, Support, and Infrastructure (TSI): TSI provides continuing management support for AWACS modernization and enhancement. These activities include managing the AWACS Development Test and Evaluation (DT&amp;E) and Production infrastructure and tracking and monitoring the AWACS vendor's core mission and aircrew training, support equipment and program Government Furnished Property. The overall DT&amp;E test infrastructure supports development, production, and sustainment projects and maintains facilities to support AWACS aircraft during system and sub-system testing at Boeing Field, WA, Baltimore, MD, and Oklahoma City, OK. The TSI assets also support multiple international Airborne Early Warning and Control (AEW&amp;C) projects on a maintenance fee basis, not limited to projects for France, Saudi Arabia, United Kingdom, Japan, and North Atlantic Treaty (NATO) AEW&amp;C efforts. Key programs include contractual management of the AWACS Avionics Integration Laboratory (AIL) integrated with the Block 40/45 Functional Group configured lab and the AWACS Radar Systems Integration Lab/Software Development Facility (SIL/SDF). These labs provide US, Foreign Military Sales (FMS), and international customers with a configured development and qualification system and subsystem environment supporting all AWACS system and radar development and sustainment. 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.</p> <p>4. E-3 Command and Control, Intelligence, Surveillance, and Reconnaissance (C2ISR): C2ISR system improvements investigate and develop future capabilities of the AWACS weapon system. These efforts also include but are not limited to 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 materiel 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 &amp; Sustainment Roadmap that projects user capability needs, as well as materiel solutions for the user needs. C2ISR will also support an analytical comparison of the operational effectiveness, suitability, and life-cycle cost of alternative materiel solutions beyond the current AWACS that satisfy an established capability need identified in an Initial Capabilities Document (ICD).</p> <p>5. E-3 Internet Protocol Enabled Communication (IPEC): IPEC will provide the Block 40/45 E-3 with a medium-bandwidth Internet Protocol (IP) communications capability to connect to the Global Information Grid and will support net-centric operations/warfare. IPEC will provide a reliable IP-enabled communication capability to support a shortened digitized kill-chain of time-sensitive targets. The modification will provide a permanent Inmarsat-based IP-enabled communications package supporting warfighter identified requirements for increased bandwidth Secret Internet Protocol Router Network (SIPRNet) and multi-domain networks. IPEC was originally planned for accomplishment as a traditional acquisition program, but due to warfighter demand, the effort has been re-classified as an Urgent Operational Need (UON).</p> <p>6. E-3 Combat Identification (CID) DMS: AWACS' current CID capability is based upon 1960's era technology that has become unsustainable, and requires an update to retain a significant part of AWACS overall mission capability. AWACS will address C2 CID shortfalls with a modern, persistent Airborne Moving Target Indication (AMTI) BM/C2 combat ID. CID DMS supports the kill chain and decision superiority.</p> <p>7. E-3 Communication Network Upgrade (CNU): CNU will provide a Link 16 capability with high-jam-resistance, high-speed, crypto-secure computer-to-computer connectivity in support of every type of military platform from Air Force fighters to Navy submarines. The current 20 year old Class 2 terminal has sustainability/DMS issues and does not support mandated Crypto Mod (CM) &amp; Freq. Remap (FR). CNU resolves DMS issues, provides CM &amp; FR, Link 16 enhancements &amp; growth for Next Gen Tactical Data Link (TDL). Risk reduction activities are being executed in cooperation with foreign partners.</p>		

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8. E-3 Automatic Dependent Surveillance Broadcast (ADS-B) Out Acceleration: Updates flight deck to address known Air Traffic Management restrictions; replaces analog equipment with modern digital avionics to include ADS B Out and Mode 5 transponder since DRAGON's IOC 2020/FOC 2026 does not meet ADS B out or Mode 5 mandates. This subset accelerates the ADS-B Out and Mode 5 transponder FOC independent of DRAGON.						
9. E-3 Advanced Battle Management and Surveillance (ABMS) Bridge Capabilities: E-3 Bridge strategy addresses near-to mid-term gaps identified in Advanced Battle Management & Surveillance Capabilities Based Assessment (CBA) Initial Capabilities Document (ICD). Fields advanced communications, networking & sensor capabilities on E-3G to mitigate operational risk prior to arrival of ABMS in the early 2040s. Adds RDT&E funding to develop and integrate E-3G advanced communications/networking, adjunct sensors, and integration of off board sensors.						
This program element may include necessary civilian pay expenses required to manage, execute, and deliver E-3 AWACS weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, and 0605898F.						
The FY19 funding request was reduced by \$3.403 million to account for the availability of prior year execution balances.						
BA7 - This program is in Budget Activity 7, Operational System 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget		86.644	151.726	124.067	0.000	124.067
Current President's Budget		85.727	151.726	120.664	0.000	120.664
Total Adjustments		-0.917	0.000	-3.403	0.000	-3.403
• Congressional General Reductions		0.000	0.000			
• Congressional Directed Reductions		0.000	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		0.000	0.000			
• Congressional Directed Transfers		0.000	0.000			
• Reprogrammings		2.000	0.000			
• SBIR/STTR Transfer		-2.917	0.000			
• Other Adjustments		0.000	0.000	-3.403	0.000	-3.403
Change Summary Explanation						
FY17: Received \$2 million to fund Internet Protocol Enabled Communications (IPEC) development						
FY19: Reduced by \$3.403 million to account for the availability of prior year execution balances.						

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Title:</b> E-3 DMS Replacement of Avionics for Global Operations and Navigation (DRAGON) <b>Description:</b> DRAGON  <b>FY 2018 Plans:</b> - Develop Motion Trainer Simulator  <b>FY 2019 Plans:</b> - Continue development of Motion Trainer Simulator  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funding increased due to the continued Dragon Motion Trainer Simulator development		27.762	6.500	8.600
<b>Title:</b> E-3 Electronic Protection (EP) <b>Description:</b> EP  <b>FY 2018 Plans:</b> - Complete Functional Configuration Audit (FCA) and Physical Configuration Audit (PCA) - Continue Engineering and Manufacturing Development (EMD)  <b>FY 2019 Plans:</b> - Continue EMD  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funding increased due to the EP program continuation in EMD		18.365	38.191	38.400
<b>Title:</b> E-3 Training, Support and Infrastructure (TSI) <b>Description:</b> TSI  <b>FY 2018 Plans:</b> - Maintain and provide DT&E labs to AWACS programs - Support AWACS development and production programs lab integration & test efforts - Provide system lab support to EP, Block 40/45, DRAGON, NGIFF, IPEC, CID, ADSB-Out, and CNU improvement, integration and test - Support AWACS and other OSD mandated interoperability testing and support mandatory E-3 Operational, Safety, and Suitability and Effectiveness program  <b>FY 2019 Plans:</b>		9.761	11.735	12.978

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<ul style="list-style-type: none"> <li>- Will continue to maintain and provide DT&amp;E labs to AWACS programs</li> <li>- Will support AWACS development and production programs lab integration &amp; test efforts</li> <li>- Will provide system lab support to EP, Block 40/45, DRAGON, NGIFF, IPEC, CID, ADSB-Out, and CNU improvement, integration and test</li> <li>- Will support AWACS and other OSD mandated interoperability testing and support mandatory E-3 Operational, Safety, and Suitability and Effectiveness program</li> </ul> <p><b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funding increased due to additional testing requirements</p>				
<p><b>Title:</b> E-3 Command and Control, Intelligence, Surveillance and Reconnaissance (C2ISR)</p> <p><b>Description:</b> C2ISR</p> <p><b>FY 2018 Plans:</b></p> <ul style="list-style-type: none"> <li>- Conduct engineering / integration studies to determine required modifications and associated costs to upgrade and support risk reduction activities for program planning</li> <li>- Execute cooperative Independent Research and Development</li> </ul> <p><b>FY 2019 Plans:</b></p> <ul style="list-style-type: none"> <li>- Will continue to conduct engineering / integration studies to determine required modifications and associated costs to upgrade and support risk reduction activities for program planning</li> <li>- Will continue to execute cooperative Independent Research and Development</li> </ul> <p><b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funds decreased due to a decrease in requirements for risk reduction studies</p>		9.657	11.265	6.188
<p><b>Title:</b> E-3 Internet Protocol Enabled Communication (IPEC)</p> <p><b>Description:</b> IPEC</p> <p><b>FY 2018 Plans:</b> Complete Engineering, Manufacturing &amp; Development (EMD), Functional Configuration Audit (FCA)/ Physical Configuration Audit (PCA), and Technical Order (TO) Certification and Verification (C&amp;V).</p> <p><b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funding decreased due to the IPEC program moving into production.</p>		18.604	33.665	-
<p><b>Title:</b> E-3 Combat Identification (CID) Diminishing Manufacturing Sources (DMS)</p>		0.127	27.572	14.712

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Description:</b> CID DMS  <b>FY 2018 Plans:</b> - Conduct Risk Reduction for system-level integration, AWACS-specific modifications to the SEU, AWACS-specific antenna solutions, and integration prototyping.  <b>FY 2019 Plans:</b> - Will complete Phase II Risk Reduction activities including Risk Reduction for system-level integration, AWACS-specific modifications to the SEU, AWACS-specific antenna solutions, and integration prototyping.  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funding decreased for reduced risk reduction efforts				
<b>Title:</b> E-3 Communication Network Upgrade (CNU)  <b>Description:</b> CNU  <b>FY 2018 Plans:</b> - Award risk reduction contracts and Open Mission System activities  <b>FY 2019 Plans:</b> - Will award Engineering and Manufacturing Development contract  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Funding decreased for EMD efforts		1.451	21.113	15.233
<b>Title:</b> Automatic Dependent Surveillance-Broadcast Out Acceleration  <b>Description:</b> ADS-B Acceleration  <b>FY 2018 Plans:</b> - Complete RFP documentation and releasing EMD plans  <b>FY 2019 Plans:</b> - Will integrate new CDU and APX-119 on flight deck of E-3 Sentry - Will design series of flight deck alert lights  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b>		0.000	1.685	18.803

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
Funding increased for EMD contract			
<b>Title:</b> E-3 Advanced Battle Management and Surveillance (ABMS) Bridge Capabilities	-	0.000	5.750
<b>Description:</b> E-3 ABMS Bridge Capabilities			
<b>FY 2018 Plans:</b> N/A			
<b>FY 2019 Plans:</b> Risk Reduction Activities			
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> New Program			
<b>Accomplishments/Planned Programs Subtotals</b>	85.727	151.726	120.664

  

<b>D. Other Program Funding Summary (\$ in Millions)</b>											
			<u><b>FY 2019</b></u>	<u><b>FY 2019</b></u>	<u><b>FY 2019</b></u>						<u><b>Cost To</b></u>
<u><b>Line Item</b></u>	<u><b>FY 2017</b></u>	<u><b>FY 2018</b></u>	<u><b>Base</b></u>	<u><b>OCO</b></u>	<u><b>Total</b></u>	<u><b>FY 2020</b></u>	<u><b>FY 2021</b></u>	<u><b>FY 2022</b></u>	<u><b>FY 2023</b></u>	<u><b>Complete</b></u>	<u><b>Total Cost</b></u>
• APAF 05 Line Item E00300: <i>E-3</i>	88.699	179.632	133.199	-	133.199	176.473	158.263	196.766	242.996	Continuing	Continuing
• APAF 05 Line Item	245.227	164.786	57.780	-	57.780	41.777	39.566	28.758	0.000	0.000	577.894
E34045: <i>Airborne Warning and Control System</i>											
• APAF 06 Line Item 000999: <i>Initial Spares/Repair Parts</i>	22.061	23.539	13.563	-	13.563	24.175	21.293	21.720	22.114	Continuing	Continuing

**Remarks**

**E. Acquisition Strategy**

The modernization of the AWACS weapon system consists of multiple capability upgrades that are developed and fielded on existing sole source contracts. Full and open competition is explored for all new efforts where market research indicates opportunities exist.

Air Force Program Executive Officer (PEO) for Battle Management (AFPEO/BM) is the PEO and Milestone Decision Authority (MDA) for all AWACS Programs, with the exception of the E-3 Block 40/45 Upgrade. The E-3 Block 40/45 Upgrade MDA is the Secretary of the Air Force, with authority delegated to the Assistant Secretary of the Air Force (Acquisition) [SAF/AQ]. Of note, E-3 Block 40/45 Upgrade has completed development activities, so it has no 3600 funding and thus not otherwise referenced in this document. Air Force Life Cycle Management Center (AFLCMC) is the Contracting Authority for the AWACS portfolio and provides Contracts, Legal, and Comptroller Support.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force		Date: February 2018
<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207417F <i>I Airborne Warning and Control System (AWACS)</i>	
<b>F. Performance Metrics</b> 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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2019 Air Force</b>												<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 3600 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0207417F / Airborne Warning and Control System (AWACS)						<b>Project (Number/Name)</b> 67411L / Airborne Warning & Control System (AWACS)			
<b>Product Development (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
E-3 DMS Replacement of Avionics for Global Operations and Navigation (DRAGON)	SS/FPIF	Boeing : Seattle, WA	-	23.625	Jan 2017	9.225	Jan 2018	8.600	Jan 2019	-		8.600	Continuing	Continuing	-
E-3 Electronic Protection (EP)	SS/CPIF	Boeing : Seattle, WA	-	15.509	Jan 2017	34.767	Jan 2018	34.560	Jan 2019	-		34.560	Continuing	Continuing	-
E-3 Command and Control, Intelligence, Surveillance, and Reconnaissance	SS/ Various	Boeing : Seattle, WA	-	6.896	Jan 2017	10.514	Jan 2018	5.225	Jan 2019	-		5.225	Continuing	Continuing	-
E-3 Internet Protocol Enabled Communication (IPEC)	SS/ Various	Boeing : Oklahoma City, OK	-	16.728	Jan 2017	29.181	Jan 2018	-		-		-	Continuing	Continuing	-
E-3 Combat Identification (CID) Diminishing Manufacturing Sources (DMS) Risk Reduction Study	SS/CPFF	Raytheon : Fort Wayne, IN	-	-		15.561	May 2018	12.062	Nov 2018	-		12.062	Continuing	Continuing	-
E-3 Combat Identification (CID) Diminishing Manufacturing Sources (DMS) Prototype Development	TBD	TBD : TBD	-	0.000		10.000	May 2018	-		-		-	Continuing	Continuing	-
E-3 Communication Network Upgrade (CNU)	SS/ Various	Space & Naval Warfare Sys : San Diego, CA	-	1.095	Jan 2017	18.334	Jan 2018	11.723	Jan 2019	-		11.723	Continuing	Continuing	-
ADS-B Acceleration	TBD	TBD : TBD	-	0.000		0.600	Jan 2018	15.803	Jan 2019	-		15.803	Continuing	Continuing	-
E-3 ABMS Bridge Capabilities	TBD	TBD : TBD	-	0.000		0.000		5.750	Jan 2019	-		5.750	Continuing	Continuing	-
<b>Subtotal</b>			-	63.853		128.182		93.723		-		93.723	Continuing	Continuing	N/A
<b>Remarks</b> Total Program does not include NATO funds.															

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Air Force													<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 3600 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0207417F / Airborne Warning and Control System (AWACS)				<b>Project (Number/Name)</b> 67411L / Airborne Warning & Control System (AWACS)					
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
E-3 Training, Support & Infrastructure (TSI)	SS/ Various	Boeing : Seattle, WA	-	8.582	Jan 2017	10.525	Jan 2018	11.765	Jan 2019	-		11.765	Continuing	Continuing	-
<b>Subtotal</b>			-	8.582		10.525		11.765		-		11.765	Continuing	Continuing	N/A
<b>Management Services (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
(U) Program Management Administration (PMA)	Various	AWACS Program Office : Hanscom AFB, MA	-	12.831	Jan 2017	13.019	Jan 2018	15.176	Jan 2019	-		15.176	Continuing	Continuing	-
(U) Joint Test Facility	Various	Muliple : Seattle, WA	-	0.461	Jan 2017	0.000	Jan 2018	0.000	Jan 2019	-		0.000	Continuing	Continuing	-
<b>Subtotal</b>			-	13.292		13.019		15.176		-		15.176	Continuing	Continuing	N/A
			<b>Prior Years</b>	<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	85.727		151.726		120.664		-		120.664	Continuing	Continuing	N/A
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2019 Air Force							<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 3600 / 7				<b>R-1 Program Element (Number/Name)</b> PE 0207417F / Airborne Warning and Control System (AWACS)				<b>Project (Number/Name)</b> 67411L / Airborne Warning & Control System (AWACS)		

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>AWACS PE 0207417F</b>																												
DRAGON EMD																												
DRAGON IOT&E																												
DRAGON Milestone C (Jul 2017)																												
EP EMD																												
EP Milestone C (Dec 2019)																												
EP DT/OT																												
TSI																												
C2ISR																												
IPEC EMD																												
IPEC DT/OT (Sep 2017)																												
IPEC Milestone C (Apr 2018)																												
CID DMS TD																												
CID DMS Milestone B (Apr 2020)																												
CID DMS EMD																												
CID DT/OT																												
CID DMS Milestone C (Jul 2022)																												
CNU TMRR Phase																												
CNU Milestone B (Oct 2019)																												
CNU EMD																												
CNU Milestone C (Sep 2021)																												
ADS-B Accel Milestone B (Jul 2018)																												
ADS-B EMD																												
ADSB Milestone C (Mar 2021)																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force																								Date: February 2018													
Appropriation/Budget Activity 3600 / 7										R-1 Program Element (Number/Name) PE 0207417F / Airborne Warning and Control System (AWACS)										Project (Number/Name) 67411L / Airborne Warning & Control System (AWACS)																	
										FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
E-3 ABMS Bridge Capabilities Risk Reduction																																					
E-3 ABMS Bridge Capabilities EMD																																					

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Air Force			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207417F / Airborne Warning and Control System (AWACS)	<b>Project (Number/Name)</b> 67411L / Airborne Warning & Control System (AWACS)	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>AWACS PE 0207417F</b>				
DRAGON EMD	1	2017	1	2018
DRAGON IOT&E	3	2019	2	2020
DRAGON Milestone C (Jul 2017)	4	2017	4	2017
EP EMD	1	2017	1	2020
EP Milestone C (Dec 2019)	1	2020	1	2020
EP DT/OT	2	2019	4	2019
TSI	1	2017	4	2023
C2ISR	1	2017	4	2023
IPEC EMD	1	2017	1	2018
IPEC DT/OT (Sep 2017)	4	2017	4	2017
IPEC Milestone C (Apr 2018)	3	2018	3	2018
CID DMS TD	3	2018	3	2020
CID DMS Milestone B (Apr 2020)	3	2020	3	2020
CID DMS EMD	3	2020	2	2022
CID DT/OT	3	2020	3	2022
CID DMS Milestone C (Jul 2022)	4	2022	4	2022
CNU TMRR Phase	4	2017	3	2019
CNU Milestone B (Oct 2019)	1	2020	1	2020
CNU EMD	1	2020	4	2021
CNU Milestone C (Sep 2021)	4	2021	4	2021
ADS-B Accel Milestone B (Jul 2018)	4	2018	4	2018

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0207417F / Airborne Warning and Control System (AWACS)		Project (Number/Name) 67411L / Airborne Warning & Control System (AWACS)	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
ADS-B EMD		2	2019	2	2021
ADSB Milestone C (Mar 2021)		2	2021	2	2021
E-3 ABMS Bridge Capabilities Risk Reduction		1	2019	4	2020
E-3 ABMS Bridge Capabilities EMD		1	2021	4	2023