

UNCLASSIFIED

PE NUMBER: 0102326F

PE TITLE: REGION/ SECTOR OPERATIONS CONTROL CENTER

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0102326F REGION/ SECTOR OPERATIONS CONTROL CENTER
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	22.628	23.793	25.734	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
4592 Region/Sector Operations Modernization Center (R/SAOC)	22.628	23.793	25.734	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

(U) 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), for the Atmospheric Early Warning System (AEWS). The BCS-F program, which supports NOBLE EAGLE, is an FY07-fielded 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. BCS-F systems serve as the Air Force's Homeland Defense battle management, command, and control hubs and integrate data from radar sensors, data links, and the supporting communications architecture. They provide the tactical communications and data link capabilities with other military and civil systems responsible for conducting the planning, directing, coordinating, and controlling forces for air surveillance, air defense, and control of sovereign US air space (including the National Capital Region). The BCS-F system is a bi-national cooperative program with Canada, ensuring air defense and surveillance capability for the entire North American continent.

The R/SAOC legacy system had reached saturation in its capability to receive, process, display, exchange, and employ air surveillance data from current sensor and communication systems, thus contributing to delays in the kill chain. The outdated technology was costly to sustain and provided no opportunity for application enhancement. The BCS-F system replaced this antiquated system and achieved Initial Operational Capability in October 2006. With each successive increment, BCS-F provides a more effective Homeland Defense capability.

Ongoing planning and associated activities will take place to prevent and overcome diminishing manufacturing sources and obsolescence issues as required.

This program is in Budget Activity 7 - Operational System Development because it provides funding for the replacement of a currently existing and operating system.

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BUDGET ACTIVITY

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(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget	23.262	23.858	26.171
(U) Current PBR/President's Budget	22.628	23.793	25.734
(U) Total Adjustments	-0.634	-0.065	
(U) Congressional Program Reductions	0.000		
Congressional Rescissions		-0.065	
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-0.634		
(U) <u>Significant Program Changes:</u>			

Exhibit R-2a, RDT&E Project Justification

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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total	
4592 Region/Sector Operations Modernization Center (R/SAOC)	22.628	23.793	25.734	0.000	0.000	0.000	0.000	0.000	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

(U) 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), for the Atmospheric Early Warning System (AEWS). The BCS-F program, which supports NOBLE EAGLE, is an FY07-fielded 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. BCS-F systems serve as the Air Force's Homeland Defense battle management, command, and control hubs and integrate data from radar sensors, data links, and the supporting communications architecture. They provide the tactical communications and data link capabilities with other military and civil systems responsible for conducting the planning, directing, coordinating, and controlling forces for air surveillance, air defense, and control of sovereign US air space (including the National Capital Region). The BCS-F system is a bi-national cooperative program with Canada, ensuring air defense and surveillance capability for the entire North American continent.

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Ongoing planning and associated activities will take place to prevent and overcome diminishing manufacturing sources and obsolescence issues as required.

This program is in Budget Activity 7 - Operational System Development because it provides funding for the replacement of a currently existing and operating system.

(U) B. Accomplishments/Planned Program (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Accomplishments/Planned Program			
(U) Continue Acquisition Activities associated with System Development of the BCS-F, to include but not limited to Software Development, System Integration, Purchase of Government Furnished Equipment, Production Representative Hardware, NCR/IADS, Test, Training and Certification Support.	20.150	19.320	21.543
(U) Continue Program Management/Systems Engineering	1.571	3.313	3.431
(U) Continue Program Support (i.e. travel, supplies, equipment, misc)	0.907	1.160	0.760
(U) Total Cost	22.628	23.793	25.734

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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0102326F REGION/ SECTOR OPERATIONS CONTROL CENTER	PROJECT NUMBER AND TITLE 4592 Region/Sector Operations Modernization Center (R/SAOC)
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(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) OPAF PE 0102326F (Other Procurement Air Force, WSC 833040, Theater Air Control System Improvement)	11.156	14.266	11.328	13.294	11.832	12.133	12.646	13.067	Continuing	TBD

(U) **D. Acquisition Strategy**

The BCS-Fixed program is utilizing an incremental development acquisition strategy to further advance tactical Battle Management C2 capabilities.

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Exhibit R-3, RDT&E Project Cost Analysis

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u> Continue acquisition activities associated with System Development	CPAF	Thales Raytheon Systems, Fullerton, CA		17.502	Nov-08	17.145	Mar-09	19.602	Dec-09	Continuing	TBD	TBD
Various	Various	Various		0.779	Jan-08	0.000		0.000		Continuing	TBD	TBD
Subtotal Product Development			0.000	18.281		17.145		19.602		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u> Program Management Tech Spt System Engineering	T&M FFP	A&AS Various Mitre, Bedford, MA		0.512	Jan-08	1.454	Jan-09	1.498	Jan-10	Continuing	TBD	TBD
Program Office Support	Various	Various		0.907	Nov-07	1.160	Nov-08	1.153	Nov-09	Continuing	TBD	TBD
Subtotal Support			0.000	2.478		4.473		4.584		Continuing	TBD	TBD
Remarks:												
(U) <u>Test & Evaluation</u> 46th Test Wing/Other Test Act	Various	Various		1.869	Nov-07	2.175	Dec-08	1.548	Nov-09	Continuing	TBD	TBD
Subtotal Test & Evaluation			0.000	1.869		2.175		1.548		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			0.000	22.628		23.793		25.734		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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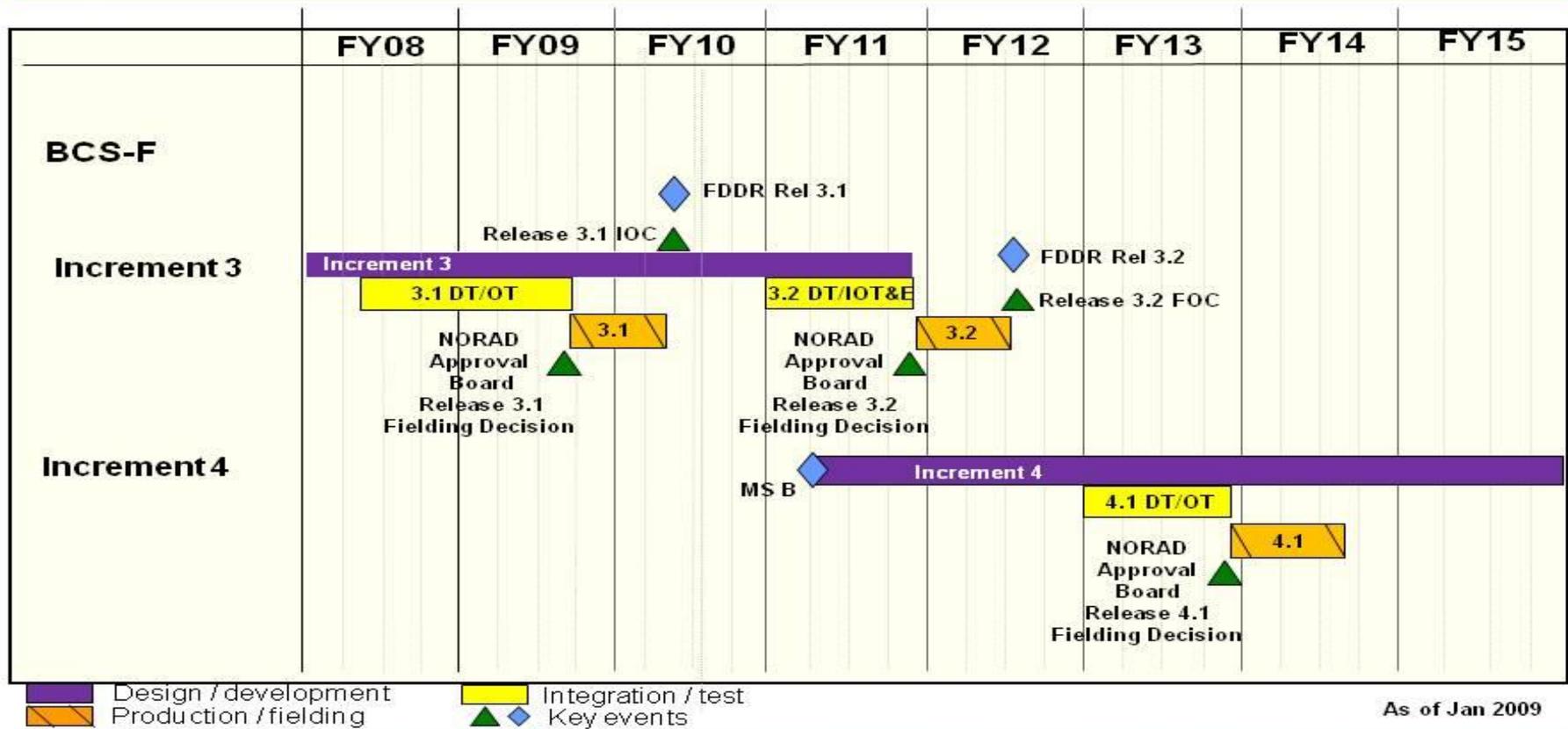
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*BCS - F
Schedule*



PB10 R-Docs

Exhibit R-4a, RDT&E Schedule Detail

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(U) <u>Schedule Profile</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Continuation of BCS-F Increment 3 Software Development	1-4Q	1-4Q	1-4Q
(U) BCS-F Increment 3 Release 3.1 DT/OT	2-4Q	1-3Q	
(U) BCS-F Increment 3 Release 3.1 Fielding Decisions IOC		3Q	
(U) BCS-F Increment 3 Release 3.1 IOC			2Q
(U) BCS-F Increment 3 Release 3.2 DT/IOT&E			3Q
(U) BCS-F Increment 3 Release 3.2 Fielding Decisions FOC			4Q

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