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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					PE 0102326F I Region/Sector Operation Control Center Modernization Program							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	1.570	1.272	-	-	-	-	-	-	-	-	2.842
674592: R/SAOC MODERNIZATION	-	1.570	1.272	-	-	-	-	-	-	-	-	2.842
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Efforts in this program element, 0102326F, will complete in FY15.

A. Mission Description and Budget Item Justification

A. Mission Description and Budget Item Justification

Battle Control System-Fixed (BCS-F) is the operational equipment replacement in the fixed air defense sites, Region/Sector Air Operations Center (R/SAOC), also known as Region Air Operations Center-Air Defense Sector (RAOC-ADS). The BCS-F Program supports a battle management command and control system with capability to integrate data from civil and military defense surveillance systems into a comprehensive, recognized air picture. This integrated air picture enhances the North American Aerospace Defense/Combatant Commander's (NORAD/CC's) capability to conduct peacetime air sovereignty, transition, and warfare. The BCS-F system serves as the Air Force's Homeland Defense battle management, command, and control hub and integrates data from radar sensors, data links, and the supporting communications architecture. It provides the tactical communications and data link capabilities that enable planning, directing, coordinating, and controlling forces for air surveillance, air defense, and control of sovereign US air space. BCS-F is a bi-national program with Canada, ensuring air defense and surveillance capability, including Hawaii. BCS-F achieved Initial Operational Capability in October 2006 and full deployment declaration in Nov 2012. The National Capital Region - Integrated Air Defense System (NCR-IADS) is a post-September 11, 2001 rapidly fielded capability to improve low altitude detection capability in order to prosecute airborne threats to the NCR. The Air Defense Sector (ADS) feeds the Air Picture and Targets of Interest (TOI) to the NCR-IADS. NCR-IADS provides ground-based air defense of the NCR airspace, and provides an integrated air surveillance picture, fire control quality air picture, ground air defense weapons, enhanced regional situational awareness and forensic data collection capabilities for the warfighter.

This program is in Budget Activity 07, 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.

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B. Program Change Summary (\$ in Millions)				FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total				
Previous President's Budget				1.624	1.522	-	-	-				
Current President's Budget				1.570	1.272	-	-	-				
Total Adjustments				-0.054	-0.250	-	-	-				
• Congressional General Reductions				-	-							
• Congressional Directed Reductions				-	-							
• Congressional Rescissions				-	-							
• Congressional Adds				-	-							
• Congressional Directed Transfers				-	-							
• Reprogrammings				-	-							
• SBIR/STTR Transfer				-0.054	-							
• Other Adjustments				-	-0.250	-	-	-				
C. Accomplishments/Planned Programs (\$ in Millions)							FY 2014	FY 2015	FY 2016			
Title: Battle Control System Modernization Upgrades							1.570	1.272	-			
Description: The development, systems engineering, test and evaluation of the BCS Modernization Upgrades program to include Release 3.2.2 efforts and beyond.												
FY 2014 Accomplishments: Performed development, systems engineering, test and evaluation of the BCS Modernization Upgrades program to include Release of 3.2.2 efforts and RM Redundancy.												
FY 2015 Plans: Efforts include, but are not limited to, systems engineering and the test and evaluation of the BCS Modernization Upgrades program, such as RM and modification studies like the ADS-B.												
FY 2016 Plans: N/A												
Accomplishments/Planned Programs Subtotals							1.570	1.272	-			
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
• OPAF: BA07: Line Item # 833030: Battle Control System - Fixed	14.412	2.704	1.687	-	1.687	6.407	4.006	4.078	4.150	Continuing	Continuing	

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D. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Remarks E. Acquisition Strategy Battle Control System-Increment 3: The BCS-Fixed program utilized a sole source contracting strategy that declared full deployment, completing the ACAT 1AC program. The BCS Modernization Upgrades program used a sole source contracting strategy for the RM redundancy effort.											
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 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0102326F / Region/Sector Operation Control Center Modernization Program				Project (Number/Name) 674592 / R/SAOC MODERNIZATION					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 Complete	Total Cost	Target Value of Contract
BCS Modernization Upgrade	Various	Various : ,	-	0.707	Feb 2014	0.752	May 2015	-		-		-	-	1.459	-
RM Redundancy	SS/CPFF	Thales Raytheon Systems : Fullerton, CA	-	0.533	Feb 2014	-		-		-		-	-	0.533	-
Subtotal			-	1.240		0.752		-		-		-	-	1.992	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 Complete	Total Cost	Target Value of Contract
46th Test Wing/Other Test Act	Various	Various : Various,	-	-		0.186	Nov 2014	-		-		-	-	0.186	-
Subtotal			-	-		0.186		-		-		-	-	0.186	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 Complete	Total Cost	Target Value of Contract
Program Management and Administration	Various	AFMC/AFLCMC : Hanscom AFB, MA	-	0.330	Oct 2013	0.334	Oct 2014	-		-		-	-	0.664	-
Subtotal			-	0.330		0.334		-		-		-	-	0.664	-

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	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	-	1.570		1.272		-		-		-	-	2.842	-	
Remarks														

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0102326F / <i>Region/Sector Operation Control Center Modernization Program</i>			Project (Number/Name) 674592 / <i>R/SAOC MODERNIZATION</i>

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
BCS-Fixed RM Redundancy																												
BCS Modernization Upgrades Version 3.2.2																												
BCS ModernizationUpgrades Version 3.2.3																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
BCS-Fixed RM Redundancy	1	2014	4	2015
BCS Modernization Upgrades Version 3.2.2	1	2014	2	2014
BCS ModernizationUpgrades Version 3.2.3	1	2014	2	2015