

# **The Joint Staff**

**Fiscal Year (FY) 2009 Budget Estimates**

**February 2008**



**Research, Development, Test and Evaluation, Defense-Wide**



**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

February 2008

**TABLE OF CONTENTS**

<b><u>R-1</u></b> <b><u>Line</u></b>	<b><u>Program</u></b> <b><u>Element</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
-	-	Exhibit R-1, RDT&E Programs	1
-	-	Exhibit R-1C, RDT&E Programs Comparison Report	2
127	0605126J	Joint Theater Air & Missile Defense Organization	3
164	0204571J	Joint Staff Analytical Support	8
165	0208043J	Planning and Decision Aid System*	N/A
187	0303149J	C4I for the Warrior	11
227	0902298J	Management HQ	19
-	-	Exhibit RDT&E PB-15, Defense-Wide Advisory and Assistance Services	26

\* Note: PLANNING AND DECISION AID SYSTEM (PDAS) is an automated information system protected program under Secretary of Defense (SecDef). PDAS supports the planning and execution of Integrated Joint Special Technical Operations (IJSTO).

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

February 2008

**ALPHABETICAL ORDER**

<b><u>R-1</u></b> <b><u>Line</u></b>	<b><u>Program</u></b> <b><u>Element</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
-	-	Exhibit R-1, RDT&E Programs	1
-	-	Exhibit R-1C, RDT&E Programs Comparison Report	2
187	0303149J	C4I for the Warrior	11
164	0204571J	Joint Staff Analytical Support	8
127	0605126J	Joint Theater Air & Missile Defense Organization	3
227	0902298J	Management HQ	19
165	0208043J	Planning and Decision Aid System*	N/A
-	-	Exhibit RDT&E PB-15, Defense-Wide Advisory and Assistance Services	26

\* Note: PLANNING AND DECISION AID SYSTEM (PDAS) is an automated information system protected program under Secretary of Defense (SecDef). PDAS supports the planning and execution of Integrated Joint Special Technical Operations (IJSTO).

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

February 2008

**Exhibit R-1, RDT&E Programs**  
(\$ in Millions)

R-1 Line Item No.	Program Element	Item	Budget Activity	FY2007	FY2008	FY2009	FY2010
127	0605126J	Joint Theater Air & Missile Defense Organization	6	52.287	53.653	55.282	57.039
164	0204571J	Joint Staff Analytical Support	7	7.525	7.631	8.030	7.584
165	0208043J	Planning and Decision Aid System	7	1.656	1.694	1.728	1.771
187	0303149J	C4I for the Warrior	7	3.543	3.624	3.662	3.754
227	0902298J	Management HQ	7	3.078	2.766	3.401	3.000
<b>TOTALS</b>				<b>68.089</b>	<b>69.368</b>	<b>72.103</b>	<b>73.148</b>

\* FY2008 funding totals do not include \$1.028 million in pending request for current FY2008 GWOT requirements.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

February 2008

Exhibit R-1C, RDT&E Programs - Comparison Report

Program Element	Item	Budget Activity	Position	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0605126J	Joint Theater Air & Missile Defense Organization	6	FY08 PB	52.287	53.653	55.282	57.039	58.844	60.558	62.327
			FY09 PB	52.287	53.653	55.282	57.039	58.844	60.558	62.327
			Delta	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0204571J	Joint Staff Analytical Support	7	FY08 PB	7.525	7.744	8.030	7.584	7.735	7.865	8.000
			FY09 PB	7.525	7.631	8.030	7.584	7.735	7.865	8.000
			Delta	0.000	-0.113	0.000	0.000	0.000	0.000	0.000
0208043J	Planning and Decision Aid System	7	FY08 PB	1.656	1.694	1.728	1.771	1.815	1.855	1.896
			FY09 PB	1.656	1.694	1.728	1.771	1.815	1.855	1.896
			Delta	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0303149J	C4I for the Warrior	7	FY08 PB	3.543	3.624	3.662	3.754	3.847	3.932	4.018
			FY09 PB	3.543	3.624	3.662	3.754	3.847	3.932	4.018
			Delta	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0902298J	Management HQ	7	FY08 PB	3.078	3.210	3.506	3.615	3.756	3.839	3.923
			FY09 PB	3.078	2.766	3.401	3.000	3.089	3.153	3.219
			Delta	0.000	-0.444	-0.105	-0.615	-0.667	-0.686	-0.704
<b>Total Budget Activity 6</b>			FY08 PB	52.287	53.653	55.282	57.039	58.844	60.558	62.327
			FY09 PB	52.287	53.653	55.282	57.039	58.844	60.558	62.327
			Delta	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total Budget Activity 7</b>			FY08 PB	15.802	16.272	16.926	16.724	17.153	17.491	17.837
			FY09 PB	15.802	15.715	16.821	16.109	16.486	16.805	17.133
			Delta	0.000	-0.557	-0.105	-0.615	-0.667	-0.686	-0.704
<b>Total RDT&amp;E</b>			FY08 PB	68.089	69.925	72.208	73.763	75.997	78.049	80.164
			FY09 PB	68.089	69.368	72.103	73.148	75.330	77.363	79.460
			Delta	0.000	-0.557	-0.105	-0.615	-0.667	-0.686	-0.704

Exhibit R-1C, RDT&E Programs - Comparison Report

Exhibit R-1C, Page 1 of 1

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 6	R-1 Line Item Nomenclature: 127 0605126J Joint Theater Air & Missile Defense Organization	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
<b>Total PE Cost</b>	52.287	53.653	55.282	57.039	58.844	60.558	62.327
Joint Theater Air & Missile Defense Org (JTAMDO)	52.287	53.653	55.282	57.039	58.844	60.558	62.327

**A. Mission Description and Budget Item Justification:**

The Joint Theater Air and Missile Defense Organization (JTAMDO) is the organization within the Department of Defense (DOD) chartered to plan, coordinate, and oversee Joint Air and Missile Defense (AMD) requirements, joint operational concepts, operational architectures, and development of the Joint Integrated Air and Missile Defense (IAMD) roadmap. As part of the CJCS staff, JTAMDO supports the Chairman in meeting his Title 10 responsibilities as they relate to air and missile defense issues. JTAMDO serves as the operational community's proponent for characteristics, requirements, and capabilities in air and missile defense, and is the joint air and missile defense resource proponent within the DOD's resource allocation structures. JTAMDO also leads AMD mission area and utility analyses, integrates air and missile defense within the Force Protection joint capability area, and conducts evaluations and demonstrations of joint air and missile defense architectures and concepts.

JTAMDO has established a close partnership with Combatant Commanders (COCOM) and maintains liaison offices at all major COCOM locations to facilitate coordination of IAMD issues and requirements. In particular, JTAMDO maintains close coordination with US Strategic Command (USSTRATCOM) in support of the President's initiative for ballistic missile defense of the U.S. It provides the Chairman, JCS and the Joint Requirements Oversight Council (JROC) the ability to meet statutory responsibilities to review the cost, schedule and performance criteria of Missile Defense Agency (MDA) Missile Defense programs, and assesses the validity of those criteria in relation to national and military requirements. At the request of

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 6	R-1 Line Item Nomenclature: 127 0605126J Joint Theater Air & Missile Defense Organization	

USSTRATCOM, and at the direction of the Chairman, JCS, JTAMDO supports USSTRATCOM in the conduct of Military Utility Assessments and analysis of the Ballistic Missile Defense System (BMDS). JTAMDO supports the USSTRATCOM mission by ensuring operational and technical requirements are integrated into the theater missile warning architecture. JTAMDO represents the Joint Staff in work on the IAMD Capabilities Based Assessment Joint Service Team. JTAMDO also provides direct support to US Northern Command (USNORTHCOM) for homeland air surveillance issues and to US Joint Forces Command (USJFCOM) for capabilities development and validation in support of its Unified Command Plan (UCP) assigned missions.

Funding was realigned from JTAMDO to Functional Capabilities Boards (FCBs), which was part of the Management Headquarters. To properly capture the analytical support on the Joint Staff, a new program element (Joint Staff Analytical Support) was created and several programs, to include the FCBs, were realigned from Management Headquarters to this new PE.

<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Description</u>
22.391	23.007	23.943	<b>JTAMDO Core.</b> Provides overall staff support for JTAMDO operations in the area of ballistic missile defense, air and cruise missile defense and homeland defense. This includes performing analyses, demonstrations, and programmatic assessments of technology, operations, requirements, and weapons systems. In coordination with Services and COCOMs, JTAMDO Core also leads the definition, assessment, development and approval of Joint AMD Operational Concepts, Operational Architectures, and capability requirements to guide the Department's joint/interagency/combined fully integrated and net-centric capable air defense (including defense

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 6	R-1 Line Item Nomenclature: 127 0605126J Joint Theater Air & Missile Defense Organization	

**FY 2007   FY 2008   FY 2009   Description**

against cruise missiles, unmanned aerial vehicles, and ballistic missiles). JTAMDO Core also:

- Develops and integrates joint exercises, simulations, war-games, force resource allocations, and interoperability initiatives;
- Manages relevant Congressional interaction and COCOM interface through a cadre of liaisons collocated with major headquarters;
- Directly supports and sponsors homeland air surveillance related demonstration and analysis activities;
- Runs the AMD Working Group focusing COCOM, Joint Staff and Service collaboration efforts in the generation of joint concepts and development of the IAMD architecture and roadmap
- Develops U.S. positions for, and serves as the U.S. representative to the NATO Air Defense Committee.

Core JTAMDO also provides strategic planning development, infrastructure, security, travel, administrative and other support activities. Funding pays for: Contractor Systems Engineering and Technical Assistance (SETA) support for Air & Cruise Missile Defense (ACMD), Ballistic Missile Defense (BMD), Homeland Air Security (HAS) strategic planning, senior level briefings, and JTAMDO white papers; leased office space, including all upkeep services; all travel costs for government and contractor support personnel, including support for Combatant

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 6	R-1 Line Item Nomenclature: 127 0605126J Joint Theater Air & Missile Defense Organization	

**FY 2007   FY 2008   FY 2009   Description**

Commander liaison personnel travel; multiple levels of security including lease support for a Joint Worldwide Intelligence Communications System (JWICS) communications line and Special Compartmented Information (SCI) terminals (due to the classified nature and the diverse content of work in the JTAMDO portfolio); 24-hour physical security force and alarm monitoring and maintenance; daily on-site security personnel to meet DOD, National Industrial Security Program Operating Manual (NISPOM), and other security regulations; for all administrative and support functions; all associated Information Technology (IT) support, copier purchase and maintenance, as well as basic office supplies and furniture; all telephones, telephone lines, classified telephones, and classified/unclassified data connections.

7.929    8.280    8.565    **Joint Distributed Engineering Plant** evaluates and improves interoperability by establishing and using a distributed, nationwide, hardware and software in-the-loop simulation capability that allows proposed combat capabilities and field combat weapon systems to operate in operationally representative, synthetic joint air and missile defense environments.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 6	R-1 Line Item Nomenclature: 127 0605126J Joint Theater Air & Missile Defense Organization	

<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Description</u>
6.151	6.263	6.377	<b>JTAMDO Nimble Fire</b> enhances air and missile defense capability through the integration of robust representations of current and emerging weapons platform models that support operator-in-the-loop (OITL) exercises.
12.816	16.103	16.397	<b>Cruise Missile Combat Identification (CID)</b> . Develops joint cruise missile CID technology and positions it for fielding on front-line weapon systems. Monitors, assesses and enhances joint AMD Combat ID programs.

**B. Program Change Summary:**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2008 President's Budget	52.287	53.653	55.282
Total Adjustments	0.000	0.000	0.000
FY 2009 Budget Estimate	52.287	53.653	55.282

**C. Other Program Funding Summary:**

No other funding

**D. Acquisition Strategy:**

Not required for Budget Activities 1, 2, 3 and 6.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	R-1 Line Item Nomenclature: 164 0204571J Joint Staff Analytical Support	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
<b>Total PE Cost</b>	7.525	7.631	8.030	7.584	7.735	7.865	8.000
Joint Staff Analytical Support	7.525	7.631	8.030	7.584	7.735	7.866	8.000

**A. Mission Description and Budget Item Justification:**

Joint Staff Analytical Support funding was realigned from the Management Headquarters Program Element (PE) to properly reflect analytical support on the Joint Staff. This new PE encompasses several programs across multiple appropriations (Operation and Maintenance; Procurement; and Research, Development, Test and Evaluation). The programs include: Joint Training System (to include Training Transformation (T2)), Joint Logistics, Joint Collaborative Analysis (JCA) Support (formerly Joint Modeling & Simulation), Adaptive Planning and Analytic Agenda, and Functional Capabilities Boards (FCBs). The RDT&E effort is focused on Functional Capabilities Boards.

**B. Program Change Summary:**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2008 President's Budget	7.525	7.744	8.030
Total Adjustments	0.000	(0.113)	0.000
FY 2009 Budget Estimate	7.525	7.631	8.030

**C. Other Program Funding Summary:**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TO Complete</u>	<u>TOTAL Cost</u>
Operation & Maintenance	53.558	36.087	44.088	41.711	42.236	43.156	45.831	0.000	306.667
Procurement	0.000	0.851	0.865	0.886	0.906	0.926	0.946	0.000	5.380

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	R-1 Line Item Nomenclature: 164 0204571J Joint Staff Analytical Support	

**D. Acquisition Strategy:**

This program represents a continuing level of effort supporting a wide range of Functional Capability Board (FCBs) studies to support the Joint Requirements Oversight Council (JROC) process. Efforts include the development of tools, processes and the conduct of analysis managing portfolios. These tools, processes and analysis are required to assist decision makers as they examine the relationships between warfighting capabilities/interactions and identify opportunities for improving warfighting effectiveness.

**FY 2007 Accomplishments:** The FCBs assessed aspects of Joint Warfighting related programs and initiatives. The FCBs conducted detailed portfolio management. This included program analysis, capability gap analysis, future capability prioritization, and knowledge discovery. FCBs used and assessed the Joint Capability Assessment Tool Suite (JCATS) as a means to conduct their portfolio management. This included developing business rules as well as enhancements to the software that may be FCB unique. Finally, the FCBs continued to refine and update and, in some cases, begin their Joint Functional Concept.

**FY 2008/2009 Planned Programs:** The FCBs will continue to assess all aspects of Joint Warfighting related programs and initiatives. In FY 2008/2009, the FCBs will continue conducting detailed portfolio management. This will include program analysis, capability gap analysis, future capability prioritization, and knowledge discovery. The FCBs will continue utilizing and refining the functionality within the Joint Capability Assessment Tool Suite (JCATS) as a means to conduct their portfolio management. This includes developing business rules as well as enhancements to the software that may be FCB unique. Other efforts include Capability Based Assessments (CBA) as well as refining FCB Joint Functional Concept.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

**Exhibit R-3, Project Cost Analysis**

**February 2008**

APPROPRIATION/BUDGET ACTIVITY				Program Element					Project Name and Number			
RDT&E, Defense-Wide, Joint Staff 0400/BA 7				0204571J					Analysis Support			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<b>Support</b>												
FFRDC Studies	FFP	Var	2.137	1.231	Jan 07	1.387	Apr 08	1.443	TBD	TBD	TBD	TBD
Contracted Studies	FFP	Var	4.213	6.294	Dec 06	6.244	May 08	6.587	TBD	TBD	TBD	TBD
<b>Subtotal Support</b>			<b>6.350</b>	<b>7.525</b>		<b>7.631</b>		<b>8.030</b>				
<b>Remarks:</b>												
The studies support the Joint Staff directorates and Combatant Commands and are executed IAW directives received from the JROC. FCB studies evaluate warfighting and supporting area assessments vice developing deliverable systems. Funding was realigned from the Management Headquarters program element to properly delineate the activities of the FCB from Management Headquarters. FCBs are now incorporated into the new program element, Joint Staff Analytical Support (JSAS).												
<b>TOTAL COST</b>			<b>6.350</b>	<b>7.525</b>		<b>7.631</b>		<b>8.030</b>				

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	R-1 Line Item Nomenclature: 187 0303149J C4I for the Warrior	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
<b>Total PE Cost</b>	3.543	3.624	3.662	3.754	3.847	3.932	4.018
Communications Operations Analysis & Integration	2.190	2.272	2.310	2.365	2.421	2.475	2.528
Coalition Warrior Interoperability Demo	1.353	1.352	1.352	1.389	1.426	1.457	1.489

**A. Mission Description and Budget Item Justification:**

The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) vision evolved into the Department's Global Information Grid (GIG) as a means to achieve Information Superiority. The GIG is the globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating and managing information on-demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve Information Superiority. It also includes National Security Systems as defined in section 5142 of the Clinger-Cohen Act of 1996. The GIG supports all DOD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical and business), in war and in peace. The GIG provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). Finally, the GIG provides interfaces to coalition, allied, and non-DOD users and systems managed by the Joint Staff Command, Control, Communications and Computer Systems Directorate (J-6).

**B. Program Change Summary:**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2008 President's Budget	3.543	3.624	3.662
Total Adjustments	0.000	0.000	0.000
FY 2009 Budget Estimate	3.543	3.624	3.662

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0303149J Project Name: Communications Operations Analysis and Integration	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Communications Operations Analysis & Integration	2.190	2.272	2.310	2.365	2.421	2.475	2.528

**A. Mission Description and Budget Item Justification:**

Future operations will rely on seamless and fully integrated Satellite Communications and terrestrial Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems and networks - all capable of supporting network centric operations. The use of creative analytical methodologies, C4ISR assessment tools, modeling and simulation, functional analysis, architecture development and assessment tools, and other analytical techniques, as appropriate, will help the development of insights and solutions to further evolve to a fully connected, integrated, and interoperable force. Solutions may include new C4ISR systems and networks, new technological integration into legacy systems, and integrated use of systems and networks to transform operations into a more fluid choice of capabilities across the spectrum of possible military actions and scenarios.

**B. Accomplishments/Planned Program:**

**FY 2007 Accomplishments:** Supported the analytical methodologies, C4ISR assessment tools, modeling and simulation, functional analysis, architecture development and assessment tools, and other analytical techniques, as appropriate, developed the insights and solutions to further evolve to a fully connected, integrated, and interoperable force.

**FY 2008/2009 Planned Programs:** Continued support to the analytical methodologies, C4ISR assessment tools, modeling and simulation, functional analysis, architecture development and assessment tools, and other analytical techniques, as appropriate, will help the development

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0303149J Project Name: Communications Operations Analysis and Integration	

of insights and solutions to further evolve to a fully connected, integrated, and interoperable force.

**C. Other Program Funding Summary:**

No other funding.

**D. Acquisition Strategy:**

N/A

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

**Exhibit R-3, Project Cost Analysis**

**February 2008**

APPROPRIATION/BUDGET ACTIVITY				Program Element					Project Name and Number			
RDT&E, Defense-Wide, Joint Staff 0400/BA 7				0303149J					Communications Operations Analysis and Integration			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<b>Support</b>												
FFRDC Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Contracted Studies	MIPR	Var	1.769	2.190	Jul 07	2.272	May 08	2.310	TBD	TBD	TBD	TBD
<b>Subtotal Support</b>			<b>1.769</b>	<b>2.190</b>		<b>2.272</b>		<b>2.310</b>				
<b>Remarks:</b> N/A												
<b>TOTAL COST</b>			<b>1.769</b>	<b>2.190</b>		<b>2.272</b>		<b>2.310</b>				

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0303149J Project Name: Coalition Warrior Interoperability Demo	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Coalition Warrior Interoperability Demo	1.353	1.352	1.352	1.389	1.426	1.457	1.489

**A. Mission Description and Budget Item Justification:**

The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) program has evolved into the Department's Global Information Grid (GIG) as a means to achieve information superiority. Coalition Warrior Interoperability Demonstration (CWID) provides focus and visibility into resolving joint, coalition, and national civil authority C4 interoperability issues and provides organizing principles, techniques, and procedures for achieving information superiority as envisioned by Joint Vision (JV) 2020. The GIG stresses interoperability and CWID leverages the rapid pace of C4 technology advancements. CWID is the Chairman's annual event that enables the US combatant commands, national civil authorities, and international community to investigate command control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) solutions that focus on relevant and timely objectives for enhancing coalition interoperability and exploring new partnerships. CWID is conducted in a simulated operational environment to provide context for warfighter and national civil authorities' validation of those solutions. Interoperability Trials (ITs) are the activities used to address the core coalition and interagency interoperability objectives selected each year. ITs strive to address warfighter requirements and interoperability deficiencies. The selection of trials is dependent upon the annual overarching objectives, the host combatant command's priorities, Coalition/State/Agency desires to partner in a proposed trial, interagency participation, and the desires of invited coalition participants. CWID is an integral component of the JV 2020 conceptual template.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0303149J Project Name: Coalition Warrior Interoperability Demo	

**B. Accomplishments/Planned Program:**

**FY 2007 Accomplishments:** Funding supported U.S. Southern Command (USSOUTHCOM) J7 Transformation, Wargaming and Reach Back Center (WRB). Funds procured Modeling, Simulation and Analysis (MS&A) tools and analysis in support of USSOUTHCOM SCJ7 Directorate of Transformation, which is fully engaged in DoD transformational initiatives. This effort assisted in creating a facility that will interface with other Regional Command and Control (RCC) centers, Joint National Training Capability, Joint Forces Command (JFCOM) and local exercises as well as serve as the center for Standing Joint Force Headquarters (SJFHQ) training support.

**FY 2008 Planned Program:** Funding will support U.S. Northern Command (USNORTHCOM) analytic suite hardware/software enhancements, and development of new engineering modeling tools and graphics display tools to support critical homeland defense, civil support and consequence management analyses. This capability will allow multiple Combatant Command (COCOM) user access to specific software tools and databases, allowing model and file sharing between analysts. This will leverage the analytic capability to support a number of critical assessment areas including: Wide area surveillance (land, air & maritime), missile defense scenarios, Chemical, Biological, Radiological, Nuclear, and High Yield Explosive (CBRNE) dispersion effects, flight path vulnerability to MANPADs, and infectious disease spread/consequence management.

**FY 2009 Planned Program:** Funding supports enhancements to the Synthetic Environments for Analysis and Simulation (SEAS) model. Funds will support upgrades and development to allow for modeling all Combatant Command (COCOM) areas of operation and will enable SEAS to be used as a course of action (COA) analysis mechanism to inform COCOM operational needs assessments (ONA). SEAS is a simulation that models aspects of the economy, including government,

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0303149J Project Name: Coalition Warrior Interoperability Demo	

competition, and public and foreign policy. Selected artificial agents may be given leadership traits, which would influence other sub-models within SEAS. SEAS is capable of determining the impact of Diplomatic, Information, and Economic (D, I&E) effects on social behavior and systems.

**C. Other Program Funding Summary:**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TO Complete</u>	<u>TOTAL Cost</u>
Operation & Maintenance	0.645	0.755	0.755	0.773	0.791	0.808	0.826	0.000	5.353
Procurement	0.000	0.277	0.276	0.283	0.289	0.295	0.302	0.000	1.722

**D. Acquisition Strategy:**

N/A

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

**Exhibit R-3, Project Cost Analysis**

**February 2008**

APPROPRIATION/BUDGET ACTIVITY				Program Element					Project Name and Number			
RDT&E, Defense-Wide, Joint Staff 0400/BA 7				0303149J					Coalition Warrior Interoperability Demo			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<b>Management Services</b>												
Contract Engineering and Tech Support	FP	Various	1.309	1.353	Apr 07	1.352	Apr 08	1.352	TBD	TBD	TBD	TBD
<b>Subtotal Support</b>			<b>1.309</b>	<b>1.353</b>		<b>1.352</b>		<b>1.352</b>				
<b>Remarks:</b> N/A												
<b>TOTAL COST</b>			<b>1.309</b>	<b>1.353</b>		<b>1.352</b>		<b>1.352</b>				

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	R-1 Line Item Nomenclature: 227 0902298J Management HQ	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
<b>Total PE Cost</b>	3.078	2.766	3.401	3.000	3.089	3.153	3.219
Joint Staff Knowledge Management Program	1.143	0.000	0.000	0.000	0.000	0.000	0.000
Joint Staff Information Network (JSIN)	1.935	2.766	3.401	3.000	3.089	3.153	3.219

\* FY2008 funding totals do not include \$1.028 million in pending request for current FY2008 GWOT requirements.

**A. Mission Description and Budget Item Justification:**

This program element previously contained two distinct efforts -- Joint Staff Information Network (JSIN), managed by DOM OCIO (Office of the Chief Information Officer), and Joint Staff Knowledge Management Program (JSKMP). After FY07 this program element contains one distinct effort - JSIN.

Joint Staff Information Network (JSIN) is the Joint Staff's primary "weapon system." It consists of classified and unclassified local area networks. The classified TOP SECRET network has access to DOD-wide Secret Internet Protocol Route Network. This interface is controlled via a comprehensive system of security checks and guards. The unclassified network provides access to the Non-classified Internet Protocol Route Network and Internet. Both networks host connections to the Defense Messaging System (DMS). All networks run the standard Microsoft Office suite of programs. Most day-to-day staff work is conducted on the classified network. The Joint Staff's workflow application is a highly customized software program called the Joint Staff Action Processing (JSAP) application, developed by an information technology (IT) support contractor. JSAP codifies processes for creating, routing, reviewing, approving, and archiving staff packages in electronic form. JSAP has numerous commercial counterparts and is being marketed by the contractor to Combatant Commands and Services. The Office of the Chief Information Officer (OCIO) envisions enhancing JSAP to keep the application current with IT initiatives including Public Key Infrastructure, collaborative tools, and web-based enhancements. The Joint Staff's core processes and products are knowledge-based.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	R-1 Line Item Nomenclature: 227 0902298J Management HQ	

The Services, combatant commands, and the Office of the Secretary of Defense are quickly moving forward with the implementation of a Netcentric Operating Environment (NCOE) under the Global Information Grid (GIG) framework. This framework implements a core set of enterprise services that will support the DOD enterprise, including the Joint Staff. In order to operate on the GIG and be relevant, the Joint Staff must plug into these services and offer net centric compliant services to GIG consumers. This calls for a major change in how TJS defines, designs, develops, deploys, and sustains solutions for Joint Staff requirements and also requires changes in collecting, processing, analyzing, and distributing decision-quality information.

The Joint Staff will move toward a service-oriented IT strategy that centralizes services at the enterprise level where and when it makes sense, while maximizing decentralized execution and decision-making authority. Over time, TJS will increase the enterprise services provided. Joint Staff systems will become increasingly integrated and interoperable with GIG services, Service, combatant command, OSD, and interagency systems. That integrated set of systems, known as the JS Decision Support Environment (DSE), will encompass every JS application hosted on the JSIN.

**B. Program Change Summary:**

\* FY2008 funding totals do not include \$1.028 million in pending request for current FY2008 GWOT requirements.

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2008 President's Budget	3.078	3.210	3.506
Total Adjustments	0.000	(0.444)	(0.105)
FY 2009 Budget Estimate	3.078	2.766	3.401

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0902298J Project Name: Joint Staff Information Network (JSIN)	

Cost(\$ IN Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Joint Staff Information Network (JSIN)	1.935	2.766	3.401	3.000	3.089	3.153	3.219

\* FY2008 funding totals do not include \$1.028 million in pending request for current FY2008 GWOT requirements.

**A. Mission Description and Budget Item Justification:**

Joint Staff Information Network (JSIN) is the information technology infrastructure that supports the Chairman of the Joint Chiefs of Staff and the Joint Staff. It provides the information management resources and an application required for decision superiority, and empowers the Joint Staff as a knowledge-enabled organization. The JSIN system accomplishes this through a collection of capabilities and services. JSIN is comprised of three integrated networks that serve internal Top Secret needs, external Secret collaboration needs, and combined internal and external unclassified collaboration needs. The major capabilities of JSIN include office automation suite, collaboration, workflow, information archiving and retrieval. The most critical of these is staff action processing (decision making) for faster coordination of critical classified and unclassified issues among the CJCS, JS, and the Combatant Commands, Services, and Agencies. JSIN's other key services include strategic geographical information services, office automation, collaborative planning, automated message handling, local area networking, electronic mail, financial management, contract management, manpower and personnel management, and record management.

**B. Accomplishments/Planned Program:**

**FY 2007 Accomplishments:**

The JS IT Strategic Vision is being implemented in three phases: Phase I: build infrastructure; Phase II: system integration; Phase III: data integration. In FY07 the JS leveraged the infrastructure improvements achieved in Phase One and began Phase Two. The Joint Staff met its major IT Objectives for FY07:

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0902298J Project Name: Joint Staff Information Network (JSIN)	

Enhance Current Operations: Updated hardware and software on the desktops of JS personnel; improved access to archived data; increased use of Pentagon Common IT services; proactively identified, assessed and resolved network problems reducing user impact; and developed and tested continuity of operations plans and continuation of business operations plans.

Enable Integrated Decision Support Environment (DSE): Began implementation of an integrated IT environment to enable an agile organization and facilitate improved speed of actions and decisions by the Chairman of the Joint Chiefs of Staff with the fielding of DSE on the JSIN Top Secret network.

Defend Critical Infrastructure While Enabling JS Operations: Identified and mitigated risks with our JS risk management strategy; and implemented CAC/PKI procedure to encrypt data and enhance information assurance.

Enable JS Transformation with the CIO Management Framework: Used target enterprise architecture to align IT environment to JS mission needs; began using Portfolio Management (PfM) to inform IT investment decisions, achieve the right mix of capabilities and identify and eliminate duplicate IT capabilities; honed the system integration services contract; and developed and implemented policies that maximize use of IT in the interconnected Global Information Grid environment.

**FY 2008 Planned Program:**

FY 2008 will see continued improvements to Joint Staff decision effectiveness and information dominance by extending the fielding of the Decision Support Environment to the JSIN Secret and JSIN Unclassified networks. Decision making will be streamlined through the use of a web-based tasking system, increasing accessibility and efficiency. The Joint Staff will

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0902298J Project Name: Joint Staff Information Network (JSIN)	

transition to a Net-Centric Service Oriented Architecture reducing stovepipe legacy systems and applications and implementing open standards architecture. The JS IT PfM process will be extended to the entire JS IT enterprise and utilized to justify, sustain and track the Joint Staff's return on investment for IT systems. An enterprise content management system will be deployed to provide users the tools to simplify knowledge discovery, records management and information sharing. Enterprise identity access management will be used to protect information while enabling increased collaboration with coalition and interagency partners.

**FY 2009 Planned Program:**

Continue to provide the Chairman of the Joint Chiefs of Staff and Joint Staff personnel world-class information technology and information management services required to enable decision superiority and empower the Joint Staff as a knowledge-enabled organization with the DSE. The JS will enhance the DSE to a complete suite of integrated tools that deliver full collaboration capabilities, business intelligence, knowledge management, process management, customized reporting, digital dashboards, standardized e-forms, and cross-domain data sharing. JS personnel will access these capabilities through the JS portal, contributing significantly to the agile, knowledge-enabled, and results-oriented organization the Chairman of the Joint Chiefs of Staff envisions. The JS will continue to develop a Service Oriented Architecture. The JS will align JS business applications and systems as well as infrastructure applications and systems with the JS Target Architecture Roadmap.

**C. Other Program Funding Summary:**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TO Complete</u>	<u>TOTAL Cost</u>
Operation & Maintenance	34.694	30.069	24.308	25.419	27.225	26.497	25.586	0.000	193.798
Procurement	8.522	10.001	11.793	12.097	13.877	14.185	14.252	0.000	84.727

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>February 2008</b>
Appropriation/Budget Activity: RDT&E, Defense-Wide, Joint Staff 0400/BA 7	PE 0902298J Project Name: Joint Staff Information Network (JSIN)	

**D. Acquisition Strategy:**

N/A

**E. Performance Metrics:**

FY 2007 Funding fulfilled the OCIO program metric of "Continuing Transformation" to adhere to the Chairman, Joint Chief of Staff's goal of "Transformation". Specific accomplishments are addressed above in section B.

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

**Exhibit R-3, Project Cost Analysis**

**February 2008**

APPROPRIATION/BUDGET ACTIVITY				Program Element					Project Name and Number			
RDT&E, Defense-Wide, Joint Staff 0400/BA 7				0902298J					Joint Staff Information Network (JSIN)			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<b>Product Development</b>												
COTS S/W Mod, Integration, Engineer and Test	FP	Various	2.001	1.935	Dec 06	2.766	Mar 08	3.401	TBD	TBD	TBD	TBD
<b>Subtotal Support</b>			<b>2.001</b>	<b>1.935</b>		<b>2.766</b>		<b>3.401</b>				
<b>Remarks:</b>												
* FY2008 funding totals do not include \$1.028 million in pending request for current FY2008 GWOT requirements.												
<b>TOTAL COST</b>			<b>2.001</b>	<b>1.935</b>		<b>2.766</b>		<b>3.401</b>				

**THE JOINT STAFF**  
**Research, Development, Test and Evaluation (RDT&E), Defense-Wide**  
**Fiscal Year (FY) 2009 Budget Estimates**

**Exhibit RDT&E PB-15, Advisory and Assistance Services**

**February 2008**

(\$ in Millions)

	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>
<b><u>1. Management &amp; Professional Support Services</u></b>			
FFRDC Work	0	0	0
Non-FFRDC Work	1.896	1.842	1.979
<b>Subtotal</b>	<u>1.896</u>	<u>1.842</u>	<u>1.979</u>
<b><u>2. Studies, Analysis &amp; Evaluations</u></b>			
FFRDC Work	1.231	1.387	1.443
Non-FFRDC Work	52.111	53.409	55.206
<b>Subtotal</b>	<u>53.342</u>	<u>54.796</u>	<u>56.649</u>
<b><u>3. Engineering and Technical Services</u></b>			
FFRDC Work	0	0	0
Non-FFRDC Work	1.647	1.782	1.683
<b>Subtotal</b>	<u>1.647</u>	<u>1.782</u>	<u>1.683</u>
<b><u>4. Totals</u></b>			
FFRDC Work	1.231	1.387	1.443
Non-FFRDC Work	55.654	57.033	58.868
<b>Grand total</b>	<u>56.885</u>	<u>58.420</u>	<u>60.311</u>