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Exhibit R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System /P.E. 0303150K				
COST (in millions)	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Global Command and Control System-Joint/CC01*	0	14.930	49.991	49.004	50.660	52.983	49.353	49.454

\* FY04-FY09 funding is increased to transition GCCS-J Block IV capabilities towards operating on the web-based infrastructure and the migration of GCCS-J to a single web-based architecture in accordance with the Joint Command and Control (JC2) Operational Requirements Document and to accelerate fielding of situation awareness, force protection, force tracking, and intelligence capabilities.

A. Mission Description & Budget Item Justification: GCCS-J is a single joint command and control (C2) system that allows seamless integration of information for the Chairman, Joint Chiefs of Staff (CJCS), the Combatant Commanders, and the Services providing joint and multinational operations into the 21<sup>st</sup> century. A key C4I capability, GCCS-J is fielded at over 635 Joint sites worldwide, all networked via the DoD's classified private intranet. The system supports the President and subordinate elements by providing synchronized operations from dispersed locations and provides Joint C4I to support the entire force projection cycle. It provides responsive command and control, the capability to assess the level of success, and retain flexibility to re-engage with precision by allowing the Joint Task Force (JTF) commander the ability to maintain dominant battlefield awareness through a fused, integrated, near real-time picture of the battlespace. Most importantly, GCCS-J supports DoD's transformation by focusing on near term concepts and injecting new technologies that enhance the warfighters' effectiveness and lethality.

The requested RDT&E funding is critical to supporting DoD Transformation efforts in the area of strategic and operational command and control. In FY04 GCCS-J will begin accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will transform GCCS-J into the core of the Joint Command and Control architecture. It will provide incremental improvements that incorporate cutting-edge hand-held technologies, web-based, networked applications that can quickly access many sources of data and application logic. Specifically, in the situational awareness mission area, this funding will finance the development of candidate mission applications and integration of Advance Concept Technology Demonstrations (ACTDs) to improve information warfare visualization and display. Situation awareness enhancement tools (as the output) will directly enhance the capabilities of the Deployable Joint Command and Control (DJC2), a tailorable system addressing Joint Force Commanders' C2 needs for air-, land-, and sea-based operations and the material solution for the Standing Joint Force (SJF) headquarters.

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In addition, funding will support the development of user embedded training and by partnering with the Net-Centric Enterprise Services (NCES), GCCS-J will evolve to a web-based architecture. Finally, the GCCS-J program will commit significant RDT&E resources to evolve GCCS-J from its current state of joint and Service variants to a single Joint C2 architecture and capabilities-based implementation comprised of mission capability packages and Global Information Grid (GIG) infrastructure providing shared access to Service/Agency/theater-produced data sources. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

Accomplishments/Planned Program:

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Subtotal Cost	0	7.002	36.300	38.356

Development and Strategic Planning: The current GCCS-J system, meaning Block IV, expands the system's previous capabilities by accelerating development of selected intelligence capabilities. This acceleration, due to the program's requirement to provide increased support to operational requirements from the Global War on Terrorism (GWOT), expedited the development of the Integrated Imagery Intelligence (I3) Enhanced, Joint Targeting Toolbox (JTT), Integrated Many on Many (IMOM), Collection Management Mission Application (CMMA) and Common Operational Picture (COP) enhancements. Major Block IV capabilities provided include:

- *I3 Enhancements* - incorporates functional changes to the fielded I3 version
- *Improved Many on Many (IMOM)* - The IMOM application is a 2-D graphic oriented user-interactive program, which aids in mission planning and Intelligence Preparation of the Battlespace (IPB) analysis
- *Joint Targeting Toolbox (JTT)* - The JTT application provides a common, standardized, and scaleable set of targeting tools to manage/produce target data and target-derived products.
- *Joint Threat Analysis Tools/Global Templating Toolkit (JTAT/GTT)* - The JTAT/GTT application generates terrain suitability and other tactical decision aids based on military aspects of terrain.

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<p>- <i>Collection Management Mission Applications (CMMA)</i> - The CMMA application automates the generation and registration of intelligence requirements; fuses validated requirements into all-source collection plans; synchronizes collection plans with combat operations; monitors execution of collection plans through tasking and requests for tasking; provides near real-time assessment of execution effectiveness; and enables rapid modification of collection plans based on assessment findings.</p> <p>- <i>Global Status of Resources and Training System (GSORTS) Enhancements</i> - Readiness enhancements which will provide the capability to track Service units and partial unit deployment/employment.</p> <p>Continued Block IV development will build upon and expand the capabilities and functionalities developed and integrated in the GCCS Block III system including the migration of all capabilities to a more modern infrastructure. GCCS-J will continue development and migration of the Joint Operation Planning and Execution System (JOPES), I3, Readiness Assessment System (RAS) and the Joint Terrain Analysis Tool/Ground Template Toolkit (JTT/GTT).</p> <p>Future development (FY05-FY09) will maximize use of emerging net-centric/web services; supporting continued application migration and evolution to a web-based architecture. High priority services for early inclusion are identity management via Public Key Infrastructure (PKI), directory services, portal framework, and publish/subscribe capability. Also, the GCCS-J Program Management Office (PMO) will commit significant resources to migrate the current GCCS-J from its current state of joint and Service variants to a single Joint C2 architecture. The transition to a web-based solution is a significant challenge, requiring careful orchestration and substantial resources.</p>								
	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>				
Subtotal Cost	0	7.928	13.691	10.648				
Integration and Test: GCCS Block IV integration and test (I&T) strategy maximizes Block III development accomplishments. Early in Block IV, GCCS integrated and tested two releases incorporating new and enhanced GCCS								

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<p>warfighter capabilities and infrastructure. Significant capabilities include the Enhanced Integrated Imagery and Intelligence (EI3) and Global Status of Resources and Training Systems (GSORTS). Due to the magnitude of future Block IV I&amp;T activities, GCCS will employ an incremental spiral I&amp;T methodology. A spiral approach permits an earlier start of integration testing since all new segments will not be available at the beginning of integration testing, and it allows the Program Manager (PM) to accomplish risk reduction by testing in smaller, more manageable increments. Three integration spirals are planned during Block IV. While the spirals will eventually integrate and test all capabilities fielded during this period, the focus of spirals 1, 2 and 3 are Situation Awareness (COP and EI3); Force Planning, Sustainment, and Readiness (JOPES, RAS, and Global Combat Support Systems (GCSS)-Combatant Commanders/Joint Task Force (JTF); and the GCCS system (e.g., Adaptive Courses of Action - ACOA and Deployment Visualization Tool - DVT) respectively. The Block V (FY05-FY06) I&amp;T strategy will incorporate <i>Transformational</i> technology insertion activities, including development and commercial Non-Developmental Item and prototyping (ACTD) efforts.</p> <p>B. <u>Program Change Summary:</u></p> <table border="0"> <thead> <tr> <th></th> <th><u>FY02</u></th> <th><u>FY03</u></th> <th><u>FY04</u></th> <th><u>FY05</u></th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget</td> <td>0</td> <td>15.604</td> <td>6.498</td> <td>17.476</td> </tr> <tr> <td>Current President's Budget</td> <td>0</td> <td>14.930</td> <td>49.991</td> <td>49.004</td> </tr> <tr> <td>Total Adjustments</td> <td></td> <td>-.674</td> <td>33.493</td> <td>31.528</td> </tr> </tbody> </table> <p>Program Funding Adjustments Change Summary Explanation:</p> <p>FY03 decrease is due to Congressional Undistributed adjustments.</p> <p>FY04-FY09 funding is increased to transition GCCS-J Block IV capabilities towards operating on the web-based infrastructure and the migration of GCCS-J to a single web-based architecture in accordance with the Joint Command and Control (JC2) Operational Requirements Document and to accelerate fielding of situation awareness, force protection, force tracking, and intelligence capabilities.</p>										<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	Previous President's Budget	0	15.604	6.498	17.476	Current President's Budget	0	14.930	49.991	49.004	Total Adjustments		-.674	33.493	31.528
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Global Command and Control System-Joint/CC01	0	14.930	49.991	49.004	50.660	52.983	49.353	49.454

  

C. Other Program Funding Summary:

	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	To <u>Complete</u>	Total <u>Cost</u>
Operation and Maintenance:	73.527	67.476	79.265	85.174	91.740	92.741	85.818	85.200	Contg	Contg
Procurement:	2.880	3.386	4.743	5.200	5.434	5.689	5.084	5.062	Contg	Contg

D. Acquisition Strategy: Use performance based contracts when applicable. Indefinite Delivery Indefinite Quantity (IDIQ) contracts, GSA schedule and current contracts.

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<b>Exhibit R-3 Cost Analysis</b>										<b>DATE:</b> February 2003			
<b>APPROPRIATION/BUDGET ACTIVITY</b> RDT&E, Defense-Wide/07				<b>PROGRAM ELEMENT</b> Global Command and Control System (GCCS) PE 0303150K						<b>PROJECT NAME AND NUMBER</b> Global Command and Control System-Joint /CC01			

Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 <sup>3</sup> Cost	FY 05 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Product Development	Various <sup>1</sup>	Various <sup>2</sup>	0	7.002	May 03	34.156	May 04	38.356	TBD	Contg	Contg	NA
Product Development	Various <sup>1</sup>	Various <sup>2</sup>	0	0.000		2.144	Dec 03	0.000	TBD	Contg	Contg	NA
Test and Evaluation	Various <sup>1</sup>	Various <sup>2</sup>		7.928	May 03	13.691	May 04	10.648	TBD	Contg	Contg	NA
<b>Total</b>				<b>14.930</b>		<b>49.991</b>		<b>49.004</b>				

<sup>1</sup> Competitive and competition after exclusion and a suite of cost plus, firm-fixed price and cost plus award fee contracts

<sup>2</sup> Major performers include: Science Applications International Corporation (SAIC), McLean, VA, Northrop Grumman Information Technologies (NGIT), Reston, VA, AB Floyd, Falls Church, VA, and Pragmatics, Falls Church, VA

<sup>3</sup> In FY06, GCCS-J and associated Block construct (III-V), will transition to Joint Command and Control (JC2). JC2 will begin with Block 1.

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Exhibit R-4 Schedule Profile														Date: February 2003																							
Appropriation/Budget Activity RDT&E, Defense -Wide/07														Program Element Number and Name Global Command and Control System/PE 0303150K												Project Number and Name Global Command and Control/CC01											
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Contract Preparation			△	△	△																																
			GCCSv3/4.x		Readiness																																
Contract Competition					△	△	△		△	△	△																										
			GCCSv3/4.x & Readiness																																		
Contract Award					△	△	△		△	△	△																										
			GCCSv3/4.x		Readiness																																
*Development and Strategic Planning			△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△					
			GCCSv4/Block V				Block V				Block V				Block I				Blocks I/II				Block II				Blocks II/III										
Integration and Testing			△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△					
			GCCSv4.x				Blocks IV/IV				Block V				Block V				Block I				Block II				Block II										
Operational Testing			△		△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△					
			GCCSv3.5 Block IV		GCCSv3.6 Block IV				Block IV				Block V				Block V				Block I				Block II				Block II								

\*In FY06, GCCS-J and associated Block construct (III-V), will transition to Joint Command and Control (JC2). JC2 will begin with Block I

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Exhibit R-4a Schedule Detail							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07	Global Command and Control System (GCCS) PE 0303150K			Global Command and Control System-Joint /CC01				
<u>Schedule Profile</u>	<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>
Contract Preparation	3-4Q	1-4Q						
Contract Competition		1-3Q*	1-3Q*					
Contract Award		1-3Q*	1-3Q*					
Development and Strategic Planning		1-4Q	2-4Q <sup>A</sup>	2-4Q <sup>B</sup>	1-4Q <sup>BC</sup>	1-4Q <sup>BC</sup>	1-4Q <sup>CD</sup>	
Integration and Test		1-4Q	3-4Q <sup>A</sup>	1-4Q <sup>AB</sup>	1-4Q <sup>B</sup>	1-4Q <sup>BC</sup>	1-3Q <sup>CD</sup>	
Operational Testing	4Q (v3.5)	1-4Q	4Q <sup>A</sup>	1-4Q <sup>AB</sup>	1-4Q <sup>B</sup>	1-4Q <sup>BC</sup>	1-4Q <sup>CD</sup>	
*NexGen Contracts								
<sup>A</sup> Block V (GCCS-J)								
<sup>B</sup> Block I (JC2)								
<sup>C</sup> Block II (JC2)								
<sup>D</sup> Block III (JC2)								
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