

**UNCLASSIFIED**

PE NUMBER: 0305906F  
 PE TITLE: NCMC - TW/AA System

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0305906F NCMC - TW/AA System</b>
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	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Cost (\$ in Millions)									
Total Program Element (PE) Cost	14.600	57.107	64.822	68.416	54.106	37.812	24.511	Continuing	TBD
4806 N/UWSS NORAD/USSPACECOM Warfighting System	14.600	57.107	64.822	68.416	54.106	37.812	24.511	Continuing	TBD

**(U) A. Mission Description and Budget Item Justification**

CCIC2S provides the future standards-based, interoperable architecture for a North American Aerospace Defense Command/US Strategic Command (NORAD/USSTRATCOM) Battle Management/C4I system of systems that complies with the Network Centric Enterprise Services (NCES), Joint Technical Architecture (JTA) standards and provides for DoD/Joint Command and Control (C2) interoperability. New Space C2 capability will be integrated with this new architecture along with the evolving legacy mission capability to provide a fused battlespace picture. CCIC2S addresses all NORAD CC and selected Combatant Commander USSTRATCOM missions including the Integrated Tactical Warning/Attack Assessment (ITW/AA) of missile, space, and air threats and Space Battle Management. CCIC2S will provide NORAD CC and Combatant Commander USSTRATCOM a C2 system that is interoperable with the NORAD/USSTRATCOM warfighting functions and supporting/supported Combatant Commanders; and, is flexible to enable it to extend to meet evolving mission needs (e.g., Space-Based Infrared System (SBIRS), Command and Control Battle Management and Communications (C2BMC), Space Control, Airborne Laser (ABL), Space-Based Laser, Computer Network Defense (CND) and Information Operations (IO)). The CCIC2S operational architecture will allow Combatant Commanders to better monitor world situations, make threat assessments, formulate Courses of Action (COAs), and develop force direction for synchronized warfighter operations. CCIC2S will consolidate the air/space battle management picture. This program is consistent with the Air Force Long Range Plan, Joint Vision 2010, and the Strategic Planning Guidance. The Joint Requirements Oversight Council (JROC) approved the CCIC2S Mission Needs Statement (MNS) on 18 May 1998. Combatant Commanders' Integrated Command and Control System (CCIC2S) Requirements Document (ORD) was approved 1 Dec 03.

This program element is in Budget Activity 7, Operational System Development, because the projects in this program element support development acquisition programs or upgrades in support of operational systems.

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

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	15.639	67.933	64.992
(U) Current PBR/President's Budget	14.600	57.107	64.822
(U) Total Adjustments	-1.039	-10.826	
(U) Congressional Program Reductions	-0.105	-0.334	
Congressional Rescissions	-0.166	-0.492	
Congressional Increases			
Reprogrammings	-0.306	-10.000	
SBIR/STTR Transfer	-0.462		
(U) <u>Significant Program Changes:</u>			
None.			

## Exhibit R-2a, RDT&amp;E Project Justification

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BUDGET ACTIVITY		PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
07 Operational System Development		0305906F NCMC - TW/AA System					4806 N/UWSS NORAD/USSPACECOM Warfighting System			
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total	
4806 N/UWSS NORAD/USSPACECOM Warfighting System	14.600	57.107	64.822	68.416	54.106	37.812	24.511	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0			

(U) **A. Mission Description and Budget Item Justification**

CCIC2S provides the future standards-based, interoperable architecture for a North American Aerospace Defense Command/US Strategic Command (NORAD/USSTRATCOM) Battle Management/C4I system of systems that complies with the Network Centric Enterprise Services (NCES), Joint Technical Architecture (JTA) standards and provides for DoD/Joint Command and Control (C2) interoperability. New Space C2 capability will be integrated with this new architecture along with the evolving legacy mission capability to provide a fused battlespace picture. CCIC2S addresses all NORAD CC and selected Combatant Commander USSTRATCOM missions including the Integrated Tactical Warning/Attack Assessment (ITW/AA) of missile, space, and air threats and Space Battle Management. CCIC2S will provide NORAD CC and Combatant Commander USSTRATCOM a C2 system that is interoperable with the NORAD/USSTRATCOM warfighting functions and supporting/supported Combatant Commanders; and, is flexible to enable it to extend to meet evolving mission needs (e.g., Space-Based Infrared System (SBIRS), Command and Control Battle Management and Communications (C2BMC), Space Control, Airborne Laser (ABL), Space-Based Laser, Computer Network Defense (CND) and Information Operations (IO)). The CCIC2S operational architecture will allow Combatant Commanders to better monitor world situations, make threat assessments, formulate Courses of Action (COAs), and develop force direction for synchronized warfighter operations. CCIC2S will consolidate the air/space battle management picture. This program is consistent with the Air Force Long Range Plan, Joint Vision 2010, and the Strategic Planning Guidance. The Joint Requirements Oversight Council (JROC) approved the CCIC2S Mission Needs Statement (MNS) on 18 May 1998. Combatant Commanders' Integrated Command and Control System (CCIC2S) Requirements Document (ORD) was approved 1 Dec 03.

This program element is in Budget Activity 7, Operational System Development, because the projects in this program element support development acquisition programs or upgrades in support of operational systems.

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

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Core C2 services: Continue Enterprise network infrastructure (Core C2) development and evolve architecture as the basis for providing interoperable, flexible command and control services to Air, Missile, and Space mission elements (fixed and deployed).	4.860	36.688	29.307
(U) Continued C2 of space forces/threat warning development. Completed first design increment of Missile Warning Release 1, and Space Surveillance Release 1, to include respective system design reviews. Also, delivered Processing Display System-Migration; replaced unsupportable legacy system with desktop strategic and missile warning display capability.	2.822		
(U) Continued evolution of C2 space battle manager through spiral development/delivery. Delivered two releases of Space Battle Management Core Systems (SBMCS); provided web-based access, increased navigational accuracy, space system monitoring and status tools, and interface to Global Command and Control System (GCCS) User	2.821		

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Defined Operating Picture (UDOP).			
(U) Continued preliminary CCIC2S system engineering to define the path for new and upgraded missions (e.g., SBIRS and C2MBC, TBMCS, BCS-Fixed, Intel and ITW/AA) impacting fixed and mobile C2 nodes. This included spiral development release planning, communications architecture, new technology insertion, integrated scheduling, test planning and test safety into the CCIC2S network.		4.097	
(U) Sensor Management: Perform preliminary systems engineering and architecture development for Enterprise Sensor Management. This capability will automate system planning and scheduling of mission critical resources. Sensor Management provides a rapid response to real-time operational events, tip-offs from intel sources, cued events, and mission requests from NORAD/USSTRATCOM users and improves resource utilization.			0.793
(U) Data Fusion (DF): Perform preliminary systems engineering and architecture definition for Data Fusion capability. DF capability will provide battlespace awareness to local and global subscribers via data fusion and correlation products to enhance operational crew readiness and their ability to respond to rapid changes in warfighter conditions. Enterprise DF increases the fidelity and timeliness of situational awareness for preparation of pending theater, global, or space events without relinquishing human assessment or control.			0.700
(U) Air Mission Development/Test/Delivery: Continue Air mission capability incremental development (and deliver when complete) supporting Air Mission/Theater Battle Management Core System (TBMCS)/GCCS (Air Mission Release 2) integration in FY05. Includes software development, engineering, and test.		1.119	0.471
(U) Missile Mission Development/Test: Continue Missile Warning mission capability incremental development by providing GCCS-based core missile warning capability adaptable to operating locations and interoperable with other National Command Centers. Supports delivery of initial missile warning capability (Missile Warning Release 1) in FY05. Includes software development engineering, and test.		9.493	21.136
(U) Space Surveillance Mission Development/Test: Continue Space Surveillance mission development providing improved object tracking and cataloging, and collision avoidance planning of current and future space platforms. Support delivery of initial Space Surveillance Release 1 projected for FY05/06. Includes software development, engineering, and test.		6.163	5.500
(U) Space Defense/Control Mission Development/Test: Continue space mission support capability expansion in the AOCs for the Theater Warfighter as well as developing expanded Space C2, Strategic Defensive Counterspace (DCS), and Offensive Counterspace (OCS) capabilities. Supports delivery of initial Space Defense/Control Release 1 in FY05/06. Includes software development, engineering, and test.		3.644	6.915
(U) Total Cost		14.600	57.107 64.822



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4806 N/UWSS NORAD/USSPACECOM  
Warfighting System(U) C. Other Program Funding Summary (\$ in Millions)(U) D. Acquisition Strategy

CCIC2S employs an incremental development acquisition strategy which enables rapid development and fielding of capability increments in response to validated requirements.

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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</u> & Type	<u>Performing Activity &amp;</u> Location	<u>Total</u> Prior to FY 2003 Cost	<u>FY</u> 2003 Cost	<u>FY</u> 2003 Award Date	<u>FY</u> 2004 Cost	<u>FY</u> 2004 Award Date	<u>FY</u> 2005 Cost	<u>FY</u> 2005 Award Date	<u>Cost to</u> Complete	<u>Total</u> Cost	<u>Target</u> Value of Contract
(U) <u>Product Development</u>												
Lockheed Martin	CP/AF	Colorado Springs, CO	26.208	13.248	Oct-02	52.625	Oct-03	59.728	Oct-04	Continuing	TBD	TBD
Systems Engineering Development & Integration (SEDI)	MIPR	Lockheed Martin (Denver, CO)	5.631							0.000	5.631	
Subtotal Product Development			31.839	13.248		52.625		59.728		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u>												
MITRE	CP/FF	Colorado Springs, CO	4.682	0.910	Oct-02	3.450	Nov-03	3.588	Nov-04	Continuing	TBD	TBD
A&AS	CP/FF	various, Colorado Springs, CO	1.264	0.401	Apr-03	0.716	Apr-04	0.737	Apr-05	Continuing	TBD	TBD
Program Support	Various	various, Colorado Springs, CO	0.775	0.041	May-03	0.316	Oct-03	0.769	Nov-04	Continuing	TBD	TBD
Subtotal Support			6.721	1.352		4.482		5.094		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			38.560	14.600		57.107		64.822		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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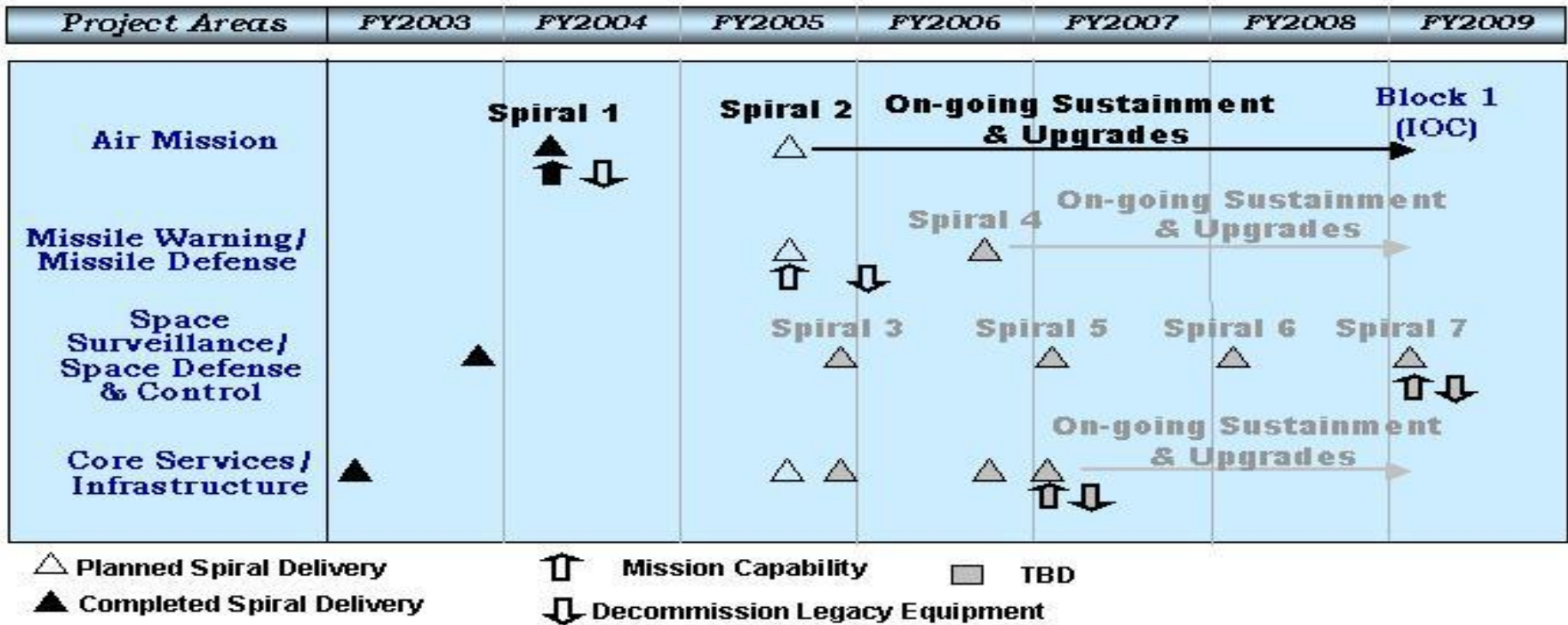
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*Exhibit R-4 CCIC2S*



**Exhibit R-4a, RDT&E Schedule Detail**

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PROJECT NUMBER AND TITLE

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Warfighting System**

<b>(U) <u>Schedule Profile</u></b>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Air Mission Spiral Deliveries		2Q	3Q
(U) Missile Warning/Missile Defense Spiral Deliveries			3Q
(U) Space Surveillance/Space Defense & Control Spiral Deliveries	4Q		4Q
(U) Core Services/Infrastructure Spiral Deliveries	1Q		3-4Q