

UNCLASSIFIED

PE NUMBER: 0303150F

PE TITLE: WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0303150F WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	3.725	5.248	3.541	3.649	3.734	3.720	3.809	3.868	Continuing	TBD
4667 Global Command and Control System - AF	3.725	5.248	3.541	3.649	3.734	3.720	3.809	3.868	Continuing	TBD

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

The Global Command and Control System (GCCS) is the Joint Command and Control (C2) System of Record and the designated C2 migration system for the DoD. It is an integrated Command, Control, Communications, Computer, and Intelligence (C4I) system capable of supporting all echelons of the US military command structure. GCCS solves C4I interoperability problems between Service components by establishing a Common Operating Environment (COE), and has an end objective to eliminate stovepiped systems. The Global Command and Control System-Air Force program provides C2, intelligence, surveillance, reconnaissance and operational information for the Joint Force Air Component Commander (JFACC) and the Air and Space Operations Center-Weapon System (AOC-WS) for planning and execution, air space deconfliction, targeting, weaponeering, and many other applications supporting air operational command and control, and fully supports the Aerospace Expeditionary Force (AEF) concept. The Air Force is responsible for developing four of the modules that will make up the COE, and integration of Air Force unique applications with the COE. Integration efforts will be directed towards future aerospace C2 concepts supporting requirements for the AOC, including intelligence, surveillance, and reconnaissance and intended to automate operational systems with an end objective of providing the right people with the right information at the right time while reducing the overall foot print of the system. As they become available, GCCS-AF will integrate applications into the WINx environment satisfying warfighter requirements for the Common Operational Picture (COP) and Single Integrated Air Picture (SIAP), Joint Defensive Planner (JDP), Joint Targeting Toolbox (JTT), Air Tasking Order (ATO) Reader, and Deliberate Crisis Action Planning and Execution Segment (DCAPES) capabilities.

This effort is Budget Activity 7, Operational System Development, because the program develops and implements software upgrades for integrating existing operational systems and computer networks that will eventually evolve to the Joint Command and Control (JC2) system riding on the Global Information Grid.

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	3.500	3.611	3.622	3.694
(U) Current PBR/President's Budget	3.725	5.248	3.541	3.649
(U) Total Adjustments	0.225	1.637		
(U) Congressional Program Reductions				
Congressional Rescissions		-0.163		
Congressional Increases		1.800		
Reprogrammings	0.330			
SBIR/STTR Transfer	-0.105			

(U) **Significant Program Changes:**

FY05 \$1.8M Congressional add placed in this program line to finance the research laboratory.

R-1 Shopping List - Item No. 173-2 of 173-7

Exhibit R-2 (PE 0303150F)

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0303150F WWMCCS/GLOBAL
COMMAND & CONTROL SYSTEM

PROJECT NUMBER AND TITLE

4667 Global Command and Control
System - AF

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4667 Global Command and Control System - AF	3.725	5.248	3.541	3.649	3.734	3.720	3.809	3.868	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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

The Global Command and Control System (GCCS) is the Joint Command and Control (C2) System of Record and the designated C2 migration system for the DoD. It is an integrated Command, Control, Communications, Computer, and Intelligence (C4I) system capable of supporting all echelons of the US military command structure. GCCS solves C4I interoperability problems between Service components by establishing a Common Operating Environment (COE), and has an end objective to eliminate stovepiped systems. The Global Command and Control System-Air Force program provides C2, intelligence, surveillance, reconnaissance and operational information for the Joint Force Air Component Commander (JFACC) and the Air and Space Operations Center-Weapon System (AOC-WS) for planning and execution, air space deconfliction, targeting, weaponeering, and many other applications supporting air operational command and control, and fully supports the Aerospace Expeditionary Force (AEF) concept. The Air Force is responsible for developing four of the modules that will make up the COE, and integration of Air Force unique applications with the COE. Integration efforts will be directed towards future aerospace C2 concepts supporting requirements for the AOC, including intelligence, surveillance, and reconnaissance and intended to automate operational systems with an end objective of providing the right people with the right information at the right time while reducing the overall foot print of the system. As they become available, GCCS-AF will integrate applications into the WINx environment satisfying warfighter requirements for the Common Operational Picture (COP) and Single Integrated Air Picture (SIAP), Joint Defensive Planner (JDP), Joint Targeting Toolbox (JTT), Air Tasking Order (ATO) Reader, and Deliberate Crisis Action Planning and Execution Segment (DCAPES) capabilities.

This effort is Budget Activity 7, Operational System Development, because the program develops and implements software upgrades for integrating existing operational systems and computer networks that will eventually evolve to the Joint Command and Control (JC2) system riding on the Global Information Grid.

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Continue Integration and Development of Future Aerospace C2 Concepts, Crisis Action Planning Evolution	0.800	0.850	0.875	0.900
(U) Continue Integration of Air Force Capabilities into GCCS (COP, SIAP, DCAPES, ATO Reader, Joint Defensive Planner (JDP), Joint Targeting Toolbox (JTT)), Prototype Software Development, GCCS Migration Support	1.625	1.298	1.300	1.339
(U) Congressional add for Applied Research in Computing Enterprise Services		1.800		
(U) Continue COE Development and Distribution	1.300	1.300	1.366	1.410
(U) Total Cost	3.725	5.248	3.541	3.649

Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0303150F WWMCCS/GLOBAL
COMMAND & CONTROL SYSTEM

PROJECT NUMBER AND TITLE

4667 Global Command and Control
System - AF(U) **C. Other Program Funding Summary (\$ in Millions)**

	<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>FY 2010</u>	<u>FY 2011</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) AF RDT&E	3.725	5.248	3.541	3.649	3.734	3.720	3.809	3.868	Continuing	TBD
(U) Other APPN										TBD
(U) Other Procurement, AF (3080)	27.283	16.168	11.891	15.259	15.320	15.649	16.023	16.253	Continuing	TBD

(U) **D. Acquisition Strategy**

Electronic Systems Center (ESC) Hanscom AFB, MA manages the integration and infrastructure of the Air Force Global Command and Control Systems developed/fielded using spiral acquisition approaches with Common Operating Environment (COE) and GCCS-Joint compliance performed by ESC to support Air Force contribution to the Joint Services and to support the separate Air Force mission applications that operate in the COE.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis												DATE February 2005		
BUDGET ACTIVITY 07 Operational System Development						PE NUMBER AND TITLE 0303150F WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM						PROJECT NUMBER AND TITLE 4667 Global Command and Control System - AF		
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u> Miscellaneous	SS/BOA		0.433	0.400	Oct-03	0.300	Oct-04	0.300	Oct-05	0.309	Oct-06	0.000	1.742 0.000	
WINxB	SS/FFP	Northrop Gruman ITS/Herndon, VA	1.400	0.800	Oct-03	0.737	Oct-04	0.800	Oct-05	0.810	Oct-06	Continuing	TBD	TBD
DCAPES*	SS/FFP		8.776	0.000								0.000	8.776	
Subtotal Product Development			10.609	1.200		1.037		1.100		1.119		Continuing	TBD	TBD
Remarks:	*In FY 00 DCAPES funding was transferred to PE 27438													
(U) <u>Support</u> Information Technology Services Program (ITSP)	SS/FFP	Multiple	2.109	0.300	Oct-03	0.300	Oct-04	0.300	Oct-05	0.310	Oct-06	Continuing	TBD	TBD
Miscellaneous SPO	SS/BOA	Multiple	0.873	0.525	Oct-03	0.311	Oct-04	0.331	Oct-05	0.400	Oct-06	Continuing	TBD	TBD
Subtotal Support			2.982	0.825		0.611		0.631		0.710		Continuing	TBD	TBD
Remarks:														
(U) <u>Management</u> FFRDC	SS/FFP	Mitre/ESC	8.816	1.700	Oct-03	1.800	Oct-04	1.810	Oct-05	1.820	Oct-06	Continuing	TBD	TBD
Subtotal Management			8.816	1.700		1.800		1.810		1.820		Continuing	TBD	TBD
Remarks:														
(U) <u>Congressional Adds</u> Applied research in Computing Enterprise Services				0.000		1.800		0.000		0.000			1.800	
Subtotal Congressional Adds			0.000	0.000		1.800		0.000		0.000		0.000	1.800	0.000
Remarks:														
(U) Total Cost			22.407	3.725		5.248		3.541		3.649		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2005

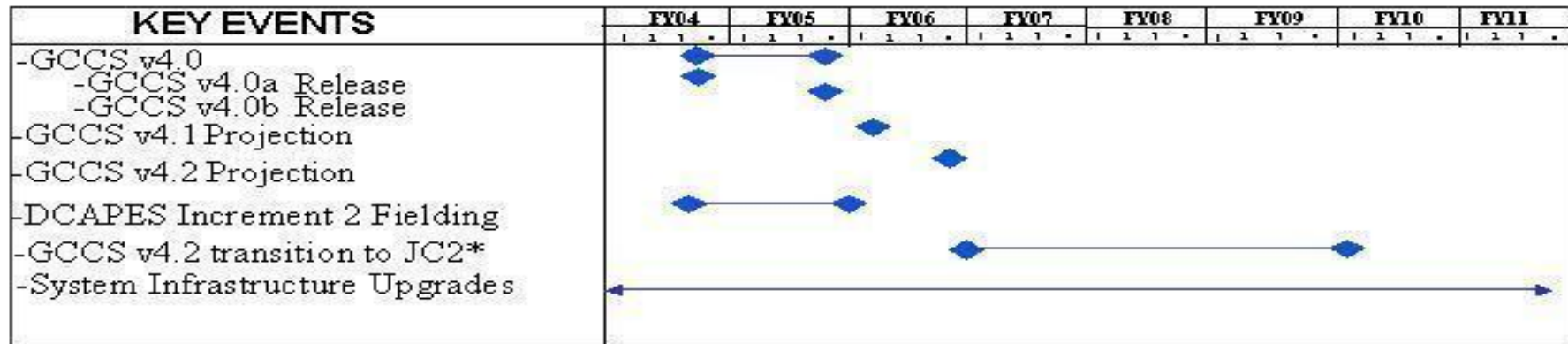
BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0303150F WWMCCS/GLOBAL
COMMAND & CONTROL SYSTEM

PROJECT NUMBER AND TITLE

4667 Global Command and Control
System - AF

*GCCS-AF v4.2 is the beginning of the transition to the Joint Command and Control System (JC2) in FY06.

UNCLASSIFIED

Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2005

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0303150F WWMCCS/GLOBAL
COMMAND & CONTROL SYSTEM

PROJECT NUMBER AND TITLE

4667 Global Command and Control
System - AF(U) Schedule ProfileFY 2004FY 2005FY 2006FY 2007

(U) GGCS-AF v4.0a/b: Development/Integration/Testing/Fielding

3-4Q

1-3Q

(U) GCCS-AF v4.1: Development/Integration/Testing/Fielding

1Q

(U) GCCS-AF v4.2: Development/Integration/Testing/Fielding

4Q

(U) DCAVES Increment 2: Integration/Testing/Fielding

2-4Q

1-4Q

(U) GCCS-AF v4.x: Transition to Joint Command and Control System

4Q

1-4Q

(U) GCCS-AF System Infrastructure Upgrades to support v4.0/JC2

1-4Q

1-4Q

1-4Q

1-4Q