Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K

COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	52.191	62.944	52.331	51.950	43.286	43.597	46.098	47.947
Global Command and Control System-Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

A. Mission Description and Budget Item Justification: The GCCS-J is the Department of Defense (DoD) Joint Command and Control (C2) System of Record and is an essential component for successfully accomplishing DoD Transformation objectives focusing on new Information Technology (IT) concepts, injecting new technologies, incrementally fielding relevant products and seeking to identify revolutionary technological breakthroughs. GCCS-J implements the Joint Chiefs of Staff validated and prioritized C2 requirements. The GCCS-J suite of mission applications/systems provides critical joint warfighting C2 capabilities by presenting an integrated, near real-time picture of the battlespace for planning and execution of joint military and multinational operations. GCCS-J is used by all nine combatant commands at over 650 sites around the world, supporting more than 10,000 joint and coalition workstations. GCCS-J is a DoD major Information Technology (IT) investment and designated as an Acquisition Category (ACAT) IAM Major Automated Information System (MAIS) program. GCCS-J is being implemented in an evolutionary manner through distinct blocks, using spiral development. Each block is self-contained, targets a specific set of user requirements and delivers multiple releases of GCCS-J functional capabilities. GCCS-J Block V version releases will continue to address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The system will continue to develop and refine enhancements to the core planning and assessment tools required by combatant commanders and their subordinate joint task force commanders. Because the GCCS-J program provides capability products that are critical to the direct fulfillment of military, intelligence, and other National Security Systems, the management of the GCCS-J program is an inherently governmental function. The requested RDT&E funding is critical to support the DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2005, GCCS-J will continue accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will evolve GCCS-J into the basis of a single integrated Joint C2 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

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K

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' needs for air-, land-, and sea-based operations and the material solution for the Standing Joint Force Headquarters.

Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) is a collaborative network of software tools that allows campaign planning, forecast predictions, information management and rapid execution. CFAST allows the dynamic preparation of campaign plans in a rapid expeditionary environment. The CFAST collaborative planning capability toolset will continue to adapt as required to support the Joint Planning and Execution Community (JPEC). CFAST is designed to meet the challenges in DoD planning doctrine in support of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The current version of CFAST is being utilized by the U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), and other combatant commands. The requested RDT&E funding is needed to advance the current CFAST system and enable it to support the Joint Staff's expanding rapid deployment mission. The enhanced CFAST system will provide the Joint Staff with user-intuitive capabilities for rapidly determining transportation requirements, performing course of action analyses, and projecting delivery profiles of troops and equipment by air, land, and sea. The improved system will be tailored for use by the Combatant Commanders component Services, regional commanders, Joint Task Forces (JTFs), and the Service staffs as a planning, forecasting, analysis, and execution tool for both deliberate and crisis action planning. The end-state described by the Secretary of Defense's Adaptive Planning Initiative strives for rapidly produced, near-execution ready campaign plans that provide multiple courses of action; these virtual "living" plans must be adaptive to the changing regional and global environment. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

B.

Program Change Summary:	FY04	FY05	FY06	FY07
Previous President's Budget	50.400	43.693	50.520	52.862
Current Submission	52.191	62.944	52.331	51.950
Total Adjustments	+1.791	+19.251	+1.811	-0.912

Change Summary Explanation:

FY 2004 change is due to below threshold reprogramming.

FY 2005 change is due to transfer of Collaborative Force Analysis, Sustainment and Transportation System to DISA funding, a Congressional add for Joint Information Technology Center Initiative, and undistributed Congressional

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K

reductions to the Defense-wide RDT&E appropriation.

FY 2006 changes are due to funds added for CFAST and revised fiscal guidance.

FY 2007 changes are due to revised fiscal guidance.

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

A. Mission Description & Budget Item Justification: The GCCS-J is the Department of Defense (DoD) Joint Command and Control (C2) System of Record and is an essential component for successfully accomplishing DoD Transformation objectives focusing on new Information Technology (IT) concepts, injecting new technologies, incrementally fielding relevant products and seeking to identify revolutionary technological breakthroughs. GCCS-J implements the Joint Chiefs of Staff validated and prioritized C2 requirements. The GCCS-J suite of mission applications/systems provides critical joint warfighting C2 capabilities by presenting an integrated, near real-time picture of the battlespace for planning and execution of joint military and multinational operations. GCCS-J is used by all nine combatant commands at over 650 sites around the world, supporting more than 10,000 joint and coalition workstations. GCCS-J is a DoD major Information Technology (IT) investment and designated as an Acquisition Category (ACAT) IAM Major Automated Information System (MAIS) program. GCCS-J is being implemented in an evolutionary manner through distinct blocks, using spiral development. Each block is self-contained, targets a specific set of user requirements and delivers multiple releases of GCCS-J functional capabilities. GCCS-J Block V version releases will continue to address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The system will continue to develop and refine enhancements to the core planning and assessment tools required by combatant commanders and their subordinate joint task force commanders. Because the GCCS-J program provides capability products that are critical to the direct fulfillment of military, intelligence, and other National Security Systems, the management of the GCCS-J program is an inherently governmental function. The requested RDT&E funding is critical to support the DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2005, GCCS-J will continue accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will evolve GCCS-J into the basis of a single integrated Joint C2 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' needs for air-, land-, and sea-based operations and the material solution for the Standing Joint Force Headquarters.

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

B. Accomplishments/Planned Program:

	FY 04	FY 05	FY 06	FY 07
Subtotal Cost	31.677	33.821	39.647	41.691

Development and Strategic Planning: GCCS-J is executing Block IV (FY 2002 through FY 2005) and Block V (FY 2004 through FY 2006). Block IV contains three spiral releases (v3.4, v3.5, v3.6) on the v3.x baseline and one spiral release (v4.0) that implements a new infrastructure and migrates all v3.x capabilities to this new infrastructure. Three of the four planned spiral releases (v3.4, v3.5, and v3.6) have been fielded. GCCS-J v4.0 is an essential prerequisite to implementing greatly expanded net-centric solutions. GCCS-J v4.0 introduces a more sophisticated "n-tier" architecture supporting dynamic infrastructure resources, thin browser-based clients, and enterprise-wide services. The current GCCS-J Block IV system 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 for 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 include:

- I3 Enhancements – incorporates functional changes to the fielded I3 version.
- Improved Many on Many (IMOM) - is a 2-D graphic oriented user-interactive program, which aids in mission planning and Intelligence Preparation of the Battlespace (IPB) analysis.
- Joint Threat Analysis Tools/Global Templating Toolkit (JTAT/GTT) - generates terrain suitability and other tactical decision aids based on military aspects of terrain.
- Collection Management Mission Applications (CMMA) - 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.
- Global Status of Resources and Training System (GSORTS) Enhancements – Force Readiness enhancements which will provide the capability to track Service units and partial unit deployment/employment.
- Joint Operational Planning & Execution System (JOPES) – incorporates functional changes to a reengineered, modernized

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

version of the current JOPES system running on significantly upgraded servers. It provides substantial improvements in maintainability, reliability, security, communications, database synchronization, and system management.
- Common Operational Picture (COP) - upgraded COP is highlighted by track amplifications, including the ability to differentiate and segregate simulated, exercise, and real tracks, and selectively display each group. Upgrades also included the initial implementation of a community process developed Web COP.

GCCS-J Block V contains three spiral releases (v4.1, v4.2, and v4.3), incorporating new and enhanced capabilities to the v4.0 baseline. By partnering with Global Information Grid (GIG) enterprise services initiatives, GCCS-J will evolve the initial web-based architecture and maximize the use of emerging net-centric/web services. High priority services for early inclusion in Block V are: identity management via Public Key Infrastructure (PKI); directory services; portal framework; and publish/subscribe capability. Major Block V capabilities include:

- Common Operational Picture (COP) - upgraded COP will improve the ability to display Air Tasking Order (ATO), to include more complete data and enhance user ability to manipulate the display (i.e. data selection, filtering, etc). In addition, COP has the ability to display and manipulate data associated with sites of interest including sea, air, and ground routes.
- Adaptive Battlespace Awareness (ABA) –will increase the ability to filter and visualize COP data and to set and recall user-definable templates. It will also send/view alerts to/from other COP users for Operationally Significant Intelligence changes.
- Web-Enabled Execution Management Capability (WEEMC)– will provide common target and weapon information across all component commanders and workflow management tools to enable common consistent deconflicted prosecution of targets.
- GALE Lite – will integrate Signal Intelligence (SIGINT) sources into COP and provide tools to automate retrieval, creation, update, and deletion of local database SIGINT records.
- Joint Network Management System (JNMS) – capability to graphically display Information Operations/Information Warfare (IO/IW) threats and own force network architectures.
- Public Key Infrastructure (PKI) Certificates –will build upon the initial implementation of server PKI certificates in GCCS-J v4.0 with fully implementing strong authentication methods (client and server authentication) using PKI certificates.
- Weapons of Mass Destruction Medical Analysis Tool (WMD MAT) – will enable medical planners to estimate medical resource requirements and perform course of action analysis for both conventional and non-conventional scenarios.
- Joint Engineering Planning and Execution System (JEPES) – will automate the Civil Engineering deployment planning

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

process using current business rules.

	FY 04	FY 05	FY 06	FY 07
Subtotal Cost	10.314	7.522	10.184	10.259

Integration and Test (I&T): GCCS will employ an incremental spiral I&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. The level of testing necessary for the Block V releases is commensurate to the operational and technical complexity of the release. In accordance with DOT&E guidelines, level two testing is applied to increments that provide only minor system improvements and present minor risk. As determined through an initial risk assessment conducted by the GCCS-J PMO, v4.1, v4.2, and v4.3 are lower risk releases having minimal potential to (1) impact other system applications and (2) disrupt the basic system's ability to support the mission. Therefore, the GCCS-J PM recommends level two testing for the Block V spiral releases.

	FY 04	FY 05	FY 06	FY 07
Subtotal Cost	10.200	10.200	0.000	0.000

Joint Information Technology Center Initiative: The Joint Information Technology Center Initiative funding will utilize the Pacific-based Information Technology Center (ITC) in Alaska. This center will allow DoD to integrate and implement the many successful logistics and personnel initiatives underway throughout the Department of Defense (DoD). The center will process the wide range and volume of information essential for the day-to-day operations of our military personnel and defense civilians. The center will allow DoD to eliminate legacy systems and to upgrade to more capable and more flexible information technology tools.

	FY 04	FY 05	FY 06	FY 07
Subtotal Cost	0.000	1.000	0.000	0.000

National Information Assurance and Training:
Funding for this effort is to be executed by the National Security Agency.

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

C. Other Program Funding Summary:

	FY 04	FY05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	To Complete	Total Cost
O&M	57.616	65.487	83.686	81.032	74.943	74.567	75.552	76.640	Contg	Contg
Procurement	7.199	4.691	5.498	5.767	5.165	5.173	5.519	5.888	Contg	Contg

D. Acquisition Strategy: GCCS-J development, integration, and migration efforts are primarily supported through Cost Reimbursable Task Orders (TO) issued under competitively awarded contracts. Since FY 2002, GCCS-J has increased its performance-based contract awards from zero (0) to 16, while reducing its Time and Material (T&M) contracts to one. The GCCS-J Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. The PMO maximizes use of competitively awarded IDIQ contracts and requires contractors to establish and manage specific earned value data. The PMO's strategy mitigates risk by conducting monthly Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

E. Performance Metrics:

Capabilities Provided: The Joint Staff revalidated the GCCS-J Phase Block IV RID, dated 6 October 2000, as the requirements baseline for Block V. Each Block V version release will continue to address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities. These enhancements may take the form of enhancements to existing GCCS-J mission applications, new candidate solutions provided by executive agents, technical refresh actions to minimize COTS end-of-life issues, and/or interfacing with additional high value data sources.

Cost & Schedule Management: The PMO utilizes Earned Value Management to manage technical cost and schedule requirements. Contractors are required to plan, budget, and schedule resources in time-phased "planned value" increments constituting a cost and schedule measurement baseline. This approach encourages contractors to use effective internal cost and schedule management control systems. The PMO evaluates performance by conducting thorough

Exhibit R-2a, RDT&E Project Justification				**DATE:** February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				**R-1 ITEM NOMENCLATURE** Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

Post-award Contract Reviews (PCRs) and monthly Contract Performance Reviews (CPRs). The GCCS-J Program Manager (PM) also conducts weekly critical path reviews of the GCCS-J release schedules to ensure tasks are on track and to mitigate risk across the entire program.

Exhibit R-3 Cost Analysis		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	**PROGRAM ELEMENT** Global Command and Control System (GCCS) PE 0303150K	**PROJECT NAME AND NUMBER** Global Command and Control System-Joint / CC01

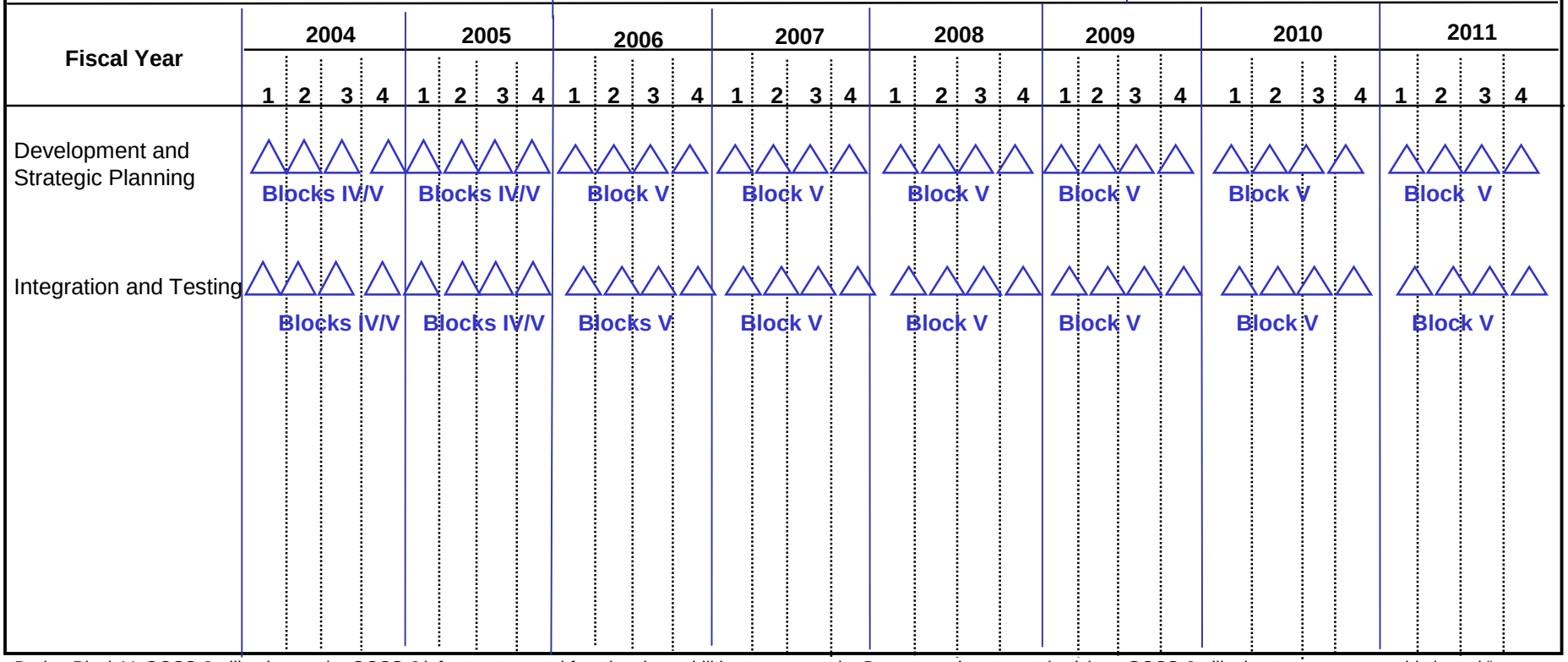
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development	CPAF	NGMS, Reston, VA	9.525	8.243	May-05	9.982	May -06	10.520	May -07	Contg	Contg	38.270
Product Development	CPAF	NGMS, Reston, VA	5.608	7.468	Feb-05	10.042	Feb-06	10.286	Feb-07	Contg	Contg	33.404
Product Development	CPFF	NGMS, Reston, VA	0.135	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.135	0.135
Product Development	CPAF	AB Floyd, Alexandria, VA	2.840	3.310	May-05	3.688	May-06	4.751	May-07	Contg	Contg	14.589
Product Development	CPFF	SAIC, Falls Church, VA	3.800	0.000	N/A	0.000	N/A	0.000	N/A	0.000	3.800	3.800
Product Development	CPAF	Pragmatics, McLean, VA	0.000	2.263	Apr-05	3.325	Apr -06	3.359	Apr -07	Contg	Contg	8.947
Product Development	CPFF	SAIC, Falls Church, Va	0.255	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.255	0.255
Product Development	CPFF	SAIC, Falls Church, Va	0.417	1.673	Jan 05	2.719	Jan 06	2.744	Jan 07	Contg	Contg	7.553
Product Development	FFP	Dynamic Systems, Los Angeles, CA	0.484	0.426	Feb-05	0.438	Feb-06	0.444	Feb-07	Contg	Contg	1.792
Product Development	CPFF	Pragmatics, McLean, VA	3.191	2.156	Jul-05	3.227	Jul -06	3.273	Jul-07	Contg	Contg	11.847
Product Development	MIPR	Booze Allen Hamilton, McLean, VA	0.564	3.208	Mar-05	0.000	N/A	0.000	N/A	0.000	3.772	3.772
Product Development	MIPR	JDISS, Suitland, MD	3.691	3.665	Dec-04	4.272	Dec-05	4.333	Dec-06	Contg	Contg	15.961

Exhibit R-3 Cost Analysis		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	**PROGRAM ELEMENT** Global Command and Control System (GCCS) PE 0303150K	**PROJECT NAME AND NUMBER** Global Command and Control System-Joint / CC01

Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development	MIPR	SPAWAR, Charleston, SC	0.000	0.405	Jun-05	0.922	Jun-06	0.935	Jun-07	Contg	Contg	2.262
Product Development	FFRDC	MITRE, McLean, VA	1.167	1.004	Oct-04	1.032	Oct-05	1.046	Oct-06	Contg	Contg	4.249
Product Development	FFP	Joint Info Technology Center Initiative	10.200	10.200	TBD	0.000	N/A	0.000	N/A	0.000	20.400	20.400
Product Development	TBD	National IA & Training	0.000	1.000	TBD	0.000	N/A	0.000	N/A	0.000	1.000	1.000
Test & Evaluation	CPAF	SAIC, Falls Church, vA	5.393	5.005	Feb-05	7.149	Feb-06	7.230	Feb-07	Contg	Contg	24.777
Test & Evaluation	MIPR	JITC, Ft Huachuca, AZ	3.350	1.800	Oct-04	2.529	Oct-05	2.524	Oct-06	Contg	Contg	10.203
Test & Evaluation	MIPR	SSC, San Diego, CA	1.571	0.717	Nov-04	0.506	Nov-05	0.505	Nov-06	Contg	Contg	3.299
Total			52.191	52.543		49.831		51.950				

Exhibit R-4 Schedule Profile | **Date: February 2005**

Appropriation/Budget Activity	Program Element Number and Name	Project Number and Name
RDT&E, Defense-Wide/07	Global Command and Control System/PE 0303150K	Global Command and Control/CC01



During Block V, GCCS-J will enhance the GCCS-J infrastructure and functional capabilities to support the Department's net-centric vision. GCCS-J will migrate to a more sophisticated "n-tier" architecture supporting dynamic infrastructure resources, thin browser-based clients, and net-centric, enterprise services. High priority services for early inclusion are identity management via Public Key Infrastructure (PKI), directory services, portal framework, and publish/subscribe capability. To achieve this GCCS-J will fully implement a new interface capability using XML to provide the flexibility to support independent version changes and improved availability to enterprise data.

GCCS-J will transition to the JC2 capability. The Program will enter into sustainment until JC2 is fully operational. Sustainment efforts include, but are not limited to, the design and testing of technical changes/software patches to the operational GCCS-J system to address high priority Global System Problem Reports (GSPRs) and Information Assurance Vulnerabilities (Alerts, Bulletins, and Technical Advisories).

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	**PROGRAM ELEMENT** Global Command and Control System (GCCS) / PE 0303150K	**PROJECT NAME AND NUMBER** Global Command and Control System-Joint / CC01

Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Development and Strategic Planning	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Integration and Test	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

Block IV (GCCS-J)
Block V (GCCS-J)

During Block V, GCCS-J will enhance the GCCS-J infrastructure and functional capabilities to support the Department's net-centric vision. GCCS-J will migrate to a more sophisticated "n-tier" architecture supporting dynamic infrastructure resources, thin browser-based clients, and net-centric, enterprise services. High priority services for early inclusion are identity management via Public Key Infrastructure (PKI), directory services, portal framework, and publish/subscribe capability. To achieve this GCCS-J will fully implement a new interface capability using XML to provide the flexibility to support independent version changes and improved availability to enterprise data.

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Exhibit R-2a, RDT&E Project Justification			DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT Global Command and Control System / PE 0303150K			PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02		
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

A. Mission Description and Budget Item Justification:
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) is a collaborative network of software tools that allows campaign planning, forecast predictions, information management and rapid execution. CFAST allows the dynamic preparation of campaign plans in a rapid expeditionary environment. The CFAST collaborative planning capability toolset will continue to adapt as required to support the Joint Planning and Execution Community (JPEC). CFAST is designed to meet the challenges in DoD planning doctrine in support of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The current version of CFAST is being utilized by the U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), and other combatant commands. The RDT&E funds are needed to advance the current CFAST system and enable it to support the Joint Staff's expanding rapid deployment mission. The enhanced CFAST system will provide the Joint Staff with user-intuitive capabilities for rapidly determining transportation requirements, performing course of action analyses, and projecting delivery profiles of troops and equipment by air, land, and sea. The improved system will be tailored for use by the Combatant Commanders component Services, regional commanders, Joint Task Forces (JTFs), and the Service staffs as a planning, forecasting, analysis, and execution tool for both deliberate and crisis action planning. The end-state strives for rapidly produced, near-execution ready campaign plans that provide multiple courses of action; these virtual "living" plans must be adaptive to the changing regional and global environment.

B. Accomplishments/Planned Program:

	FY 04	FY 05	FY 06	FY 07
Subtotal Cost	0	9.201	2.212	0

Development and Strategic Planning: CFAST Version 2.0 was initially provided as a prototype to enhance deliberate planning capability. CFAST Version 3.0 was enhanced to include upgrades to Version 2.0 and begin an approach to develop tools for Crisis Action Planning and Adaptive Planning capabilities. CFAST is now executing Version 3.1 (FY 2004 through FY 2005) and Block 3.X (FY 2005 through FY 2006) following receipt of final user requirements NLT Feb 2005.

Exhibit R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Global Command and Control System / PE 0303150K	PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02

Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

Version 3.X will be broken into spiral releases as the final work requirement is identified. CFAST Version 3.X introduces a more sophisticated planning capability and the ability to do near execution planning/re-planning during crisis and execution.

CFAST Version 3.x capabilities are anticipated to include the following after receipt of final, vetted, user defined requirements:
- *Force Builder* – A force-generation tool used to automate the design and building of Time Phased Force and Deployment Data (TPFDD) files for deliberate planning. It allows the planner to build forces, group them into force modules and place them into a priority of movement that is honored by other CFAST scheduling applications.
- *Lift Allocator* - A collaborative tool between United States Transportation Command (USTRANSCOM) and the other Combatant Commands that will calculate an average daily throughput tonnage by day. This ceiling will in turn be allocated to service components as their daily limit on transportation flow.
- *Force Packager* - A CFAST application used to quickly build TPFDD requirements including their "below the line" Combat Support and Combat Service Support (CS/CSS) capability based on rules of allocation for each service. Provides a "one click" process for building large force requirements in support of the published Concept of Operations (CONOPS).
- *Plan Builder* - Generates decision logs and reports.
- *AmmoGen* - Generates ammo sustainment requirements during the building of a plan.
- *PerGen* - Personnel Generator allows modifications of scenarios by service for inclusion in dynamic plans/adaptive situations.
- *SusGen* - Sustainment Generator allows for merging of scenarios by service. Imports scenarios created in standalone Joint Flow and Analysis System for Transportation (JFAST).
- *Plan Viewer* - Option to show force flow data across modules by date range.

	FY 04	FY 05	FY 06	FY 07
Subtotal Cost	0	1.200	0.288	0

Integration and Test (I&T): CFAST will employ an incremental spiral I&T methodology. Focus will be on rapidly fielding capability to users to evaluate during actual planning events. A spiral approach permits an earlier start of

Exhibit R-2a, RDT&E Project Justification		DATE: February 2005
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Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
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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. The level of testing necessary for the Version 3.X release is commensurate to the operational and technical complexity of the release. In accordance with DOT&E guidelines, level two testing is applied to increments that provide only minor system improvements and present minor risk. As determined through an initial risk assessment conducted by the CFAST PMO, Version 3.X is a lower risk release having minimal potential to (1) impact other system applications and (2) disrupt the basic system's ability to support the mission. Therefore, level two testing for the Version 3.X spiral releases is anticipated.

C. Other Program Funding Summary:

	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	To Complete	Total Cost
Procurement, DW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
O&M, DW	0.000	0.000	4.500	0.000	0.000	0.000	0.000	0.000	0.000	4.500

D. Acquisition Strategy:
The Joint Requirements Oversight Council (JROC) memorandum (JROCM) 102-04, Subject: Collaborative Force Analysis, Sustainment and Transportation System (CFAST) Future Development, designated U.S. Joint Forces Command (USJFCOM) as the Functional Proponent for CFAST and the Defense Information Systems Agency (DISA) as the Material Solution Provider, effective July 2004. The CFAST Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. The CFAST project utilizes Cost Reimbursable Task Orders (TO) issued under competitively awarded contracts. The CFAST project maximizes use of competitively awarded IDIQ contracts and requires contractors to establish and manage specific earned value data. The CFAST project's strategy mitigates risk by conducting monthly Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

Exhibit R-2a, RDT&E Project Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Global Command and Control System / PE 0303150K		PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02

Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

E. Performance Metrics:

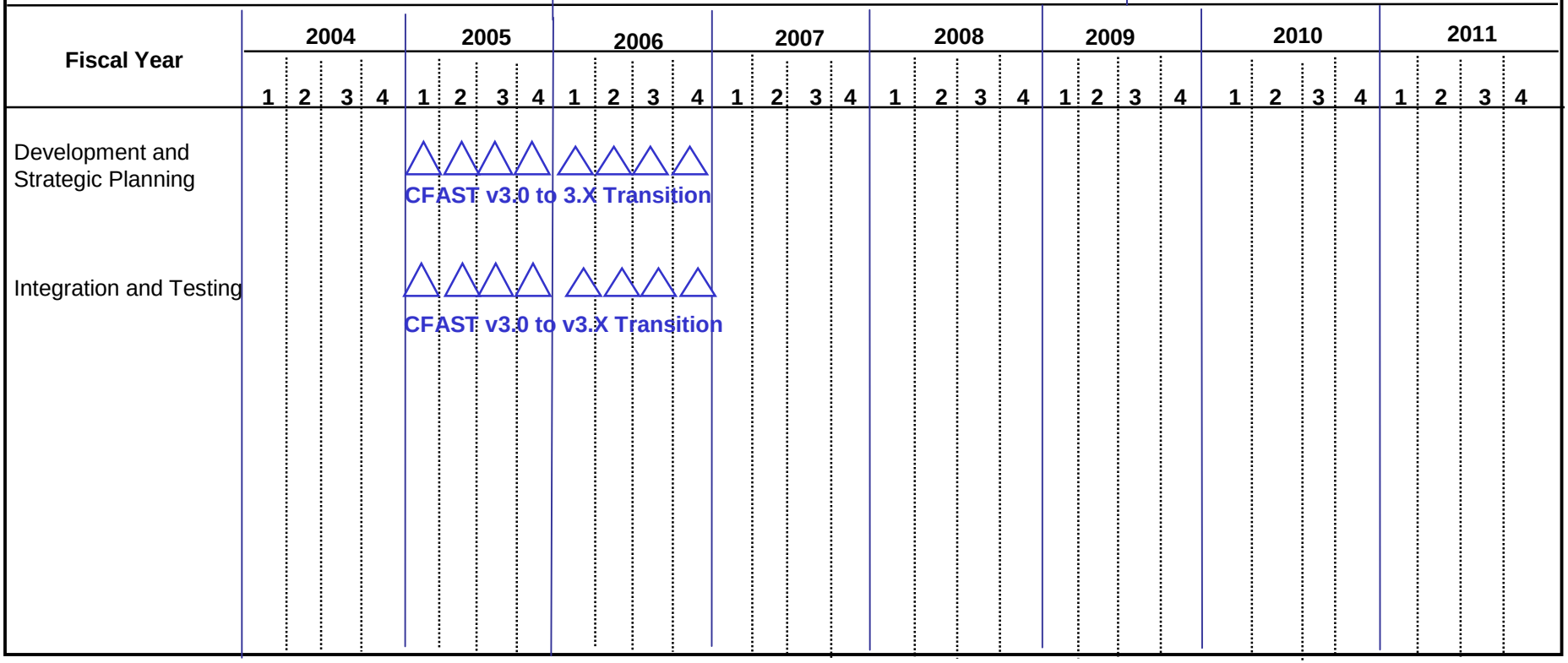
Cost & Schedule Management – The CFAST project utilizes earned value management to manage technical cost and schedule requirements. Contractors are required to plan, budget, and schedule resources in time-phased "planned value" increments constituting a cost and schedule measurement baseline. This approach encourages contractors to use effective internal cost and schedule management control systems. The CFAST project leader evaluates performance by conducting thorough Post-award Contract Reviews (PCRs) and monthly Contract Performance Reviews (CPRs). The CFAST project leader also conducts weekly critical path reviews of the CFAST release schedules to ensure tasks are on track and to mitigate risk across the entire program.

Exhibit R-3 Cost Analysis		**DATE:** February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	**PROGRAM ELEMENT** Global Command and Control System (GCCS) PE 0303150K	**PROJECT NAME AND NUMBER** Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) / CC02

Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development	MIPR	ORNL, Oak Ridge, TN	0.000	7.201	Feb-05	1.731	Feb-06	0.000	N/A	Contg	Contg	8.932
Product Development	CPAF	TBD	0.000	2.000	Feb-05	0.481	Feb-06	0.000	N/A	Contg	Contg	2.481
Test and Evaluation	TBD	TBD	0.000	1.200	TBD	0.288	TBD	0.000	N/A	Contg	Contg	1.488
Total			0.000	10.401		2.500		0.000				

Exhibit R-4 Schedule Profile | **Date: February 2005**

Appropriation/Budget Activity	Program Element Number and Name	Project Number and Name
RDT&E, Defense-Wide/07	Global Command and Control System/PE 0303150K	CFAST / CC02



CFAST Version 2.0 was initially provided as a prototype to enhance deliberate planning capability. CFAST Version 3.0 was enhanced to include upgrades to several modules in Version 2.0 and begin an approach to develop tools for Crisis Action Planning and Adaptive Planning capabilities. CFAST is now executing Version 3.1 (FY 2004 through FY 2005) and Block 3.X (FY 2005 through FY 2006) following receipt of final user requirements NLT Feb 05. Version 3.X will be broken into spiral releases as the final work requirement is identified. CFAST Version 3.x introduces a more sophisticated planning capability and the ability to do near-execution planning/re-planning during crisis and execution.

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	**PROGRAM ELEMENT** Global Command and Control System (GCCS) / PE 0303150K	**PROJECT NAME AND NUMBER** Collaborative Force Analysis, Sustainment, and Transportation System / CC02

Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Development and Strategic Planning	N/A	1-4Q	1-4Q	N/A	N/A	N/A	N/A	N/A
Integration and Test	N/A	1-4Q	1-4Q	N/A	N/A	N/A	N/A	N/A

Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) Version 2.0 was initially provided as a prototype to enhance deliberate planning capability. CFAST Version 3.0 was enhanced to include upgrades to several modules in Version 2.0 and begin an approach to develop tools for Crisis Action Planning and Adaptive Planning capabilities. CFAST is now executing Version 3.1 (FY 2004 through FY 2005) and Block 3.X (FY 2005 through FY 2006) following receipt of final user requirements NLT Feb 05. Version 3.X will be broken into spiral releases as the final work requirement is identified. CFAST Version 3.x introduces a more sophisticated planning capability and the ability to do near-execution planning/re-planning during crisis and execution.