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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0102326F: Region/Sector Operation Control Center Modernization Program

BA 7: Operational Systems Development

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	-	6.283	5.609	1.700	-	1.700	1.500	0.000	0.000	0.000	Continuing	Continuing
674592: Region/Sector Operations Modernization Center (R/SAOC)	-	6.283	5.609	1.700	-	1.700	1.500	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

MDAP/MAIS Code(s): N32

A. Mission Description and Budget Item Justification

Battle Control System-Fixed (BCS-F) is the replacement for the fixed sites for the Region/Sector Air Operations Center (R/SAOC), also known as Region Air Operations Center-Air Defense Sector (RAOC-ADS). The BCS-F Program, which supports Operation NOBLE EAGLE, is a next-generation battle management command and control system with enhanced capability to integrate data from existing and future civil and military defense surveillance systems into a comprehensive recognized air picture and National Capital Region/Integrated Air Defense System (NCR/IADS). This multi-input single integrated air control picture enhances the North American Aerospace Defense/Combatant Commander's (NORAD/CC's) capability to conduct peacetime air sovereignty, transition, and conventional warfare in the event of aggression toward the North American continent (including Hawaii). 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 (including the National Capital Region). BCS-F is a bi-national cooperative program with Canada, ensuring air defense and surveillance capability for the entire North American continent (including Hawaii). BCS-F achieved Initial Operational Capability in October 2006. The BCS-F Increment 3 program achieved Full Deployment 29 November 2012. Upon the full deployment declaration, the ACAT 1AC is transitioning to an inactive program.

NCR-IADS is the post-September 11 2001, quickly established, ground based air defense system using sensors to enhance the air surveillance picture incorporated in BCS-F.

Battle Control System-Modernization/Sustainment: The BCS Modernization program efforts include, but are not limited to, providing system changes to facilitate mission area changes such as Radiant Mercury (RM) Redundancy, Distributed Mission Operations (DMO), Battle Control Center (BCC) Expansion, Automatic Dependent Surveillance-Broadcast (ADS-B), Remote Tactical Air Picture (RTAP) extensibility, sensor integration (JLENS, LSTAR, STARS), and Certified Network Defense Service Provider (CNDSP). Activities also include studies and analysis to support both current program planning and execution, as well as future program planning.

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

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

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

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0102326F: Region/Sector Operation Control Center Modernization Program

DATE: April 2013

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

This program is in Budget Activity 7, Operational System Development, which incude development efforts to upgrade systems currently fielded or have 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	6.466	5.609	1.700	-	1.700
Current President's Budget	6.283	5.609	1.700	-	1.700
Total Adjustments	-0.183	0.000	0.000	-	0.000
 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 	0.000	0.000			
 SBIR/STTR Transfer 	-0.183	0.000			
Other Adjustments	0.000	0.000	0.000	-	0.000

Change Summary Explanation

The program is transitioning to modernization sustainment.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: BCS-F Increment 3	4.810	0.000	0.000
Description: The fielding and delivery of the ACAT 1AC program in Nov 2012.			
FY 2012 Accomplishments: Completed fielding deliver the ACAT 1AC program in Nov 2012			
FY 2013 Plans: N/A			
FY 2014 Plans: N/A			
Title: NCR-IADS	0.399	0.398	0.000
Description: The fielding and delivery of a non-ACAT program.			
FY 2012 Accomplishments:			

PE 0102326F: Region/Sector Operation Control Center Modernizati... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: 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 0102326F: Region/Sector Operation Control Center Modernization Program					
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014		
Completed fielding delivery of version 3.2 in Dec 2012.						
FY 2013 Plans: Complete fielding delivery of version 3.3.						
FY 2014 Plans: N/A						
Title: Battle Control System Modernization/Sustainment		0.507	3.252	1.48		
Description: The development, systems engineering, test and evaluate Release 3.2.2 efforts and beyond.	uation of the Modernization/Sustainment program to include					
FY 2012 Accomplishments: N/A						
FY 2013 Plans: This program is performing development, systems engineering, test include Release 3.2.2 and beyond, RM Redundancy, CNDSP, and to						
FY 2014 Plans: This program will perform development, systems engineering, test a include Release 3.2.2 efforts and beyond.	nd evaluation of the Modernization/Sustainment program to					
Title: Program Management Administration (PMA)		0.567	1.959	0.21		
Description: Program Office support of BCS-F Increment 3, and the testing and fielding.	e Modernization/Sustainment Program to include development,					
FY 2012 Accomplishments: The program office supported BCS-F Increment 3, and the Moderniz and fielding.	zation/Sustainment Program to include development, testing					
FY 2013 Plans: The program office is supporting BCS-F Increment 3, and the Model and fielding.	rnization/Sustainment Program to include development, testing					
FY 2014 Plans:						

PE 0102326F: Region/Sector Operation Control Center Modernizati...
Air Force

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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0102326F: Region/Sector Operation Control Center Modernization Program

BA 7: Operational Systems Development

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
The program office will support BCS-F Increment 3, and the Modernization/Sustainment Program to include development, testing and fielding.			
Accomplishments/Planned Programs Subtotals	6.283	5.609	1.700

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

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
OPAF: BA07: Line Item #	33.527	17.368	19.248		19.248	1.634	1.709	3.991	4.063	Continuing	Continuing

833030: Battle Control System -

Fixed Remarks

E. Acquisition Strategy

Battle Control System-Increment 3: The BCS-Fixed program utilized a sole source contracting strategy that declared full deployment in November 2012, completing the ACAT 1AC program.

NCR-IADS Version 3: The NCR-IADS program utilizes a competitive contractor logistics support strategy to sustain and maintain the system.

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 0102326F: Region/Sector Operation Control Center Modernizati... Air Force

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DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0102326F: Region/Sector Operation 674592: Region/Sector Operations Control Center Modernization Program Modernization Center (R/SAOC) BA 7: Operational Systems Development FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** oco FY 2012 FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost Thales Raytheon Continue acquisition activities associated with SS/CPIF Systems: Fullerton, 1.964 Dec 2011 0.000 1.485 Feb 2014 1.485 0.000 3.449 40.108 System Development 0.000 1.964 0.000 1.485 0.000 1.485 0.000 3.449 Subtotal 40.108 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 oco Total Base Contract Target Method Performing All Prior Award Award Award Award Cost To Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Program Management C/FFP Various:Various, 1.803 Dec 2011 1.892 Oct 2011 0.000 0.000 Continuing Continuing TBD Tech Spt System Engineering SS/FFP MITRE:Bedford, MA 1.442 Oct 2011 1.500 Oct 2011 0.000 0.000 Continuina Continuina TBD Subtotal 0.000 3.392 3.245 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) oco Total FY 2012 FY 2013 Base Contract Target Method Performing **All Prior** Award Award Award Award **Cost To** Value of Total **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract 46th Test Wing/Other Test Various Various: Various. 0.108 Oct 2011 1.530 Oct 2011 0.000 0.000 0.000 1.638 9.101 Act NCR-IADS Integration Various: Various. 0.399 Dec 2011 0.398 Dec 2012 0.000 0.000 Continuing Continuing TBD Various Testing 0.000 0.507 1.928 0.000 0.000 0.000 Subtotal FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract **Target** Method Performing All Prior Award Award Award Award Cost To Total Value of Cost Cost **Cost Category Item** & Type Activity & Location Years Date Cost Date Cost Date Date Cost Complete Cost Contract AFMC/ Program Management and ESC:Hanscom AFB. Various 0.567 Oct 2011 0.289 Oct 2012 0.215 Oct 2013 0.215 Continuing Continuing TBD Administration

PE 0102326F: Region/Sector Operation Control Center Modernizati...
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

3600: Research, Development, Test & Evaluation, Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

BA 7: Operational Systems Development

PE 0102326F: Region/Sector Operation Control Center Modernization Program

674592: Region/Sector Operations Modernization Center (R/SAOC)

DATE: April 2013

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.000	0.567		0.289		0.215		0.000		0.215			
			All Prior Years	FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	6.283		5.609		1.700		0.000		1.700			

Remarks

PE 0102326F: Region/Sector Operation Control Center Modernizati... Air Force

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

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

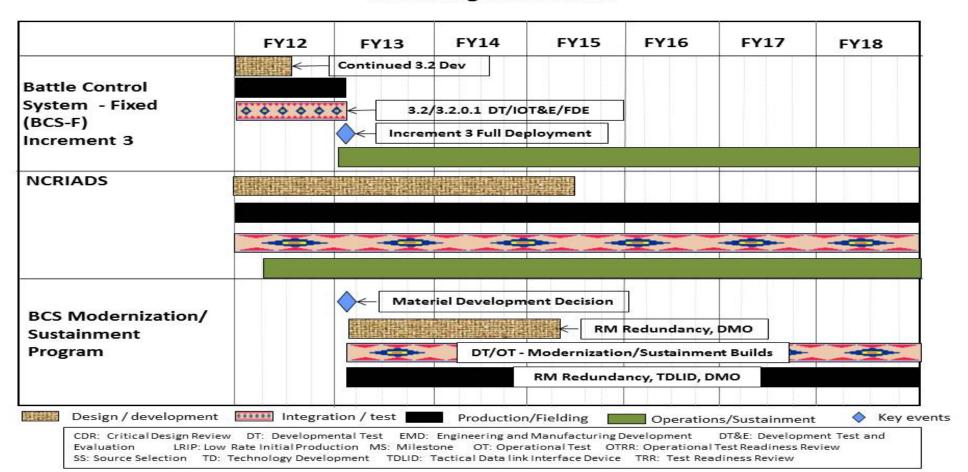
PE 0102326F: Region/Sector Operation Control Center Modernization Program

PROJECT

674592: Region/Sector Operations Modernization Center (R/SAOC)

DATE: April 2013

BCS-F Program Schedule



PE 0102326F: Region/Sector Operation Control Center Modernizati... Air Force

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0102326F: Region/Sector Operation 674592: Region/Sector Operations

BA 7: Operational Systems Development Control Center Modernization Program Modernization Center (R/SAOC)

Schedule Details

	St	art	E	ind
Events	Quarter	Year	Quarter	Year
Continuation of Release 3.2 Software Development	1	2012	2	2012
Release 3.2 Integration/Test	1	2012	4	2015
Release 3.2 Production/Fielding	1	2012	1	2013
Increment 3 Full Deployment	1	2013	1	2013
Release 3.2 Sustainment	1	2013	4	2018
Materiel Development Decision	1	2013	1	2013
Radiant Mercury Redundancy/Distributed Military Operations	1	2013	2	2015
Developmental Test/Operational Test-Modernization/Sustainment Builds	1	2013	4	2018
Radiant Mercury Redundancy, Tactical Datalink Interface Device, Distributed Mission Operations	1	2013	4	2018