

## UNCLASSIFIED

## RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2003

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

PROJECT

0102326F REGION/ SECTOR OPERATIONS CONTROL CENTER 4592

COST (\$ in Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
4592	Region/Sector Operations Modernization Center (R/SAOC)	5,765	34,075	22,573	19,697	24,394	19,482	19,429	19,257	Continuing	TBD
Quantity of RDT&E Articles		0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**

Battle Control System (BCS) Family of Systems (FOS) is comprised of fixed Homeland Defense (HLD) [BCS-Fixed (BCS-F) PE 0102326F] and mobile Theater Battle Management (TBM) Command and Control (C2) nodes [BCS-Mobile (BCS-M) PE 0207412F]. Battle Control System-Fixed (BCS-F) is the fixed modernized Region/Sector Air Operations Center (R/SAOC) [also know as Region Air Operations Center-Air Defense Sector (RAOC-ADS)] for the Atmospheric Early Warning System (AEWS). The BCS-F program will provide a modernized Command and Control, Communications, Computer and Intelligence (C4I) system with enhanced capability to integrate data from existing and future civil and military defense surveillance systems into a comprehensive recognized air picture to enhance 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. The legacy system (R/SAOC) has 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 The outdated technology has become increasingly difficult and costly to sustain and provides no opportunity for application enhancement.

(U) **FY 2002 (\$ in Thousands)**

(U)	\$0	Accomplishments/Planned Program
(U)	\$5,150	Began Alaska Aerospace Surveillance and Range Operations Modernization (AASROM) System Development to include but not limited to Software Development, System Integration, Purchase of Production Representative Hardware, Test, Certification and System Support.
(U)	\$0	Began Acquisition Activities associated with System Development of the BCS-F with \$9M DERF funding. Activities include but are not limited to Software Development, System Integration, Purchase of Government Furnished Equipment, Production Representative Hardware, Test, Certification and System Support.
(U)	\$215	Continue Program Management/Systems Engineering
(U)	\$400	Continue Program Support (i.e. travel, supplies, equipment, misc)
(U)	\$5,765	Total

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(U) **A. Mission Description Continued**(U) **FY 2003 (\$ in Thousands)**

(U) \$0 Accomplishments/Planned Program

(U) \$31,448 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, Test, Certification and System Support. This is a continuation of activities DERF funds received in FY02.

(U) \$2,087 Continue Program Management/Systems Engineering

(U) \$540 Continue Program Support (i.e. travel, supplies, equipment, misc)

(U) \$34,075 Total

(U) **FY 2004 (\$ in Thousands)**

(U) \$0 Accomplishments/Planned Program

(U) \$19,767 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, Test, Certification and System Support.

(U) \$2,417 Continue Program Management/Systems Engineering

(U) \$389 Continue Program Support (i.e. travel, supplies, equipment, misc)

(U) \$22,573 Total

(U) **B. Budget Activity Justification**

This program is a budget activity 7 - Operational System Development because it provides funding for the modernization of a currently existing and operating system.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
(U) Previous President's Budget	5,957	35,000	8,000	TBD
(U) Appropriated Value	6,000	35,000		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-43	-370		
b. Small Business Innovative Research	-12			
c. Omnibus or Other Above Threshold Reprogram		-346		
d. Below Threshold Reprogram				

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(U) C. Program Change Summary (\$ in Thousands) Continued

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
e. Rescissions	-180	-209		
(U) Adjustments to Budget Years Since FY 2003 PBR			14,573	
(U) Current Budget Submit/FY 2004 PBR	5,765	34,075	22,573	TBD

(U) Significant Program Changes:(U) D. Other Program Funding Summary (\$ in Thousands)

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Other Procurement, AF (3080)	0	0	0	4,552	19,279	24,109	19,271	19,227	Continuing	TBD
(U) Other APPN	0	0	0	0						

(U) E. Acquisition Strategy

1. The BCS Program Family of Systems is utilizing a spiral development acquisition strategy to further advance Command and Control (C2) concepts supporting future aerospace operations. The program was restructured as a result of 9/11 and NORAD/CC's additional requirements for HOMELAND DEFENSE.

2. The BCS-F Program will modernize/replace the AN/FQY-93 central processors, RADIL and datalinks, the Advanced Interface Control Unit (AICU), and the NORAD Contingency Suite (NCS) to further advance C2 concepts supporting current and future aerospace operations.

(U) F. Schedule Profile

	<u>FY 2002</u>				<u>FY 2003</u>				<u>FY 2004</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Begin NORAD Contingency Suite (NCS)	*											
(U) Complete NCS						X						
(U) Begin RAOC/Alaska					*							
(U) Continue Systems Engineering of RAOC/Alaska						*						
(U) Complete RAOC/Alaska												X
(U) Begin Phase 1 RAOC-ADS Stop-Gap Modernization			*									

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(U) F. Schedule Profile Continued

		<u>FY 2002</u>				<u>FY 2003</u>				<u>FY 2004</u>			
		1	2	3	4	1	2	3	4	1	2	3	4
(U)	Complete Phase 1 RAOC-ADS Stop-Gap Modernization						X						
(U)	Begin Spiral 1 BCS-F Modernization							X					
(U)	Begin Spiral 1 DT&E								X				
(U)	Complete Spiral 1 DT&E												X
	* Denotes completed event												
	X Denotes planned event												

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## RDT&amp;E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)

DATE

February 2003

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0102326F REGION/ SECTOR OPERATIONS CONTROL CENTER  
PROJECT 4592(U) A. Project Cost Breakdown (\$ in Thousands)

	FY 2002	FY 2003	FY 2004
(U) System Development/Test	5,150	31,448	19,767
(U) Program Management/Systems Engineering	215	2,087	2,417
(U) Program Office Support	400	540	389
(U) Total	5,765	34,075	22,573

(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)(U) Performing Organizations:

<u>Contractor or</u> <u>Government</u> <u>Performing</u> <u>Activity</u>	<u>Contract</u> <u>Method/Type</u> <u>or Funding</u> <u>Vehicle</u>	<u>Award or</u> <u>Obligation</u> <u>Date</u>	<u>Performing</u> <u>Activity</u> <u>EAC</u>	<u>Project</u> <u>Office</u> <u>EAC</u>	<u>Total Prior</u> <u>to FY 2002</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>	<u>Budget</u> <u>FY 2004</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Product Development Organizations</u>										
LITTON	CPAF	14 Mar 97			48,274				Continuing	TBD
PROLOGIC INC.	CPFF	23 Dec 02				2,591			Continuing	TBD
TBD(1)	TBD	TBD					27,654	16,586	Continuing	TBD

NOTE: TBD(1): Spiral 1 BCS-F RFP was released Jan 03 with Contract Award Planned for Apr 03 - Contractor TBD.

Support and Management Organizations

MITRE	Various	N/A	N/A	N/A	7,314	150	1,052	1,080	Continuing	TBD
ITSP	Various	N/A	N/A	N/A	7,787	65	1,035	1,337	Continuing	TBD
Program Office Support	Various	N/A	N/A	N/A	3,003	400	540	389	Continuing	TBD

Test and Evaluation Organizations

46th Test Wing/Other Test Act					241	700	1,373	1,181	Continuing	TBD
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(U) Government Furnished Property:

<u>Item</u>	<u>Contract</u> <u>Method/Type</u> <u>or Funding</u>	<u>Award or</u> <u>Obligation</u> <u>Date</u>	<u>Delivery</u> <u>Date</u>	<u>Total Prior</u> <u>to FY 2002</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>	<u>Budget</u> <u>FY 2004</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Product Development Property</u>									
MIDS LVT-1 Terminals	MIPR	Aug 02	Aug 03		1,083				1,083
Various	TBD	TBD	TBD		776	2,421	2,000	Continuing	TBD
<u>Support and Management Property</u>									
N/A									
<u>Test and Evaluation Property</u>									
N/A									
				<u>Total Prior</u> <u>to FY 2002</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>	<u>Budget</u> <u>FY 2004</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Subtotals</u>									
Subtotal Product Development				48,274	4,450	30,075	18,586	TBD	TBD
Subtotal Support and Management				18,104	615	2,627	2,806	TBD	TBD
Subtotal Test and Evaluation				241	700	1,373	1,181	TBD	TBD
Total Project				66,619	5,765	34,075	22,573	TBD	TBD