

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2, RDT&E Budget Item Justification**

Exhibit R-2, RDT&E Budget Item Justification								Date: February 2002	
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				
RDT&E, Defense-Wide, Joint Staff/BA 7					0303149J C4I for the Warrior				
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE Cost	7.351	10.083	10.190	10.503	10.218	10.405	10.428	TBD	TBD
Network Warfare Simulation (NETWARS)	5.213	5.757	6.271	6.438	6.661	6.794	6.930	TBD	TBD
Joint Warrior Interoperability Demonstrations (JWID)	.201	1.530	1.532	1.553	1.580	1.580	1.595	TBD	TBD
Joint Satellite Communications Architecture Planning and Evaluation (J-SCAPE) Toolset	1.937	2.796	2.387	2.512	1.977	2.031	1.903	TBD	TBD

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

The C4IFTW vision has evolved into the Department's Global Information Grid (GIG) as a means to achieve information superiority. This program provides focus and visibility into resolving joint C4 capacity and interoperability issues and provides a mechanism for achieving information superiority as envisioned by JV 2020. Currently, the overall GIG efforts stress interoperability, identification of transmission capacity, and leveraging of the rapid pace of C4 technology advancements. As the GIG evolves and matures, it will spawn new approaches to providing the joint warfighter with C4 capabilities to achieve information superiority. This program element consists of three Joint Staff programs: 1) Network Warfare Simulation (NETWARS), 2) Joint Warrior Interoperability Demonstrations (JWID), and 3) the Joint Satellite Communications Architecture Planning and Evaluation (J-SCAPE) tool. NETWARS will assess the effects of full operational combat traffic loading on current and future communications systems and networks in a joint task force major theater of war scenario, conduct quick-turn communications planning for small regional conflicts or peacekeeping scenarios, and evaluate new communication systems and technologies. The second program is JWID. JWID is the only CJCS-sponsored demonstration of new and emerging, low-cost, low-risk C4ISR technologies and interoperability solutions, impartially presented to the CINCs and Military Services in an operational environment. Proposals are selected to fulfill identified warfighter deficiencies and are designed to provide the opportunity to experiment with new and emerging capabilities, assess their value, and recommend them for implementation where appropriate. JWID provides a structured process where new C4ISR capabilities are rigorously vetted, evaluated, and assessed by the warfighter. JWID is an integral component of the JV 2020 conceptual template for future joint warfighting. The current focus of the Satellite Communications (SATCOM) operations analysis and integration effort is the development of the Joint Satellite Communications Architecture Planning and Evaluation (J-SCAPE) Tool Set. J-SCAPE is required to provide decision-makers with the means to focus the ongoing modernization of SATCOM assets to transform current systems and choose the best architectural alternative for the 21<sup>st</sup> century SATCOM infrastructure. The J-SCAPE tool set is also required to support planning and evaluation necessary to maximize all four of the operational concepts of JV 2020-dominant maneuver, precision engagement, focused logistics, and full dimensional protection. Currently, there is no effective,

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2, RDT&E Budget Item Justification**

Exhibit R-2, RDT&E Budget Item Justification		Date: February 2002
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, Defense-Wide, Joint Staff/BA 7	0303149J	C4I for the Warrior
<p>concepts of JV 2020-dominant maneuver, precision engagement, focused logistics, and full dimensional protection. Currently, there is no effective, efficient, capability to plan and evaluate the ability of current and future SATCOM architectures to meet the CINCs' requirements. When fully operational, the J-SCAPE tool set will be used by the Joint Staff, CINCs, their components, other joint organizations, satellite systems program offices, and earth terminal program offices. The Services will use this tool set to assess the adequacy of SATCOM systems to support their assigned missions, evaluate operational plans, define SATCOM-related operational requirements, and provide operational input to the acquisition process.</p>		
B. Program Change Summary: No Change		
	<u>FY 2001</u>	<u>FY 2002</u>
FY 2003 Budget Estimate	7.368	9.622
FY 2003 Appropriated Value		10.209
Adjustments to Appropriated Value:		
a. Congressional non programmatic adj/inflation		(.019)
b. Increase		.461
FY 2003 President's Budget	7.351	10.083
<p>Increase in FY02 is due to JWID. Funding has been revised to reflect CJCS direction to ensure critical milestones are met and Golden Nuggets are expeditiously acquired and fielded during the "exploitation year."</p>		
C. Other Program Funding Summary: Exhibit 2a attached.		
D. Acquisition Strategy: Exhibit 2a attached.		
E. Schedule Profile: Exhibit 2a attached.		

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2a, RDT&E Project Justification**

Exhibit R-2a, RDT&E Project Justification								Date: February 2002	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide, Joint Staff/BA 7		0303149J			C4I for the Warrior – NETWARS				
Cost (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
NETWARS	5.213	5.757	6.271	6.438	6.661	6.794	6.930	TBD	TBD
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

The C4I for the Warrior (C4IFTW) vision has evolved into the Department's Global Information Grid (GIG) as a means to achieve information superiority. NETWARS will assess the effects of full operational combat traffic loading on current and future communications systems and networks in a joint task force major theater of war scenario, conduct quick-turn communications planning for small regional conflicts or peacekeeping scenarios, and evaluate new communication systems and technologies. It will be evolved through prototyping, development, and rigorous verification and validation of a toolkit, and its required input information. The objective is to use the simulation to investigate high-priority C4ISR technologies in the context of realistic warfighter scenarios. NETWARS will start with small joint Service scenarios, evolve to include complete joint task force (JTF) scenarios, and, ultimately, to a major theater of war (MTW) with the thousands of communications nodes in a JTF each individually represented in detail. Ultimately, the CINCs will have a tool to assist them in conducting network management scenarios to optimize and ensure full and efficient C4 systems.

<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Description</u>
1.100	1.470	1.600	Tool Kit Functionality
.700	.700	1.200	Comm Model Development
.500	.700	.700	IER Refinement
1.729	1.787	1.400	Comm Burden Assessment Studies
.200	.000	.000	Contract Engineer and Technical Support
.000	.000	.000	Software Development
.200	.200	.500	Verification and Validation
.000	.000	.000	Developmental Studies and Data Expansion
.200	.200	.200	Program Management
.100	.100	.171	Configuration Management
.500	.500	.400	Contractor Engineer Support (FFRDC)
.000	.000	.000	Standardization
.000	.000	.000	COTS hardware and software
.000	.100	.100	Maintenance
(.016)			FY 01 congressional non programmatic rescission
5.230	5.757	6.271	Total

**B. Other Program Funding Summary:** N/A

**C. Acquisition Strategy:**

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2a, RDT&E Project Justification**

Exhibit R-2a, RDT&E Project Justification		Date: February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER
RDT&E, Defense-Wide, Joint Staff/BA 7	0303149J	C4I for the Warrior – NETWARS
<p>C. Acquisition Strategy:</p> <p><i>FY 1997:</i> A Mission Needs Statement was developed and signed. Subsequent to initiating model development, an extensive Program Development Plan was developed and approved by the Director, Command, Control, Communications, and Computer (C4) Systems Directorate (J-6). A proof-of-concept effort validated the concept and determined that NETWARS would support the requirements. <i>FY 1998:</i> A Configuration Management Plan, Software Development and Integration Plan, and Systems Architecture Design Plan were developed. Initiated software and communications modules development and integration. NETWARS Toolkit Version 1.1 functional requirements were derived, documented, and formalized. JWARS initial requirements for C4 were evaluated relative to expected analytical outputs from NETWARS. <i>FY 1999:</i> Based on further refinement and analysis of requirements, initiated a transition to lower-risk developmental software and toward building the NETWARS Toolkit Advanced Development, Interim Version. Concurrent communications studies of accepted Joint Task Force (JTF) scenarios will help to refine requirements, the development of data, and the development of models that represent the C4 processors, systems, and networks used in a JTF that will become part of the NETWARS data and model repository. Continued development of NETWARS standards. <i>FY 2000:</i> Interim Version 2.0 provided to CINCs/Services/agency (C/S/A) users, including a training course, in November 1999. Continued development of NETWARS Toolkit Advanced Development, Version 2.0, associated documentation and completion of a Southwest Asia JTF-based communication burden assessment. <i>FY2001:</i> Further expansion of toolkit functionality (Versions 2.2 and 2.5) involved development of needed specific communication system models and information exchange requirements data; a series of developmental studies for Southwest Asia JTF scenarios (of up to 20,000 communication nodes); and gathering requirements from model users. Codified program requirements for subsequent toolkit conversion were captured subsequent to extensive use of NETWARS by the CINCs, Services, and agencies. Continued development of input data in conjunction with communications studies conducted in parallel with model development. <i>FY2002:</i> Emphasis will be on further expansion of toolkit functionality in response to requirements identified by CINCs, Services and agencies; several studies to include a Northeast Asia scenario, the Army's Future Combat System (FCS) and the initial phase of a multi-year logistics communications modeling and simulation effort by DUSD-L; release of several contingency planning tools for use by the CINCs; and the award of a competitively bid contract. Additionally, with the recent award of the Joint Network Management System contract (JNMS), it is logical that the NETWARS program will serve as one of the Government Off The Shelf (GOTS) software options incorporated by JNMS. As such, the potential exists for some associated integration costs as the JNMS technical design matures.</p> <p>D. Schedule Profile and Performance Measures:</p> <p>The first-Phase review was 23 September 1997, when the Phase I proof-of-concept results were presented to the J-6 and Service/agency representatives. The mid-Phase II In-Progress Review (IPR) to the J-6 and the Service/agency representatives was held on 19 December 1997. Block I formally began in March 1997 and involved researching and writing a detailed NETWARS development plan, followed by conducting a proof-of-concept prototype demonstration of a small JTF scenario of 100 to 200 communications nodes. Block II began in mid-September 1997, and was completed in October 1998. In Block II, J6I continued the design and building to complete version 1.1 of the front-end toolset database and completed a study of a small JTF of up to 5000 nodes and a JTF scenario of up to 10,000 nodes. The scenario selected was the Synthetic Theater of War (STOW)/UNITED ENDEAVOR 98-1 scenario, which involved a JTF defense of Kuwait. Block III, Version 2.0, which began in April 1999, involved advanced development, testing, and building of the interim version Version 2.0 front-end toolkit and database for NETWARS, plus completing a Joint Task Force scenario of up to 5000 communications nodes. Reviews of</p>		

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2a, RDT&E Project Justification**

Exhibit R-2a, RDT&E Project Justification		Date: February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER
RDT&E, Defense-Wide, Joint Staff/BA 7	0303149J	C4I for the Warrior – NETWARS
<p>Version 2.0 were held in March 2000, with additional upgrading scheduled for August - November 2000. A refined 5000-node communication burden assessment was completed in December 2000. Joint, CINC, Service, and agency representatives will review that assessment for accuracy and completeness. By integrating input from these users, NETWARS will enhance the abilities of the CINCs, Services, and agencies to meet the goals stated in JV 2010, JV 2020, and the GIG CRD. FY 2001 Accomplishments: Major milestones reached include three software releases (Versions 2.1, 2.2 and 2.5); execution of the software design MOA between J-6 and DISA, publication of coordinating TEMP and ORD drafts, initiation of a Southwest Asia JTF burden analysis study with CENTCOM, and implementation of a spiral acquisition process, to include an evolutionary phased implementation plan (EPIP) and establishment of four integrated process teams (requirements, studies, configuration management and standards).</p>		
(Fiscal Qtr)	<u>FY 2000</u>	<u>FY 2001</u>
	1 2 3 4	1 2 3 4
<b>Contract Award -- Aug 00 to OPNET Technologies</b>		
IOC		X
FOC (FY 2009/4 <sup>th</sup> Qtr)		

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2a, RDT&E Project Justification**

Exhibit R-2a, RDT&E Project Justification								Date: February 2002																															
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER																																		
RDT&E, Defense Wide, Joint Staff/BA 7		0303149J			C4I for the Warrior - Joint Warrior Interoperability Demonstration (JWID)																																		
Cost (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost																														
JWID	.201	1.530	1.532	1.553	1.580	1.580	1.595	TBD	TBD																														
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A																														
<p>A. Mission Description and Budget Item Justification:</p> <p>The C4IFTW vision has evolved into the Department's GIG as a means to achieve information superiority. JWID provides focus and visibility into resolving C4 interoperability issues and provides organizing principles, techniques, and procedures for achieving information superiority as envisioned by JV 2020. The GIG stresses interoperability and JWID leverages the rapid pace of C4I technology advancements. Joint Warrior Interoperability Demonstration (JWID) is the only CJCS-sponsored demonstration of new and emerging, low-cost, low-risk C4ISR technologies and interoperability solutions impartially presented to the CINCs and Military Services in an operational environment. Proposals are selected to fulfill identified warfighter deficiencies and are designed to provide the opportunity to experiment with new and emerging capabilities, assess their value, and recommend them for implementation where appropriate. JWID provides a structured process where new C4ISR capabilities are rigorously vetted, evaluated, and assessed by the warfighter. JWID is an integral component of the JV 2020 conceptual template for future joint warfighting. Interoperability and Information Superiority are key goals of the Chairman of the Joint Chiefs of Staff. New and emerging technologies are required to conform with established standards on systems interoperability and must also be integrated into approved architectures that are Defense Information Infrastructure (DII)/Common Operational Environment (COE) Joint Tactical Architecture (JTA)-compliant.</p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY2002</u></th> <th style="text-align: center;"><u>FY2003</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">.201</td> <td style="text-align: center;">1.530</td> <td style="text-align: center;">1.532</td> <td>Contract Engineering and Technical Support</td> </tr> <tr> <td style="text-align: center;">.201</td> <td style="text-align: center;">1.530</td> <td style="text-align: center;">1.532</td> <td>Total</td> </tr> </tbody> </table> <p>FY 2001 Accomplishments: JWID 01 conducted the "most successful event to date." JWID stood up a worldwide, coalition-wide, area network that maintained a 99.64 percent availability for a 12-nation, 38-worldwide site, multinational task force. JWID conducted complex interoperability trials and operationally assessed 89 demonstrations worldwide. JWID acquired and distributed the two Gold Nugget technologies (Silent Runner™ and PATROL®), selected in JWID 2000, to eight warfighting CINCs with validated concepts of operation and standard operating procedures.</p> <p>B. Other Program Funding Summary</p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>To Complete</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>O&amp;M Defense-Wide</td> <td style="text-align: center;">1.488</td> <td style="text-align: center;">.754</td> <td style="text-align: center;">.743</td> <td style="text-align: center;">TBD</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>Procurement Defense-Wide</td> <td style="text-align: center;">.861</td> <td style="text-align: center;">.260</td> <td style="text-align: center;">.265</td> <td style="text-align: center;">TBD</td> <td style="text-align: center;">TBD</td> </tr> </tbody> </table> <p>C. Acquisition Strategy: N/A</p> <p>D. Schedule Profile. The RDT&amp;E will be spent during various quarters of each Fiscal Year.</p>										<u>FY 2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>Description</u>	.201	1.530	1.532	Contract Engineering and Technical Support	.201	1.530	1.532	Total		<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>To Complete</u>	<u>Total Cost</u>	O&M Defense-Wide	1.488	.754	.743	TBD	TBD	Procurement Defense-Wide	.861	.260	.265	TBD	TBD
<u>FY 2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>Description</u>																																				
.201	1.530	1.532	Contract Engineering and Technical Support																																				
.201	1.530	1.532	Total																																				
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>To Complete</u>	<u>Total Cost</u>																																		
O&M Defense-Wide	1.488	.754	.743	TBD	TBD																																		
Procurement Defense-Wide	.861	.260	.265	TBD	TBD																																		

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2a, RDT&E Project Justification**

Exhibit R-2a, RDT&E Project Justification								Date: February 2002																																					
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER																																								
RDT&E, Defense-Wide, Joint Staff/BA 7		0303149J			C4IFTW (SATCOM Ops Analysis and Integration Tools)																																								
Cost (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost																																				
SATCOM Ops Analysis and Integration Tools	1.937	2.796	2.387	2.512	1.977	2.031	1.903	TBD	TBD																																				
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A																																				
<p>A. Mission Description and Budget Item Justification:</p> <p>The current focus of the Satellite Communications (SATCOM) operations analysis and integration effort is the development of the Joint Satellite Communications Architecture Planning and Evaluation (J-SCAPE) Tool Set. J-SCAPE is required to provide decision-makers with the means to focus the ongoing modernization of SATCOM assets to transform current systems and choose the best architectural alternative for the 21<sup>st</sup> century SATCOM infrastructure. The J-SCAPE tool set is also required to support the planning and evaluation necessary to maximize all four of the operational concepts of JV 2020-dominant maneuver, precision engagement, focused logistics, and full dimensional protection. Currently, there is no effective, efficient, capability to plan and evaluate the ability of current and future SATCOM architectures to meet the CINCs' requirements. The J-SCAPE tool set mission recognizes the importance of information superiority to each of these operational concepts. Specifically, the J-SCAPE toolset will provide the capability to efficiently and accurately evaluate a set of communication requirements -- captured in the form of a scenario -- against a set of SATCOM resources. It will quantify supportability in terms of connectivity and capacity, emphasizing SATCOM parameters such as link budgets, including fading because of rain and scintillation, bit error rates, satellite processing, and crosslinks. Other measures of effectiveness include link availability, delay, resistance to jamming, and intercept or signals exploitation. When fully operational, the J-SCAPE toolset will be used by the Joint Staff, CINCs, their components, other joint organizations, satellite systems program offices, and earth terminal program offices. The Services will use this tool set to assess the adequacy of SATCOM systems to support their assigned missions, evaluate operational plans, define SATCOM-related operational requirements, and provide operational input to the acquisition process. J-SCAPE is presently in early concept exploration, including documentation of mission need, development and documentation of operational and functional requirements, CONOPS, and program management plan. Specifically, this year's accomplishments include the development of the Research Analysis Report, CONOPS, Functional Requirements Document, Initial - High Level Design, and Initial Software Development Plan.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.917</td> <td style="text-align: center;">1.705</td> <td style="text-align: center;">1.560</td> <td>Software Development</td> </tr> <tr> <td style="text-align: center;">.200</td> <td style="text-align: center;">.300</td> <td style="text-align: center;">.200</td> <td>Program Mgmt</td> </tr> <tr> <td style="text-align: center;">.140</td> <td style="text-align: center;">.000</td> <td style="text-align: center;">.000</td> <td>COTS HW &amp; SW</td> </tr> <tr> <td style="text-align: center;">.100</td> <td style="text-align: center;">.100</td> <td style="text-align: center;">.100</td> <td>Verification and Validation</td> </tr> <tr> <td style="text-align: center;">.150</td> <td style="text-align: center;">.000</td> <td style="text-align: center;">.000</td> <td>Independent Cost Estimate (FFRDC)</td> </tr> <tr> <td style="text-align: center;">.200</td> <td style="text-align: center;">.361</td> <td style="text-align: center;">.200</td> <td>Contract Engineering &amp; Tech. Support (non-FFRDC)</td> </tr> <tr> <td style="text-align: center;"><u>.230</u></td> <td style="text-align: center;"><u>.330</u></td> <td style="text-align: center;"><u>.327</u></td> <td>Contract Engineering &amp; Tech. Support (FFRDC)</td> </tr> <tr> <td style="text-align: center;">1.937</td> <td style="text-align: center;">2.796</td> <td style="text-align: center;">2.387</td> <td>Total</td> </tr> </tbody> </table> <p>B. Other Program Funding Summary. N/A</p>										<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Description</u>	0.917	1.705	1.560	Software Development	.200	.300	.200	Program Mgmt	.140	.000	.000	COTS HW & SW	.100	.100	.100	Verification and Validation	.150	.000	.000	Independent Cost Estimate (FFRDC)	.200	.361	.200	Contract Engineering & Tech. Support (non-FFRDC)	<u>.230</u>	<u>.330</u>	<u>.327</u>	Contract Engineering & Tech. Support (FFRDC)	1.937	2.796	2.387	Total
<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Description</u>																																										
0.917	1.705	1.560	Software Development																																										
.200	.300	.200	Program Mgmt																																										
.140	.000	.000	COTS HW & SW																																										
.100	.100	.100	Verification and Validation																																										
.150	.000	.000	Independent Cost Estimate (FFRDC)																																										
.200	.361	.200	Contract Engineering & Tech. Support (non-FFRDC)																																										
<u>.230</u>	<u>.330</u>	<u>.327</u>	Contract Engineering & Tech. Support (FFRDC)																																										
1.937	2.796	2.387	Total																																										

**JOINT STAFF**  
**FY 2003 Budget Estimates**  
**Exhibit R-2a, RDT&E Project Justification**

Exhibit R-2a, RDT&E Project Justification		Date: February 2002																				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide, Joint Staff/BA 7	PROGRAM ELEMENT 0303149J	PROJECT NAME AND NUMBER C4IFTW (SATCOM Ops Analysis and Integration Tools)																				
<p>C. Acquisition Strategy:  <u>FY 2001</u>: The FY01 increment of funding (RDT&amp;E) was used for the proof-of-concept phase, developing more detailed requirements and inputs for the advanced prototype tool. System requirements specifications: detailed subsystem design document, building of the proof-of-concept tool, testing and documentation, and R-1 (release one) of the tool set. <u>FY 2002</u>: Supports the continued requirements refinement and software engineering of the prototype and actual development of the software tool in compliance with the allocated requirements refined in FY01 and FY02. In addition, because the SATCOM doctrine, requirements, technology, and market are in a continuous state of change, the system-engineering task will continue. This continuing effort will monitor the changing SATCOM environment to ensure that the modeling software will be able to reflect the latest developments. <u>FY2001 Accomplishments</u>: Delivery of Database Design Description, Requirements Traceability Matrix, Functional Requirements Document, Configuration Management Plan, Quality Assurance Plan, and Risk Management Plan. Delivery of J-SCAPE Software v1.02 included UHF Follow-On (UFO), Defense Satellite Communication System (DSCS), and commercial C/Ku and Ka analysis engine software, tool set, and unclassified test data. <u>FY 2003 Plan</u>: Build on the FY02 prototyping efforts by developing and finalizing the design, code, and test, and delivering the analysis engine tool set software for the Global Broadcast Service (GBS), Wide-Band Gapfiller (WGS), and the Advanced Wideband Systems (AWS).</p> <p>D. Schedule Profile: This program was a new start in FY 00.</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <thead> <tr> <th style="text-align: left;">(Fiscal Qtr)</th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> </tr> <tr> <th></th> <th style="text-align: center;">1 2 3 4</th> <th style="text-align: center;">1 2 3 4</th> <th style="text-align: center;">1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>Contract Award* -- Jul 97</td> <td></td> <td></td> <td></td> </tr> <tr> <td>IOC ** (FY 2004/3<sup>rd</sup> Qtr)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FOC (To be determined)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>* SAIC Inc., under competitively awarded delivery order type support contract awarded July 1997. Aerospace Corporation provides FFRDC support. After program definition, prototyping, risk-reduction phases, and engineering development (just prior to IOC), J-SCAPE will be openly competed based on fully defined requirement and a mature software design.</p> <p>** J-SCAPE acquisition strategy is to follow a proof-of-concept phase with a series of prototypes to help further define the program, continue to capture and refine requirements and implement risk-reduction measures. IOC will be achieved following a final engineering development phase with formalized software design and planning on use of commercial software developmental tools (COTS), as much as feasible. Government Cost Estimates (GCE) are anticipated in FY02 based on documented requirements that are approved at those times.</p>			(Fiscal Qtr)	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>		1 2 3 4	1 2 3 4	1 2 3 4	Contract Award* -- Jul 97				IOC ** (FY 2004/3 <sup>rd</sup> Qtr)				FOC (To be determined)			
(Fiscal Qtr)	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>																			
	1 2 3 4	1 2 3 4	1 2 3 4																			
Contract Award* -- Jul 97																						
IOC ** (FY 2004/3 <sup>rd</sup> Qtr)																						
FOC (To be determined)																						