Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K

COST (in millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Total Program Element	50.882	62.237	47.237	36.613	27.961	9.242	4.800	0.000
Global Command and Control System-Joint/CC01	48.570	55.237	38.937	28.313	19.661	9.242	4.800	0.000
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	2.312	7.000	8.300	8.300	8.300	0.000	0.000	0.000

A. Mission Description and Budget Item Justification: The Global Command and Control System-Joint (GCCS-J) is the Department of Defense joint Command and Control (C2) system of record for achieving full spectrum dominance. GCCS-J is the principal foundation for dominant battlespace awareness, providing an integrated, near real-time picture of the battlespace necessary to conduct joint and multinational operations. It enhances information superiority and supports the operational concepts of full-dimensional protection and precision engagement. GCCS-J provides a robust and seamless C2 capability to the Commander-in-Chief, Secretary of Defense, National Military Command Center, Combatant Commanders, Joint Force Commanders, and Service Component Commanders. Employing the Defense Information Systems Network, GCCS-J offers vital connectivity to the systems the joint warfighter uses to plan, execute, and manage military operations. GCCS-J is a major Information Technology investment and is designated an Acquisition Category 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 Joint Staff validated, prioritized user requirements, and delivers multiple releases of GCCS-J functional capabilities. GCCS-J employs a predominantly open system client/server architecture, which is evolving to a web-based architecture that allows a diverse group of commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) software packages to operate at any GCCS-J location. GCCS-J integrates C2 mission applications/capabilities, database, web technology, and office automation tools. It fuses select C2 capabilities into a comprehensive, interoperable system by exchanging imagery, intelligence, status of forces, and planning information. GCCS-J Block V version releases will continue to address high priority requirements, and implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The program 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,

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2007
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the management of the GCCS-J program is an inherently governmental function. The requested RDT&E funding is critical to support DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2006, RDT&E funding financed the development of candidate applications and integration of Advanced Concept Technology Demonstrations (ACTDs) such as Situational Awareness enhancement tools to improve information warfare visualization and display. These tools will directly enhance the capabilities of the Deployable Joint Command and Control (DJC2), a tailorable system addressing Joint Force Commmanders' needs for air-, land-, and sea-based operations and the materiel solution for Standing Joint Force Headquarters.

Adaptive Planning (AP) is the DoD's methodology for constructing timely and agile war plans that achieve national security objectives. The Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) is a suite of software tools that provides AP capabilities to include: campaign planning, forecast predictions, information management and rapid execution. As an operational prototype, CFAST will continue to evolve as required to support the Joint Planning and Execution Community (JPEC) and is aimed to reduce the deliberate planning timeline from two years to six months. CFAST facilitates the dynamic preparation of campaign plans for rapid expeditionary environments to meet DoD planning doctrine requirements of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), Joint Staff and other Combatant Commands currently utilize CFAST. OSD and Joint Staff use CFAST to model how DoD will respond to current and future conflicts using a variety of current and future forces for all Services as part of their Operational Analysis missions.

CFAST has been identified for migration into the Net Enabled Command Capability (NECC) Program. In preparation for the transition, CFAST must evolve to the Service Oriented Architecture (SOA) while continuing to provide functional enhancements to meet Joint Staff validated and prioritized requirements. These enhancements include 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 goal end-state is for rapidly produced, near-execution ready campaign plans that provide multiple courses of action. CFAST will provide "living plans" in a net-centric, collaborative, virtual environment, updated routinely to reflect changes in guidance/ strategic environment with automated triggers, linked to real time authoritative sources, that alert planners to key assumptions or planning parameters.

CFAST RDT&E funding has been extended (8.3M annually beginning in FY08 through FY10) to continue development of AP capabilities against Joint Staff requirements and to support the synchronization with NECC.

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K

B.

Program Change Summary:	FY06	FY07	FY08	FY09
Previous President's Budget	51.584	59.681	43.972	44.061
Current Submission	50.882	62.237	47.237	36.613
Total Adjustments	0.702	+2.556	+3.265	-7.448

Change Summary Explanation:

FY 2006 change is due the following:

- Revised Fiscal Guidance due to the Defense Wide RDTE Appropriations (0.702)

FY 2007 change is due the following:

- Congressional Section 8106 –Economic Assumptions (-$0.644M) and
- Due to congressional funding of Tactical 3D Common Operational Picture (+$3.2M)

FY 2008 change is due the following:

- Congressional Adjustment (-$1.935M)
- Intradepartmental realignment of funding (+$8.3M) associated with CFAST to extend the development of AP capabilities and to synchronize with NECC
- Intradepartmental realignment of funding (-$3.1M) from GCCS-J to OSD's Defense Readiness Reporting System (DRRS)

FY 2009 change is due to the following:

- Congressional Adjustment (-$1,487M)
- Internal realignment of funding by appropriations to begin the migration of the Joint Operations Support Center (JOSC) to the DISA Defense Enterprise Computing Centers (DECC) in order to support net-centric operations (-$11.061M)
- Intradepartmental realignment of funding (+$8.3M) associated with CFAST to extend the development of AP capabilities and to synchronize with NECC
- Intradepartmental realignment of funding (-$3.2M) from GCCS-J to OSD's Defense Readiness Reporting System (DRRS)

Exhibit R-2a, RDT&E Project Justification				DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Global Command and Control System- Joint/CC01	48.570	55.237	38.937	28.313	19.661	9.242	4.800	0.000

A. Mission Description & Budget Item Justification: The Global Command and Control System-Joint (GCCS-J) is the Department of Defense joint Command and Control (C2) system of record for achieving full spectrum dominance. GCCS-J is the principal foundation for dominant battlespace awareness, providing an integrated, near real-time picture of the battlespace necessary to conduct joint and multinational operations. It enhances information superiority and supports the operational concepts of full-dimensional protection and precision engagement. GCCS-J provides a robust and seamless C2 capability to the Commander-in-Chief, Secretary of Defense, National Military Command Center, Combatant Commanders, Joint Force Commanders, and Service Component Commanders. Employing the Defense Information Systems Network, GCCS-J offers vital connectivity to the systems the joint warfighter uses to plan, execute, and manage military operations. GCCS-J is a major Information Technology investment and is designated an Acquisition Category 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 Joint Staff validated, prioritized user requirements, and delivers multiple releases of GCCS-J functional capabilities. GCCS-J employs a predominantly open system client/server architecture, which is evolving to a web-based architecture that allows a diverse group of commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) software packages to operate at any GCCS-J location. GCCS-J integrates C2 mission applications/capabilities, database, web technology, and office automation tools. It fuses select C2 capabilities into a comprehensive, interoperable system by exchanging imagery, intelligence, status of forces, and planning information. GCCS-J Block V version releases will continue to address high priority requirements, and implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The program 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 DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2006, RDT&E funding financed the development of candidate applications and integration of Advanced Concept Technology Demonstrations (ACTDs) such as Situational Awareness enhancement tools to improve information warfare visualization and display. These tools 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 materiel solution for Standing Joint Force Headquarters.

Exhibit R-2a, RDT&E Project Justification				DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Global Command and Control System- Joint/CC01	48.570	55.237	38.937	28.313	19.661	9.242	4.800	0.000

B. Accomplishments/Planned Program:

	FY06	FY 07	FY 08	FY 09
Subtotal Cost	42.941	43.355	29.387	20.864

Development and Strategic Planning: GCCS-J is currently executing Block V (FY 2004 through FY 2009). GCCS-J Block V will incorporate 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. Block V releases of GCCS-J will deliver a secure, collaborative, web-enabled, and tailorable C2 architecture that provides decision superiority and vertical/horizontal interoperability. Major Block V capabilities include:

FY06: Emergent releases (SORTS 4.0.3, JOPES 4.0.3, Global 4.0.2) that included implementation of new functionality, functionality enhancements and architecture and infrastructure enhancements. New functionality included net-centric capabilities such as the JOPES web-based Data Exchange (DEX), JDNETS web service and the Readiness Input Tool and the addition of Joint Blue Force Situational Awareness (JBFSA) capabilities and common operational picture military operations other than war (MOOTW) symbology. Functionality enhancements included the addition of new interfaces such as the Geospatial Information Access & Sharing (GIAS) interface, enhancements to the Theater Ballistic Missile Defense (TBMD) capabilities, upgrades to Force Readiness input tool for the USMC and Force Readiness database for Navy overall C-level reporting. Architecture and infrastructure enhancements included COP client stability and synchronization improvements, migration of the Deployment Visualization Tool (DVT) from a local to an enterprise level capability and core infrastructure commercial off the shelf version updates and security patches.

FY07: In FY07 GCCS-J is focused on the development of GCCS-J 4.1 Spiral Releases (Global 4.1, SORTS 4.1, JOPES 4.1) addressing operational requirements and net-centric architecture implementation. Includes core infrastructure upgrades to operating system, database, and security capabilities, Force Readiness implementation of tiered readiness reporting data (strategic, operational, tactical) and Force Planning web enablement of the JOPES editing Tool (JET) and integration of deliberate and crisis action medical planning tools. COP enhancements add capabilities to process and

Exhibit R-2a, RDT&E Project Justification				DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Global Command and Control System- Joint/CC01	48.570	55.237	38.937	28.313	19.661	9.242	4.800	0.000

display moving target indicator data, manage blue force tracks and provide static and dynamic web based access to the common operational picture. Intelligence enhancements include management of multiple data services in the COP and continued integration of intelligence information into the COP through automatic association of multiple data sources.

FY08: In FY08 GCCS-J will be focused on the development of GCCS-J 4.2 Spiral Releases (Global 4.2, SORTS 4.2, JOPES 4.2) addressing operational requirements and net-centric architecture implementation. Includes core infrastructure upgrades to operating system, database, and security capabilities, completing the implementation of unified account management via PKI and single sign on. New functionality includes web based access to Force Planning and Force Readiness data, ability to aggregate readiness data, implementation of dynamic and deployment Force Modules, web enablement of the JOPES Rapid Query Tool (RQT), common operational picture track management capability increase (100K Tracks),Cross Domain Services (CDS), time critical targeting, the ability to process and display Combat Survivor Evader Locator (CSEL) events, and target coordinate production from ISR sensor images. Architectural enhancements include the migration of Adaptive Course of Action (ACOA) from a local to an enterprise level capability and eliminating the need for local replication of readiness data.

As a result of an intradepartmental realignment of funding ($3.1M) from GCCS-J to OSD's Defense Readiness Reporting System (DRRS), GCCS-J will not develop any new capabilities for SORTS beginning in FY08. GCCS-J will complete testing and fielding SORTS v4.2 in FY08, and provide ongoing sustainment.

FY09: In FY09, GCCS-J will complete the development, testing, and fielding of GCCS-J 4.2 Spiral Releases (Global 4.2) addressing operational requirements and net-centric architecture implementation. Includes core infrastructure upgrades to operating system, database, and security capabilities, completing the implementation of unified account management via PKI and single sign on. New functionality includes web based access to Force Planning and Force Readiness data, ability to aggregate readiness data, implementation of dynamic and deployment Force Modules, web enablement of the JOPES Rapid Query Tool (RQT), common operational picture track management capability increase (100K Tracks), Cross Domain Services (CDS), time critical targeting, the ability to process and display Combat Survivor Evader Locator (CSEL) events, and target coordinate production from ISR sensor images. Architectural enhancements include the migration of Adaptive Course of Action (ACOA) from a local to an enterprise level capability and eliminating the need for local replication of readiness data.

As a result of an intradepartmental realignment of funding ($3.2M) from GCCS-J to OSD's Defense Readiness Reporting

Exhibit R-2a, RDT&E Project Justification				DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Global Command and Control System- Joint/CC01	48.570	55.237	38.937	28.313	19.661	9.242	4.800	0.000

System (DRRS), GCCS-J will not develop any new capabilities for SORTS beginning in FY08. GCCS-J will complete testing and fielding SORTS v4.2 in FY08, and provide ongoing sustainment.

	FY06	FY 07	FY 08	FY 09
Subtotal Cost	5.629	8.682	9.550	7.449

Integration and Test (I&T): GCCS-J's incremental, spiral I&T approach permits an earlier start of integration testing since all new segments will not be available at the beginning of integration testing. This risk reduction strategy allows testing in smaller, more manageable increments, while still enforcing a level of Block V testing commensurate to the operational and technical complexity of each release. In accordance with DOT&E guidelines, and determined through an initial risk assessment conducted by the GCCS-J Program Manager Office (PMO), Block V spiral releases will be relatively low risk, with minimal potential to (1) impact other system applications and (2) disrupt the basic system's ability to support the mission.

	FY06	FY 07	FY 08	FY 09
Subtotal Cost	0.000	3.200	0.000	0.000

Tactical 3-D Common Operational Picture (T3DCOP) - The T3DCOP 3D display provides a complete air, ground, and sea picture in a situational awareness environment that can enhance the warfighters' understanding of the COP. This C4ISR transformational enhancement will provide immediate benefit to the warfighter, combining intuitive visualization and powerful functionality for enhanced situational awareness. In real-time operations, in playback for shift changeover, and in briefing material preparation, incorporation of this mature commercial technology will have a positive impact from the watch station, throughout the command chain.

C. Other Program Funding Summary:

	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Complete	Total Cost
O&M	86.506	87.318	69.078	79.918	65.114	65.021	64.339	65.183	Contg	Contg

Exhibit R-2a, RDT&E Project Justification				DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Global Command and Control System- Joint/CC01	48.570	55.237	38.937	28.313	19.661	9.242	4.800	0.000
Procurement	5.403	5.562	10.779	11.060	9.624	5.502	5.694	5.694	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. Use of performance-based contract awards is maximized while use of Time and Material (T&M) contracts is minimized to those providing programmatic support vs. software development, integration, or testing. The GCCS-J Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. PMO contract awards incorporate provisions requiring contractors to establish and manage specific earned value data. The PMO's strategy mitigates risk by requiring monthly Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

E. Performance Metrics:

Capabilities Provided: In August 2005 Joint Staff published the GCCS-J Block V Requirements Identification Document (RID) as the requirements baseline for Block V. Each Block V version release addresses outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities. These enhancements may take the form of modifications 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 GCCS-J program does implement/track a tailored subset of earned value concepts that fit within ANSI/EIA Standard 748. 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 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 2007
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

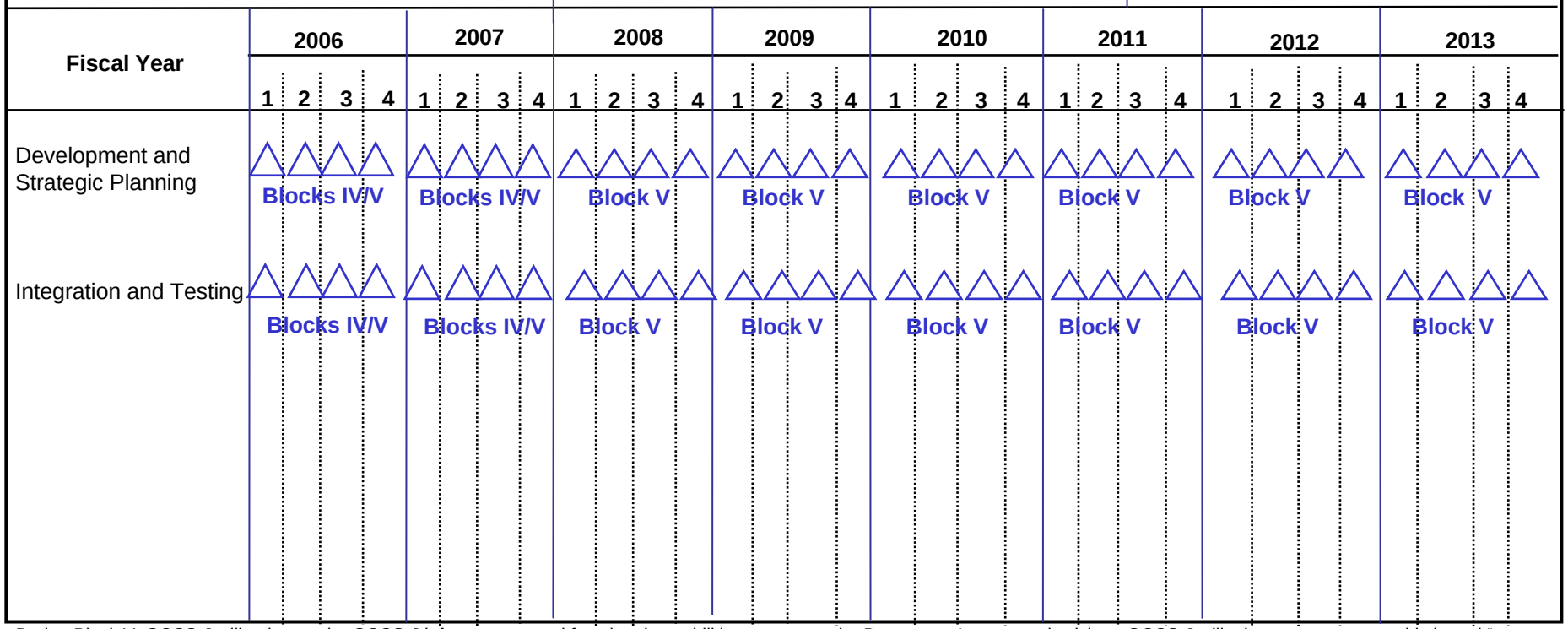
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development	CPAF	NGMS Reston, VA	36.401	17.138	May-07	7.998	May-08	6.238	May-09	Contg	Contg	67.775
Product Development	CPAF	NGMS Reston, VA	23.261	8.316	Feb-07	10.304	Feb-08	5.616	Feb-09	Contg	Contg	47.497
Product Development	CPAF	AB Floyd Alexandria, VA	10.730	0.000	N/A	0.000	N/A	0.000	N/A	Contg	12.477	10.730
Produce Development	CPAF	Femme Comp Inc., Chantilly, VA	1.847	3.551	TBD	0.000	TBD	0.000	TBD	Contg	Contg	5.398
Product Development	CPFF	SAIC Falls Church, VA	5.876	0.000	N/A	0.000	N/A	0.000	N/A	0.000	5.876	5.876
Product Development	CPFF	SAIC Falls Church, VA	3.892	1.547	Jan 07	1.593	Jan 08	1.243	Jan 09	Contg	Contg	8.275
Product Development	FFP	Dynamic Systems Los Angeles, CA	1.742	0.542	Feb-07	0.558	Feb-08	0.575	Feb-09	Contg	Contg	3.417
Product Development	CPFF	Pragmatics McLean, VA	14.358	3.861	Jul-07	2.971	Jul-08	1.925	Jul-09	Contg	Contg	23.115
Product Development	MIPR	Booz Allen Hamilton McLean, VA	3.394	0.000	N/A	0.000	N/A	0.000	N/A	0.000	3.394	3.394
Product Development	MIPR	JDISS Suitland, MD	6.039	0.000	N/A	0.000	N/A	0.000	N/A	0.000	10.590	6.039
Product Development	FFP	NGMS Reston, VA	4.301	0.849	TBD	0.425	TBD	0.213	TBD	Contg	Contg	5.788
Product Development	FFP	TBD (Source Selection)	0.000	5.028	TBD	2.939	TBD	3.027	TBD	Contg	Contg	10.994

Exhibit R-3 Cost Analysis		DATE: February 2007
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 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development	MIPR	SPAWAR, Charleston, SC	2.799	0.000	Jun-07	0.000	Jun-08	0.000	Jun-09	Contg	Contg	2.799
Product Development	FFRDC	MITRE, McLean, VA	3.438	1.194	Oct-06	1.230	Oct-07	0.959	Oct-08	Contg	Contg	6.821
Product Development	MISC	MISC	2.126	0.000	N/A	0.000	N/A	0.000	N/A	0.000	2.400	2.126
Product Development	FFP	Joint Info Technology Center Initiative	20.400	0.000	N/A	0.000	N/A	0.000	N/A	0.000	20.400	20.400
Product Development	MIPR	DIA	1.200	1.329	Jan-07	1.369	Jan-08	1.068	Jan-09	Contg	Contg	4.966
Product Development	FFP	Tactical 3-D COP (T3DCOP)	0.000	3.200	TBD	0.000	N/A	0.000	N/A	0.000	3.200	3.200
Test & Evaluation	CPAF	SAIC, Falls Church, VA	15.091	5.416	Feb-07	5.958	Feb-08	4.647	Feb-09	Contg	Contg	31.112
Test & Evaluation	MIPR	JITC, Ft Huachuca, AZ	7.808	2.872	Oct-06	3.159	Oct-07	2.464	Oct-08	Contg	Contg	16.303
Test & Evaluation	MIPR	TBD, Slidell, LA	0.436	0.394	TBD	0.433	TBD	0.338	TBD	Contg	Contg	1.601
Test & Evaluation	MIPR	SSC, San Diego, CA	3.636	0.000	Nov-06	0.000	Nov-07	0.000	Nov-08	Contg	Contg	3.636
Total			168.775	55.237		38.937		28.313				291.262

Exhibit R-4 Schedule Profile | **Date: February 2007**

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.

Post Block V, GCCS-J will transition to the Net Enabled Command Capability (NECC) Program, in accordance with schedules that will be established in concert with the NECC Program. During the transition period, until all GCCS-J functionality is available in NECC, GCCS-J will be sustained. 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 2007
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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
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

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.

Post Block V, GCCS-J will transition to the Net Enabled Command Capability (NECC) Program, in accordance with schedules that will be established in concert with the NECC Program. During the transition period, until all GCCS-J functionality is available in NECC, GCCS-J will be sustained. 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-2a, RDT&E Project Justification				DATE: February 2007				
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)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	2.464	7.000	8.300	8.300	8.300	0.000	0.000	0.000

A. Mission Description and Budget Item Justification:
Adaptive Planning (AP) is the DoD's methodology for constructing timely and agile war plans that achieve national security objectives. The Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) is a suite of software tools that provides AP capabilities to include: campaign planning, forecast predictions, information management and rapid execution. As an operational prototype, CFAST will continue to evolve as required to support the Joint Planning and Execution Community (JPEC) and is aimed to reduce the deliberate planning timeline from two years to six months. CFAST facilitates the dynamic preparation of campaign plans for rapid expeditionary environments to meet DoD planning doctrine requirements of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), Joint Staff and other Combatant Commands currently utilize CFAST. OSD and Joint Staff use CFAST to model how DoD will respond to current and future conflicts using a variety of current and future forces for all Services as part of their Operational Analysis missions.

CFAST has been identified for migration into the Net Enabled Command Capability (NECC) Program. In preparation for the transition, CFAST must evolve to the Service Oriented Architecture (SOA) while continuing to provide functional enhancements to meet Joint Staff validated and prioritized requirements. These enhancements include 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 goal end-state is for rapidly produced, near-execution ready campaign plans that provide multiple courses of action. CFAST will provide "living plans" in a net-centric, collaborative, virtual environment, updated routinely to reflect changes in guidance/ strategic environment with automated triggers, linked to real time authoritative sources, that alert planners to key assumptions or planning parameters.

CFAST RDT&E funding has been extended (8.3M annually beginning in FY08 through FY10) to continue development of AP capabilities against Joint Staff requirements and to support the synchronization with NECC.

Exhibit R-2a, RDT&E Project Justification				DATE: February 2007				
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)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	2.464	7.000	8.300	8.300	8.300	0.000	0.000	0.000

B. Accomplishments/Planned Program:

	FY 06	FY 07	FY 08	FY 09
Subtotal Cost	2.176	6.250	7.800	7.800

Development and Strategic Planning: CFAST continues to produce capabilities via spiral development, allowing for the rapid introduction of more sophisticated planning capabilities to include execution planning/re-planning during crisis and execution. In FY06, CFAST received 167 validated and prioritized requirements. In addition, The Secretary of Defense approved the AP Roadmap on 13 December 2005. CFAST will meet this AP guidance, preserving the best characteristics of present day deliberate (contingency) and crisis planning, while establishing common joint processes and systems to support the development and execution of plans. Furthermore, CFAST has been identified as a technical solution to address the NECC Force Projection Mission Capability Package as articulated in the draft NECC CDD. Within the FY08 to FY10 timeframe, CFAST will sustain existing capabilities, continue to development emergent AP capabilities to satisfy the 167 requirements as well as meet the intent of the AP Roadmap and alignment with the NECC CDD. CFAST is funded to provide four operational versions annually.

In FY08-09, RDT&E will finance the following:

- **Capability and Force Requirements Manipulation**: improving the Force Builder force generation tool to include Task Organization and Mass/Selective Edits for units within the Time Phased Force And Deployment Data (TPFDD) files. The improvements enable the scheduled movement of forces and supplies into an area of operations. Force Builder allows the planner to build a draft list of forces, group them into force modules and place them into a priority of movement that is honored by scheduling applications. Improvements will include a refined level of detail which provides a higher quality estimate for logistics and transportation needs and reduces the time required to build a plan. The following tools will receive modifications:
  - Force Packager - An application used to quickly build TPFDD requirements including “below the line” Combat

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Support and Combat Service Support (CS/CSS) capability based on rules of allocation for each Service. Will provide a "one click" process for building large force requirements in support of the published Concept of Operations (CONOPS).

- Plan Builder - Generate decision logs and reports for a specific Operation Plan (OPLAN).
- Plan Viewer - Option to show force flow data across modules by date range.

- **Plan Evaluation and Quality Assurance**: providing a feedback loop from models which simulate warfare and transportation needs from initial US entry into theatre through mission completion. The feedback allows planners to alter the force composition and size according to the mission needs. The improvements include modifications to the Lift Allocator and the Joint Force Analysis, Sustainment, and Transportation (JFAST) tools, a pair of collaborative tools sponsored by United States Transportation Command (USTRANSCOM) and the other Combatant Commands that rapidly calculates an average daily throughput tonnage by day.
- **Logistics Analysis Capabilities:** CFAST will provide improved capabilities which estimate logistics requirements for an operation. This includes all classes of supply daily. Improvements will include Transportation estimate improvements by improving the Sealift estimation algorithm, increasing the level of detail for sustainment planning, and increasing the data for individual ports. The increased detail provides better information and makes the initial estimate more accurate and reduces the planning cycle. Improvements will be made to:
  - AmmoGen Tool - Generate ammo sustainment requirements during the building of a plan.
  - PerGen Tool - Personnel Generator will allow modifications of scenarios by service for inclusion in dynamic plans/adaptive situations.
  - SusGen Tool - Sustainment Generator allows for merging of scenarios by service. Imports scenarios created in standalone Joint Flow and Analysis System for Transportation (JFAST), the robust TRANSCOM used for scheduling movement.
  - Execution management tool – A CFAST tool used to absorb and manage USTRANSCOM analysis and scheduling system data. It allows the user to create tools that validate movement requirements, assign requirements to carriers, report movement, and track strategic and theater lift assets and requirement movement through the Defense Transportation System globally.
  - Theater log CONOPS management tool – A CFAST tool that enables logistics planners to develop theater-wide concept of operations. It provides automated planning, and enables planning for theater distribution of supplies and equipment. Include support available, where applicable, from the host nation.
  - Log Force adequacy tool – The Log Force Adequacy tool will enable logistics planners, via automation, to evaluate the force list (Time Phased Force Deployment Data - TPFDD) and develop estimates of supportability/concept of

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operations for providing adequate and timely support.

- **Planning Workflow**: New capability will allow authorized users to track the status of each OPLAN and the approval process for the plan. The planning capability will receive modifications which provide redeployment planning capabilities from theatre back to home station. Modifications are required for the following tools:
  - Plan Development and Execution Process Workflow Manager - Provide capability similar to Microsoft Project for management and graphical layout of the campaign and war planning process.
  - Planning Application Integration - Develop a collaborative working environment that provides the capability to absorb, manipulate, model, display and provide updated data containing critical plan elements to/from DLA, the intelligence community, the Standing Joint Force HQ, special operations forces and the Joint medical community.
- **Interoperability**: CFAST contains unique software capabilities but relies upon data feeds from external systems. Data requirements and improvements will include Readiness data; fine grain unit information; migration to new data standards; and importing/exporting into new formats.
- **Course of Action Development** – Provide an initial capability that allows planners to simulate the scheduled TPFDD flow of forces into the area of operations and the actions required to fulfill the mission. The simulation shall include effects based operations as well as attrition warfare. The course of action will allow feedback into the planning applications in order to refine the forces required for an operation.
- **Net Enabled Command Capabilities (NECC)** – In order for CFAST to provide Adaptive Planning capabilities for the NECC program, CFAST must move to the SOA technical specifications dictated by OSD NII in order to reduce cost by providing reuse of code and enterprise level capabilities through FY10.

	FY 06	FY 07	FY 08	FY 09
Subtotal Cost	0.288	0.750	0.500	0.500

Integration and Test (I&T): CFAST employs an incremental spiral I&T methodology in accordance with testing and information assurance regulations, as applicable. This risk reduction strategy allows testing in smaller, more manageable versions, while still enforcing a level of testing commensurate to the operational and technical complexity of each release. This approach permits an earlier start of integration testing as well as on making capability

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available to users for evaluation during actual planning events. CFAST also finances independent security evaluations of CFAST versions in order to maintain the ATO status. This approach ensures the operational suitability and effectiveness, interoperability, and security of CFAST for warfighter use.

C. Other Program Funding Summary:

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	To Complete	Total Cost
Procurement, DW	0.000	0.000	6.000	1.500	1.500	0.000	0.000	0.000	0.000	9.000
O&M, DW	3.939	0.360	8.700	8.700	8.700	0.000	0.000	0.000	0.000	30.600

D. Acquisition Strategy:
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. CFAST utilizes Cost Reimbursable Task Orders (TO) issued under competitively awarded contracts. CFAST maximizes the use of competitively awarded IDIQ contracts and requires contractors to establish and manage specific earned value data. The CFAST strategy mitigates risk by requiring Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

E. Performance Metrics:
Cost & Schedule Management – CFAST 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

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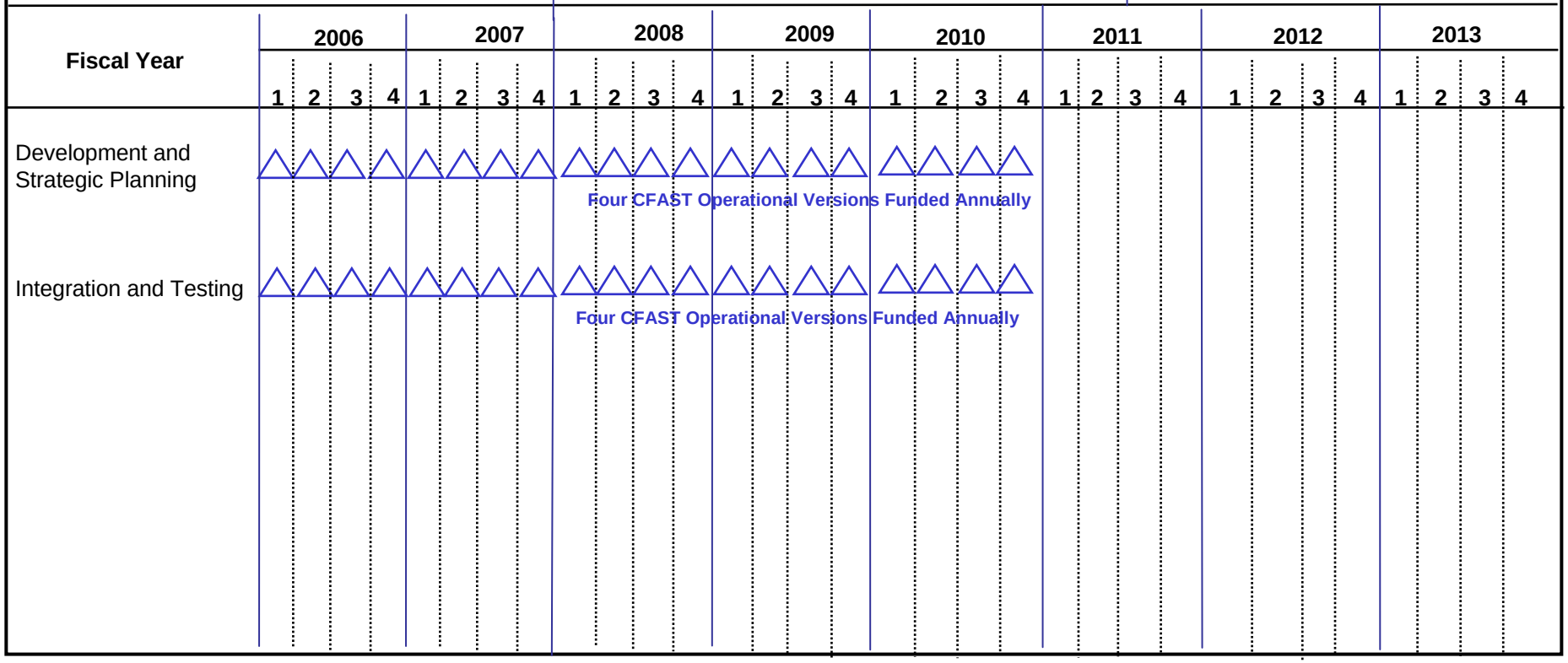
schedule management control systems. Performance is evaluated by conducting CPRs as well as weekly critical path reviews of the CFAST release schedules to ensure tasks are on track and to mitigate risk across the entire lifecycle.

Exhibit R-3 Cost Analysis		DATE: February 2007
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 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development	MIPR	ORNL, Oak Ridge, TN	7.350	6.250	Feb-07	6.500	Feb-08	6.500	Feb-09	Contg	Contg	23.650
Product Development	CPAF	Pragmatics, McLean, VA	2.000	0.000	N/A	0.000	N/A	0.000	N/A	Contg	Contg	2.000
Test and Evaluation	MIPR	ORNL, Oak Ridge, TN	1.200	0.750	Feb-07	0.500	Feb-08	0.500	Feb-09	Contg	Contg	2.700
Product Development	IATAC	BAH McLean, VA	2.300	0.000	Sep-07	1.300	Sep-08	1.300	Sep-09	Contg	Contg	4.900
Total			12.850	7.000	N/A	8.300	N/A	8.300	N/A	Contg	Contg	33.250

Exhibit R-4 Schedule Profile | **Date: February 2007**

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



In FY06, CFAST received 167 validated and prioritized requirements. In FY06 and FY07, CFAST developed, tested and fielded capabilities to satisfy those requirements. Within the FY08 to FY10 timeframe, CFAST will sustain existing capabilities, continue to development emergent AP capabilities to satisfy the 167 requirements as well as meet the intent of the AP Roadmap and alignment with the NECC CDD. CFAST is funded to provide four operational versions annually. CFAST will provide "living plans" in a net-centric, collaborative, virtual environment, updated routinely to reflect changes in guidance/ strategic environment with automated triggers, linked to real time authoritative sources, that alert planners to key assumptions or planning parameters. CFAST is funded to provide four operational versions annually.

Exhibit R-4a Schedule Detail		DATE: February 2007
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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Development and Strategic Planning	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	N/A	N/A	N/A
Integration and Test	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	N/A	N/A	N/A

In FY06, CFAST received 167 validated and prioritized requirements. In FY06 and FY07, CFAST developed, tested and fielded capabilities to satisfy those requirements. Within the FY08 to FY10 timeframe, CFAST will sustain existing capabilities, continue to development emergent AP capabilities to satisfy the 167 requirements as well as meet the intent of the AP Roadmap and alignment with the NECC CDD. CFAST is funded to provide four operational versions annually. CFAST will provide “living plans” in a net-centric, collaborative, virtual environment, updated routinely to reflect changes in guidance/ strategic environment with automated triggers, linked to real time authoritative sources, that alert planners to key assumptions or planning parameters. CFAST is funded to provide four operational versions annually.