Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force Date: May 2017

Appropriation/Budget Activity R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7: PE 0207417F I Airborne Warning and Control System (AWACS)

Operational Systems Development

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost		
Total Program Element	-	124.457	86.644	151.726	0.000	151.726	124.067	92.428	81.441	78.731	Continuing	Continuing		
67411L: Airborne Warning & Control System (AWACS)	-	124.457	86.644	151.726	0.000	151.726	124.067	92.428	81.441	78.731	Continuing	Continuing		
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-				

Note

This program, BA 07 PE 0207417F, project 67411L, Automatic Dependent Surveillance-Broadcast Out Acceleration, 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.,
- 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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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	
3600: Research, Development, Test & Evaluation, Air Force I BA 7:	PE 0207417F I Airborne Warning and Control System (A	WACS)
Operational Systems Development		

- 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&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&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. Funding is shared between Research, Development, Test, and Evaluation (RDT&E) and production funds. The TSI assets also support multiple international Airborne Early Warning and Control (AEW&C) projects on a maintenance fee basis, not limited to projects for France, Saudi Arabia, United Kingdom, Japan, and North Atlantic Treaty (NATO) AEW&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, production, 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.
- 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 the 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 & 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).
- 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).
- 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.

In FY17 CID was a new start.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

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

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. Current 20 year old Class 2 terminal has sustainability/DMS issues and does not support mandated Crypto Mod (CM) & Freq. Remap (FR). CNU resolves DMS issues, provides CM & FR, Link 16 enhancements & growth for Next Gen Tactical Data Link (TDL). In previous budget cycle, this effort was referred to as Multifunctional Information Distribution System Joint Tactical Radio System (MIDS JTRS). Risk reduction activities are being executed in cooperation with foreign partners.

In FY17 CNU was a new start

8. E-3 Automatic Dependent Surveillance Broadcast (ADS-B) Out Acceleration: Updates flight deck to address known Air Traffic Management restrictions; replace analog equipment with modern digital avionics to include ADS B Out and Mode 5 transponder; DRAGON's IOC 2020 – FOC 2026 does not meet ADS B out or Mode 5 mandates. Accelerates ADS-B Out and Mode 5 transponder from DRAGON – moves FOC for this DRAGON subset from FY25 to FY21.

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	131.812	86.644	121.067	0.000	121.067
Current President's Budget	124.457	86.644	151.726	0.000	151.726
Total Adjustments	-7.355	0.000	30.659	0.000	30.659
 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 	-3.012	0.000			
SBIR/STTR Transfer	-4.343	0.000			
Other Adjustments	0.000	0.000	30.659	0.000	30.659

Change Summary Explanation

FY2016 delta due to a \$3.012M Below Threshold Reprogramming to fund higher Air Force priorities and -\$4.343M for Small Business Innovation Research (SBIR).

FY2018 funding request was increased by \$30.659M to include: Aircraft Dependent Surveillance - Broadcast (ADS-B) acceleration for \$26.493M and \$3.716M to investigate and develop further capabilities of the AWACS weapon system.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: E-3 DMS Replacement of Avionics for Global Operations and Navigation (DRAGON)	53.943	34.656	18.345

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force		Date: N	lay 2017	
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 Sy	stem (AWACS)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Description: DRAGON				
FY 2016 Accomplishments: -Completed N-1 (common) Functional Configuration Audit (FCA) and Phy -Performed D-1 Installation & Checkout -Started D-1 Ground and Flight Test -Conducted D-1 Tech Order validation -Completed flight testing on N-1 -Awarded contract for DRAGON simulators	sical Configuration Audit (PCA)			
-Starting D-1 FCA and PCA -Completing development of D-1 FCA and PCA -Boeing delivering D-1 -Boeing delivering two virtual desktop trainer kits -Delivering First Flight Training Device -Completing N-1 Type 1 training -Completing ADSB-Out development and test -Boeing delivering N-1 -Starting D-1 Ops Type 1 training -Delivering Fixed Trainer Simulator				
FY 2018 Plans: -Will develop Motion Trainer Simulator				
Title: E-3 Electronic Protection (EP)		41.217	16.792	30.895
Pescription: EP FY 2016 Accomplishments: -Conducted EMD contract Kick-off meeting -Conducted delta System Requirements Review (SRR) -Conducted System Level Preliminary Design Review (PDR) -Continued development of classified technology solutions to mitigate issues.	ues/concerns identified in the RMP study			

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force		Date: N	1ay 2017			
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development	stem (AWACS)					
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018		
-Conducted Critical Design Review (CDR)						
FY 2017 Plans: -Conducting Test Readiness Review (TRR) -Scheduling Installation and Check Out (I&CO) -Continuing development and maturation of classified technology radar sol Software Development Facility (SDF) and Avionics Integration Laboratory						
FY 2018 Plans: -Will Complete Functional Configuration Audit (FCA) and Physical Configu-Will DD250 & PoP complete	ration Audit (PCA)					
Title: E-3 Training, Support and Infrastructure (TSI)		9.500	13.181	15.17		
Description: TSI						
FY 2016 Accomplishments: -Supported AWACS developmental and production program lab integration -Provided system lab support to EP, Block 40/45, DRAGON, NGIFF, IPEC -Supported E-3 and other OSD mandated interoperability testing and provi Suitability and Effectiveness efforts -Supported the E-3 AWACS Developmental Test and Evaluation AIL	, radar improvement efforts, integration and test					
FY 2017 Plans: -Awarding follow-on contract(s) -Supporting AWACS developmental and production programs lab integratiProviding system lab support to EP, Block 40/45, DRAGON, NGIFF, IPEC -Supporting AWACS and other OSD mandated interoperability testing and Suitability and Effectiveness program -Supporting the E-3 AWACS Developmental Test & Evaluation AIL	C, radar improvement, integration and test					
FY 2018 Plans: -Will continue to maintain and provide DT&E labs to AWACS programs -Will support AWACS development and production programs lab integratio -Will provide system lab support to EP, Block 40/45, DRAGON, NGIFF, IPI						

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force		Date: M	lay 2017	
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 Systems	tem (AWACS)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
-Will support AWACS and other OSD mandated interoperability testing an Suitability and Effectiveness program	nd support mandatory E-3 Operational, Safety, and			
Title: E-3 Command and Control, Intelligence, Surveillance and Reconna	issance (C2ISR)	4.008	5.735	7.992
Description: C2ISR				
FY 2016 Accomplishments: -Conducted engineering / integration studies to determine required modific Risk Reduction activities for program planning -Continued to execute International Cooperative Research & Development				
FY 2017 Plans: -Conducting engineering / integration studies to determine required modifinisk reduction activities for program planning -Executing cooperative IR&D				
FY 2018 Plans: -Will continue to conduct engineering / integration studies to determine reand support risk reduction activities for program planning -Will continue to execute cooperative IR&D	quired modifications and associated costs to upgrade			
Title: E-3 Internet Protocol Enabled Communication (IPEC)		15.789	14.280	0.000
Description: IPEC				
FY 2016 Accomplishments: -Continued EMD activities in preparation for contractor Development Test	(DT) and Government DT and Operational Test (OT)			
FY 2017 Plans: -Completing EMD, DT, and OT				
FY 2018 Plans: N/A				

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

Description: CID DMS

FY 2016 Accomplishments:

Title: E-3 Combat Identification (CID) Diminishing Manufacturing Sources (DMS)

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R-1 Line #200

0.000

1.000

27.572

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force		Date: N	1ay 2017	
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 Syste	em (AWACS)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
N/A				
FY 2017 Plans: -Planning work on risk reduction effort to buy down development risk -Planning for award of 2nd phase of risk reduction contract prior to EMD -Releasing RFP for Sensor Electronics Unit (SEU)				
FY 2018 Plans: -Will award EMD contract -Will award SEU Production Contract				
Title: E-3 Communication Network Upgrade (CNU)		0.000	1.000	25.160
Description: CNU				
FY 2016 Accomplishments: N/A				
FY 2017 Plans: -Conducting a study focused on buying down development				
FY 2018 Plans: -Will award EMD contract				
Title: Automatic Dependent Surveillance-Broadcast Out Acceleration		0.000	0.000	26.583
Description: ADS-B Acceleration				
FY 2016 Accomplishments: N/A				
FY 2017 Plans: N/A				
FY 2018 Plans: -Will integrate new CDU and APX-119 on flight deck of E-3 Sentry -Will design series of flight deck alert lights				
	Accomplishments/Planned Programs Subtotals	124.457	86.644	151.726

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

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

Operational Systems Development

D. Other	Program	Funding	Summary	(\$ i	n Millions)

	•		FY 2018	FY 2018	FY 2018					Cost To	
Line Item	FY 2016	FY 2017	Base	000	Total	FY 2019	FY 2020	FY 2021	FY 2022		Total Cost
APAF: BA05: Line	12.828	89.386	189.772	0.000	189.772	153.386	167.173	152.250	159.675	Continuing	Continuing
Item # E00300: <i>E-3</i>											
APAF: BA05: Line Item #	178.308	245.227	164.786	0.000	164.786	66.604	31.360	1.068	0.000	0.00	767.373
E34045: Airborne Warning											
and Control System											
APAF: BA06: Line Item #	15.616	22.061	23.539	0.000	23.539	23.938	24.366	21.472	21.903	Continuing	Continuing
000000 10111-1 00-00-1/0-0-1/0-0-1											

000999: Initial Spares/Repair Parts

Remarks

E. Acquisition Strategy

N/A

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.

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Air Force

Appropriation/Budget Activity

3600 / 7

R-1 Program Element (Number/Name)
PE 0207417F *I Airborne Warning and*

Control System (AWACS)

Project (Number/Name)

67411L Ì Airborne Warning & Control

Date: May 2017

System (AWACS)

Product Development (\$ in Millions)				FY 2016		FY 2	2017	FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
(U) E-3 DMS Replacement of Avionics for Global Operations and Navigation (DRAGON)	SS/FPIF	Boeing : Seattle, WA	-	49.451	Jan 2016	30.585	Jan 2017	18.345	Jan 2018	0.000		18.345	Continuing	Continuing	-
(U) E-3 Electronic Protection (EP)	SS/CPIF	Boeing : Seattle, WA	-	38.750	Feb 2016	14.143	Jan 2017	27.717	Jan 2018	0.000		27.717	Continuing	Continuing	-
(U) E-3 Command and Control, Intelligence, Surveillance, and Reconnaissance	SS/ Various	Boeing : Seattle, WA	-	1.961	Jan 2016	3.188	Jan 2017	5.442	Jan 2018	0.000		5.442	Continuing	Continuing	-
(U) E-3 Internet Protocol Enabled Communication (IPEC)	SS/ Various	Boeing : Oklahoma City, OK	-	13.560	Mar 2016	12.511	Jan 2017	0.000		0.000		0.000	Continuing	Continuing	-
(U) E-3 Combat Identification (CID) Diminishing Manufacturing Sources (DMS)	TBD	TBD : TBD	-	0.000		1.000	Jun 2017	24.592	Jan 2018	0.000		24.592	Continuing	Continuing	-
(U) E-3 Communication Network Upgrade (CNU)	TBD	TBD : TBD	-	0.000		1.000	May 2017	22.038	Jan 2018	0.000		22.038	Continuing	Continuing	-
(U) ADS-B Acceleration	TBD	TBD : TBD	-	0.000		0.000		24.083	Jan 2018	0.000		24.083	Continuing	Continuing	-
		Subtotal	-	103.722		62.427		122.217		0.000		122.217	-	-	-

Remarks

Total Program does not include NATO funds.

Support (\$ in Millions)					FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-		-	-	-	-

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

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Exhibit R-3, RDT&E	Project C	ost Analysis: FY 2	018 Air F	orce								Date:	May 201	7		
Appropriation/Budget Activity 3600 / 7						PE 020		irborne V	umber/N Warning a	Project (Number/Name) 67411L I Airborne Warning & Control System (AWACS)						
Test and Evaluation (\$ in Millions)			FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
(U) E-3 Training, Support & Infrastructure (TSI)	SS/ Various	Boeing : Seattle, WA	-	9.120	Jan 2016	12.716	Jan 2017	14.629	Jan 2018	0.000		14.629	Continuing	Continuing	-	
		Subtotal	-	9.120		12.716		14.629		0.000		14.629	-	-	-	
Management Service	es (\$ in M	illions)		FY 2	2016	FY 2	2017		2018 ise	FY 2		FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
(U) Program Management Administration (PMA)	Various	AWACS Program Office : Hanscom AFB, MA	-	11.220	Oct 2015	11.006	Oct 2016	14.330	Jan 2018	0.000		14.330	Continuing	Continuing	-	
(U) Joint Test Facility	Various	Muliple : Seattle, WA	-	0.395	Jan 2016	0.495	Jan 2017	0.550	Jan 2018	0.000		0.550	Continuing	Continuing	_	
		Subtotal	-	11.615		11.501		14.880		0.000		14.880	-	-	_	
			Prior Years	FY	2016	FY 2	2017		2018 ase	FY 2		FY 2018 Total	Cost To	Total Cost	Target Value of Contract	

Remarks

PE 0207417F: Airborne Warning and Control System (AWA... Air Force

chibit R-4, RDT&E Schedule Profile: FY 20	18 Air Force											Dat	e: M	ay 20	17	<u> </u>	
ppropriation/Budget Activity 00 / 7	R-1 Program Element (Number/Name) PE 0207417F I Airborne Warning and Control System (AWACS) Project (Number/Name) 67411L I Airborne Warning & Control System (AWACS)																
	FY 2016	FY 2017		FY 201	8	F'	Y 2019		FY	2020			202 ²			FY 2	
	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
DRAGON EMD																	
DRAGON DT/OT																	
DRAGON Milestone C (May, 2017)																	
EP EMD																	
EP Milestone C (Jul, 2018)																	
EP DT/OT																	
TSI																	
C2ISR																	
IPEC EMD																	
IPEC DT/OT (Jul 2017 - Aug 2017)																	
IPEC Milestone C (Apr 2018)																	
CID DMS TD																	
CID DMS Milestone B (Oct, 2017)																	
CID DMS EMD																	
CID DT/OT																	
CID DMS Milestone C (Sep, 2020)																	
CNU TD Phase																	
CNU Milestone B (Jun, 2019)																	
CNU EMD																	
CNU Milestone C (Sep, 2021)																	
ADS-B Accel Milestone B (Jun, 2018)																	
ADS-B EMD																	
ADSB Milestone C (Jun, 2019)																	

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force		Date: May 2017	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207417F I Airborne Warning and Control System (AWACS)	, ,	umber/Name) uirborne Warning & Control WACS)

Schedule Details

	Sta	Start				
Events	Quarter	Year	Quarter	Year		
DRAGON EMD	1	2016	3	2017		
DRAGON DT/OT	1	2017	2	2020		
DRAGON Milestone C (May, 2017)	3	2017	3	2017		
EP EMD	1	2016	2	2018		
EP Milestone C (Jul, 2018)	4	2018	4	2018		
EP DT/OT	4	2017	2	2018		
TSI	1	2016	4	2022		
C2ISR	1	2016	4	2022		
IPEC EMD	1	2016	4	2017		
IPEC DT/OT (Jul 2017 - Aug 2017)	4	2017	4	2017		
IPEC Milestone C (Apr 2018)	3	2018	3	2018		
CID DMS TD	1	2017	2	2018		
CID DMS Milestone B (Oct, 2017)	1	2018	1	2018		
CID DMS EMD	3	2018	4	2020		
CID DT/OT	3	2020	4	2020		
CID DMS Milestone C (Sep, 2020)	4	2020	4	2020		
CNU TD Phase	1	2018	3	2019		
CNU Milestone B (Jun, 2019)	3	2019	3	2019		
CNU EMD	3	2019	4	2021		
CNU Milestone C (Sep, 2021)	4	2021	4	2021		
ADS-B Accel Milestone B (Jun, 2018)	3	2018	3	2018		
ADS-B EMD	2	2018	2	2020		

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force	Date: May 2017		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Nu	umber/Name)
3600 / 7	PE 0207417F I Airborne Warning and	67411L <i>I Al</i>	irborne Warning & Control
	Control System (AWACS)	System (Al	NACS)

	St	art	End			
Events	Quarter	Year	Quarter	Year		
ADSB Milestone C (Jun, 2019)	3	2019	3	2019		