

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2006

## BUDGET ACTIVITY

### 5 - System Development and Demonstration

## PE NUMBER AND TITLE

### 0604818A - Army Tactical Command & Control Hardware & Softwar

	COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
	Total Program Element (PE) Cost	64585	66026	69172	60826	52587	13145	8555	0	544930
323	COMMON HARDWARE SYSTEMS	6193	4429	6753	7062	7352	0	0	0	56132
334	COMMON SOFTWARE	19882	15567	11787	11859	14269	0	0	0	129046
C15	MOUNTED BATTLE COMMAND ON-THE-MOVE (MBCOTM)	0	9833	16598	22191	11925	3488	0	0	64035
C29	CENTRALIZED TECHNICAL SUPPORT FACILITY (CTSFC)	11316	9564	10228	10497	10025	9657	8555	0	92064
C34	ARMY TAC C2 SYS ENG	9264	16215	9130	9217	9016	0	0	0	92993
C39	Tactical Operations Centers (TOCs)	10350	3005	4476	0	0	0	0	0	29122
C3A	ARMY AIRBORNE COMMAND & CONTROL SYS (A2C2S)	7580	7413	10200	0	0	0	0	0	81538

**A. Mission Description and Budget Item Justification:** The umbrella program to exploit automation technology for the conduct of combat operations is the Army Tactical Command and Control System (ATCCS) program which is a component of the Army Battle Command System (ABCS). The ATCCS program provides automation in the five battlefield functional areas (BFAs) with the following specific systems: (1) Maneuver Control System (MCS); (2) Effects and Fires Command and Control Systems (EFCCS); (3) All Source Analysis System (ASAS) for Intelligence/Electronic Warfare; (4) Forward Area Air Defense Command, Control and Intelligence System (FAADC2I); and (5) Battle Command Sustainment Support System (BCS3). To provide an overall technically sound, cost effective, and operationally responsive approach, the design and development of ATCCS must be accomplished on a total systems basis. The ATCCS Engineering Program, more commonly known as Systems Engineering and Integration (SE&I), provides the required overall systems engineering to assure integrated Army tactical command and control and the utilization of common hardware and software throughout the five ATCCS nodal systems. This program element also includes the Central Technical Support Facility (CTSFC) which provides a single technical "center of mass" for software checkout and physical system integration. The Common Hardware and Software projects provide common products to customers to meet their developmental and fielding needs. The Tactical Operations Centers (TOCs) project designs and develops the TOCs that form the structural backbone of the Army's digitized fielding concept. Starting in FY04 this program includes funding for the SICPS program which was previously funded in project C12 in FY03. The Army Airborne Command & Control (A2C2S) provides the avionics system required to horizontally and vertically integrate the battlefield. These systems support the Legacy to Objective transition path.

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BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>		
	FY 2005	FY 2006	FY 2007	
<b><u>B. Program Change Summary</u></b>				
Previous President's Budget (FY 2006)	64811	66980	68873	
Current BES/President's Budget (FY 2007)	64585	66026	69172	
Total Adjustments	-226	-954	299	
Congressional Program Reductions				
Congressional Rescissions	-45	-665		
Congressional Increases		-289		
Reprogrammings	-181			
SBIR/STTR Transfer				
Adjustments to Budget Years			299	

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2006</b>	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>				PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>323</b>	
COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
323      COMMON HARDWARE SYSTEMS	6193	4429	6753	7062	7352	0	0	0	56132
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> CHS is the program through which the Army ensures standardization and common integration for the Army Battle Command Systems (ABCS) hardware. CHS provides fully qualified interoperable, compatible, deployable, and survivable hardware and COTS software for Command, Control and Communications at all echelons of Command, for the United States Army and other DoD Services with world-wide repair, maintenance and logistics support through contractor operated CHS Repair Centers (CRCs) and management of a comprehensive warranty program.</p>									
<b><u>Accomplishments/Planned Program</u></b>						<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	
Continue management of the acquisition and delivery of CHS equipment in support of customer requirements						5393	3629	5878	
Continue supporting customers testing efforts with CHS equipment						300	300	300	
Continue CHS technology insertion						500	500	575	
Total						6193	4429	6753	
<p><b><u>C. Acquisition Strategy</u></b> The overall goal is to improve interoperability and compatibility and lower life cycle costs by standardizing battlefield command and control (C2) automation through centralized buys of non-developmental items (NDI), standardized protocols and reusable commercial common software. This project provides a coherent migration strategy for ABCS systems through the use of technolgy insertion.</p> <p>CHS also conducts common environmental and developmental testing of hardware items thereby reducing the testing requirements for individual BFAs. A firm fixed price, full and open competition contract, was awarded to GDC4S in May 2003, for ruggedization and production.</p>									

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>							PROJECT <b>323</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
GDC4S/CHS-3 Non-Recurring Engineering	C/FFP/IDIQ	Taunton, MA	12000	0		0		0		12000	Continue	0
Technology Insertion	Various	Various	11685	500	1-3Q	500	1-3Q	575	1-3Q	Continue	0	0
Systems Engineering	Various	Fort Monmouth, NJ	63887	2456		618		2632		Continue	0	0
In-house Government Support	MIPR	Fort Monmouth, NJ/Huntsville, AL	48699	2937	1-3Q	3011	1-3Q	3246	1-3Q	Continue	0	0
Subtotal:			136271	5893		4129		6453		Continue	Continue	0
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Not applicable			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
CHS Test Activities	MIPR	Other Government Activities	900	300	3Q	300	3Q	300	3Q	Continue	1800	0
Subtotal:			900	300		300		300		Continue	1800	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award	FY 2006 Cost	FY 2006 Award	FY 2007 Cost	FY 2007 Award	Cost To Complete	Total Cost	Target Value of

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar						PROJECT 323		
	Type				Date		Date		Date			Contract
Subtotal:			0									
Project Total Cost:			137171	6193		4429		6753		12000	1800	0

[illegible]









Schedule Detail (R4a Exhibit)					February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>323</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
CHS Technology Insertion (continuous)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
CHS-3 V1 deliveries	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
CHS-3 V2 deliveries	2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2006</b>																						
<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>				<b>PE NUMBER AND TITLE</b> <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				<b>PROJECT</b> <b>334</b>																						
<b>COST (In Thousands)</b>		<b>FY 2005 Estimate</b>	<b>FY 2006 Estimate</b>	<b>FY 2007 Estimate</b>	<b>FY 2008 Estimate</b>	<b>FY 2009 Estimate</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Estimate</b>	<b>Cost to Complete</b>	<b>Total Cost</b>																				
334 COMMON SOFTWARE		19882	15567	11787	11859	14269	0	0	0	129046																				
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> Project D334 Common Software (CS): Common Software is the program through which the Army procures, develops, integrates and tests common software products and/or modules and/or components for both the Army and Joint Services. The CS project provides state-of-the-art software technologies and functionality that is used by numerous Army Battle Command Systems (ABCS) and joint systems thereby eliminating the need for similar independent development and duplication of effort. The CS program is a cornerstone in the Army's digitization efforts.</p>																														
<b><u>Accomplishments/Planned Program</u></b>						<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>																						
Continue the development, acquisition management and delivery of CS products in support of Army and Joint Service customer requirements to include software upgrades. Continue to achieve enhanced levels of interoperability by defining, testing and implementing software technologies that are provided to the warfighter. CS products will bridge current to future force technologies in support of the Future Combat System (FCS) and the Army's way ahead.						7384	7380	3580																						
Continue execution of the Common Software technology and reuse program; support customer integration and testing; explore and evaluate new software technologies in support of the overall CS program; and develop, upgrade and deliver DII COE products into Army and Joint Service systems. The CS products released to the Army and Joint Programs are also used in support of the US/Allied coalition efforts.						12498	8187	8207																						
Total						19882	15567	11787																						
<p><b><u>B. Other Program Funding Summary</u></b></p> <table border="1"> <tr> <td></td> <td><b>FY 2005</b></td> <td><b>FY 2006</b></td> <td><b>FY 2007</b></td> <td><b>FY 2008</b></td> <td><b>FY 2009</b></td> <td><b>FY 2010</b></td> <td><b>FY 2011</b></td> <td><b>To Compl</b></td> <td><b>Total Cost</b></td> </tr> <tr> <td>Not applicable for Common Software Program</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </table>												<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>To Compl</b>	<b>Total Cost</b>	Not applicable for Common Software Program	0	0	0	0	0	0	0	0	0
	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>To Compl</b>	<b>Total Cost</b>																					
Not applicable for Common Software Program	0	0	0	0	0	0	0	0	0																					
<p><b><u>C. Acquisition Strategy</u></b> The overall goal is to improve software development, integration and interoperability, and to lower life cycle costs by providing common software products to the Army, Joint Services, and Coalition efforts. The CS program is designed to increase both horizontal and vertical interoperability while reducing development, integration and testing resources. This strategy will be realized through defined Application Program Interfaces (APIs), standardized protocols, reusable software and standard commercial products. The CS program plans to partner with and provide products to the Future Combat System (FCS).</p>																														

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>							PROJECT <b>334</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support of CS Lab, Data Access	MIPR	CECOM, Fort Monmouth, NJ	1458	395	1-3Q	0		0		0	1853	0
Engineering/Software Development	C, T&M	Various GSA Contractors / Various Locations	30812	10386	1-3Q	13810	1-3Q	9971	1-3Q	22308	87287	0
ABCS System Engineering & Integration	MIPR	PEO C3T, Fort Monmouth, NJ	210	0		0		0		0	210	0
3D Display Technology	OTA	Concurrent Technology Corp., Johnstown, PA	9083	0		0		0		0	9083	0
Digital System Engineers	C, T&M	Mantech, Ft. Hood, TX	7000	7400	1-2Q	0		0	4Q	0	14400	0
DISA Support for COE	MIPR		1486	0		0		0		0	1486	0
IDM-T Engineering Support	MIPR	GSA Contractors	2000	0		0		0		0	2000	0
Subtotal:			52049	18181		13810		9971		22308	116319	0
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Support	In-house	PM GCC2, Ft. Monmouth, NJ	777	816	1-3Q	841	1-3Q	866	1-3Q	1811	5111	0
Automation Support	C, T&M	PKMM, Oceanport, NJ	499	165	1-2Q	171	1-2Q	179	1-2Q	385	1399	0
Subtotal:			1276	981		1012		1045		2196	6510	0
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar						PROJECT 334		
Not applicable			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
Remarks: Development Testing (DT) is performed by development contractors and is covered under the Product Development section of this R-3. Operational Testing (OT) is funded by the applicable BFA application programs.												
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Office Management	In-House	Fort Monmouth, NJ	2357	720	1-4Q	745	1-4Q	771	1-4Q	1624	6217	0
Subtotal:			2357	720		745		771		1624	6217	0
Project Total Cost:			55682	19882		15567		11787		26128	129046	0

Schedule Profile (R4 Exhibit)																			February 2006													
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Software																			PROJECT 334								
Event Name					FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(1) Software Block 1 Release																																
(2) Software Block 2 Release																																
(3) Software Block 3 Release																																
(4) Software Block 4 Release																																
(5) Software Block 5 Release																																
(6) Software Block 6 Release																																

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Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>			PROJECT <b>334</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Software Block 1 Release	2Q						
Software Block 2 Release		1Q					
Software Block 3 Release			1Q				
Software Block 4 Release				1Q			
Software Block 5 Release					1Q		
Software Block 6 Release						1Q	

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2006</b>		
<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>				<b>PE NUMBER AND TITLE</b> <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Software</b>				<b>PROJECT</b> <b>C15</b>		
<b>COST (In Thousands)</b>		<b>FY 2005 Estimate</b>	<b>FY 2006 Estimate</b>	<b>FY 2007 Estimate</b>	<b>FY 2008 Estimate</b>	<b>FY 2009 Estimate</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Estimate</b>	<b>Cost to Complete</b>	<b>Total Cost</b>
C15	MOUNTED BATTLE COMMAND ON-THE-MOVE (MBCOTM)	0	9833	16598	22191	11925	3488	0	0	64035
<p><b>A. Mission Description and Budget Item Justification:</b> This project funds the procurement of the Mounted Battle Command on the Move System (MBCOTM). MBCOTM is a Command, Control, Computers, Communications, Intelligence (C4I) mission equipment package/ B Kit integrated into TO&amp;E authorized platforms which allows Brigade and above Commanders to move to the decisive point on the battlefield. The focus of MBCOTM is to facilitate commander execution of Netcentric operations versus command post centric operations. MBCOTM provides the battle command commander situational awareness in the form of a digital common operational picture enabling a commander to maintain situational understanding while On The Move (OTM) and when physically separated from fixed command posts. MBCOTM provides battle command enablers to support war (i.e., deterring aggression and coercion; fighting conflicts) and operations other than war (i.e., peacekeeping, domestic disaster relief, reducing potential conflicts, promoting regional stability, humanitarian missions and homeland security). MBCOTM supports the mission area of Command and Control. Future capabilities will include adding Joint Tactical Radio System (JTRS) and Wideband Gapfiller system (WGS). Future improvements will include addition of Secure Wireless Local Area Network (SWLAN), Land Warrior, and Unmanned Aerial Vehicle (UAV) feed, as well as the integration of MF-TDMA technology which allows large numbers of MBCOTMs to populate the battlefield and provide OTM communications services and range extension on the Battlefield. Other future enhancements will include 20 inch KU SOTM antennas, and beginning FY07 the Common Army Marine Command and Control Vehicle (CAMC2V) architecture which will include an 18 or 20 inch Ku/Ka Satellite on the Move (SOTM) antenna, Multiple Frequencies Time Division Multiple Access (MF TDMA)modem with spreading at 512kbps Tx, 1+mbps Rx, NIPR/SIPR, and wireless access point.</p>										
<b><u>Accomplishments/Planned Program</u></b>						<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>		
System Development/Tech Upgrades						0	2802	5000		
Prototype Build						0	0	3500		
Log Development/CLS						0	2000	2071		
Program Spt/SSEB						0	4009	3027		
Test/Evaluation						0	1022	3000		
Total						0	9833	16598		
<b><u>B. Other Program Funding Summary</u></b>		<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>To Compl</b>	<b>Total Cost</b>
Mounted Battle Command on the Move MBCOTM (BZ9970)		20000	30859	79035	73804	70530	49909	13542	0	337679

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<p><b>C. Acquisition Strategy</b> Mounted Battle Command on the Move (MBCOTM) will be integrated on three vehicle platforms: HMMWV, Bradley Command Vehicle, and the Stryker Command Vehicle. Various tests will be run throught this SDD phase such as Systems and Engineering tests for the MBCOTM PP1 HMMWV variant. Upgrades to include PLGRS to DGRS. The Government is developing technology demonstrators of the Common Army Marine Command and Control Vehicle (CAMC2V) which will be designed to be a Transit Case solution (Mission Equipment Package/B Kit) to be integrated on a HMMWV. This is a cooperative variant being developed with the Army and Marine Corps in order to gather information for writing the product specification, as well as to gain better insight on a design. This competitive Request for Proposal (RFP) for the System Design and Development (SDD) phase for the Bradley, Stryker and CAMC2V variant is anticipated 3QFY06. Award of this contract is scheduled for 1QFY07.</p>		

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>							PROJECT <b>C15</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
System Development/Prototype build/Log Development	T&M	TBD	0	0		3252	1-2Q	10571	1Q	Continue	0	0
Subtotal:			0	0		3252		10571		Continue	0	0
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services/ICS	T&M	Various	0	0		1550	1-2Q	1627	1Q	Continue	0	0
Subtotal:			0	0		1550		1627		Continue	0	0
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Operational Assessments/IOT&E	MIPR	Army Test and Evaluation Center	0	0		1022	2Q	3000	1Q	Continue	0	0
Subtotal:			0	0		1022		3000		Continue	0	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Management	MIPR	Various	0	0		4009	1-2Q	1400	1Q	Continue	0	0
Subtotal:			0	0		4009		1400		Continue	0	0

ARMY RDT&E COST ANALYSIS (R3)							February 2006				
BUDGET ACTIVITY		PE NUMBER AND TITLE						PROJECT			
5 - System Development and Demonstration		0604818A - Army Tactical Command & Control Hardware & Softwar						C15			
Project Total Cost:		0	0		9833		16598		Continue	0	0

Schedule Profile (R4 Exhibit)																		February 2006																	
BUDGET ACTIVITY 5 - System Development and Demonstration								PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Software																		PROJECT C15									
Event Name								FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
								1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SDD/Development - HMMWV PP1/PP1(A) Variant								SDD/Development - HMMWV Variant																											
(1) MS B ADM Revision (HMMWV/RAD FV/STRYKER)												▲ 1 MS B ADM Revision				(All Variants)																			
(2) MS C HMMWV Variant																▲ 2 MS C HMMWV Variant																			
(3) FRP HMMWV VARIANT																				▲ 3 FRP HMMWV															
(4) OA (HMMWV)																▲ 4 OA (HMMWV)																			
SDD/ Development (Bradley/Stryker)												SDD/Development																							
(5) MS C LRIP/Bradley /Stryker Variants												MS C LRIP/Bradley /Stryker Variants				▲ 5																			
(6) LUT/IOTE ALL AVARIANTS																								▲ 6											
(7) FRP BRADLEY/STRYKER																				FRP BRADLEY/STRYKER				▲ 7											
(8) MS B IPR (HMMWV/BRADLEY/STRYKER)												▲ 8				MS B IPR (All Variants)																			
(9) LRIP HMMWV Variant																▲ 9				LRIP/HMMWV Variant															
(10) LUT HMMWV																▲ 10				LUT HMMWV															

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Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>			PROJECT <b>C15</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
SDD/Development HMMWV variant	1-4Q	1-4Q	1-4Q				
LRIP Production HMMWV variant			4Q				
MS B	2Q						
MS C HMMWV Variant			3Q				
FRP HMMWV Variant				2Q			
OA (HMMWV)			3Q				
IOTE (HMMWV)				2Q			
SDD/Development for Bradley/Stryker			1-4Q	1Q			
LUT/IOTE ALL VARIANTS					3Q		
MS C/LRIP Bradley/Stryker				2Q			
FRP Bradley/Stryker					4Q		
MS B ADM Rev		2Q					
MS B IPR		4Q					

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2006</b>			
<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>			<b>PE NUMBER AND TITLE</b> <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>					<b>PROJECT</b> <b>C29</b>			
<b>COST (In Thousands)</b>			<b>FY 2005 Estimate</b>	<b>FY 2006 Estimate</b>	<b>FY 2007 Estimate</b>	<b>FY 2008 Estimate</b>	<b>FY 2009 Estimate</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Estimate</b>	<b>Cost to Complete</b>	<b>Total Cost</b>
C29	CENTRALIZED TECHNICAL SUPPORT FACILITY (CTSF)		11316	9564	10228	10497	10025	9657	8555	0	92064
<p><b>A. Mission Description and Budget Item Justification:</b> Project DC29 - Centralized Technical Support Facility: The Central Technical Support Facility (CTSF) is located in Fort Hood, Texas. The CTSF provides a centralized on-the-ground capability to ensure interoperability among various digitized platforms and serves as the final integration and maturation facility for Common Operating Environment (COE). The CTSF is the Warfighters "Edge" that acts as an enabler for rapid integration of dissimilar software and hardware systems through real time, on-site integration of soldiers, contractors, testers, Program Managers and the requirements community. Also the CTSF provides a single technical "center of mass" for software checkout and system integration and provides a controlled environment with connectivity to other C4I systems either on-site or through the Army Interoperability Network (AIN) to support digital integration and fielding. This effort supports the Current to Future transition path.</p>											
<b>Accomplishments/Planned Program</b>							<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>		
Continue test planning/procedures/execution/reporting							1739	1674	1927		
Continue software engineering.							2066	1741	1791		
Provide infrastructure (Facilities, upgrades, additions).							1440	1202	1236		
Continue Digital System Engineering							1304	1089	1120		
Continue management operations.							1302	1104	1135		
Provide equipment for instrumentation, simulation/stimulation, software evaluation and development tools.							905	755	777		
Continue configuration management.							826	689	709		
Provide networks connections to include DISN, SIPRNET, NIPRNET, GUARDNET.							315	263	270		
Provide logistics support.							233	194	200		
Provide DA Mandated Intra-Army Digital Certification test and validation.							1186	853	1063		
Small Business Innovative Research							0	0	0		
Small Business Technology Transfer Programs							0	0	0		
Total							11316	9564	10228		
<p><b>C. Acquisition Strategy</b> This project provides the technical and programmatic disciplines required for systems engineering and integration, experimentation, acquisition management, testing, software development, interoperability, fielding and sustainment to ensure an interoperable and affordable ATCCS. The Program Executive Officer for Command, Control, Communications, Tactical (PEO C3T) has planned an evolutionary approach to fielding ATCCS as soon as possible.</p>											

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)		February 2006
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>	PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>	PROJECT <b>C29</b>

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar							PROJECT C29		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
MANTECH (Direct Labor)	C/CPFF	Fort Hood, TX	4921	2384	1Q	2108	1Q	2515	1Q	Continue	0	Continue
COMPUTER SCIENCE CORP (System Engineering)	C/CPAF	Fort Hood, TX/Fort Monmouth, NJ	2344	1214	1Q	1013	1Q	1086	1Q	Continue	0	Continue
MITRE Corp (System Engineering)	C/CPFF	Fort Hood, TX/Eatontown, NJ	2116	1104	1Q	921	1Q	948	1Q	Continue	5089	Continue
CAMBER (Config Mgt/)	C/CPAF	Fort Hood, TX	1200	600	1Q	501	1Q	515	1Q	Continue	2816	Continue
Northrop Grumman (Field Engineering)	C/CPIF	Fort Hood, TX	1953	1011	1Q	844	1Q	868	1Q	Continue	4676	Continue
NICHOLS (Logistics Support)	C/CPAF	Fort Hood, TX	1521	790	1Q	659	1Q	678	1Q	Continue	3648	Continue
ILEX (Field Engineering)	C/CPAF	Fort Hood, TX	763	395	1Q	330	1Q	339	1Q	Continue	1827	Continue
ROBBINS- GIOIA (Data Base Management)	C/CPAF	Fort Hood, TX/Fort Monmouth, NJ	607	314	1Q	262	1Q	270	1Q	Continue	1453	Continue
GTE	C/CPFF	Fort Hood, TX	468	243	1Q	203	1Q	209	1Q	Continue	1123	Continue
EWA	C/CPAF	Fort Hood, TX	283	146	1Q	122	1Q	125	1Q	Continue	676	Continue
Subtotal:			16176	8201		6963		7553		Continue	21308	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
CECOM Matrix	MIPRs	Fort Hood, TX/Fort Monmouth, NJ	145	0		0		0		Continue	Continue	Continue
In-House Support	MIPRs	Fort Hood, TX	273	159	1Q	133	1Q	137	1Q	Continue	702	Continue
Other Government Support	MIPRs	Fort Hood, TX	83	55	1Q	46	1Q	48	1Q	Continue	232	Continue
Subtotal:			501	214		179		185		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar							PROJECT C29	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
ELECTRONIC PROVING GROUNDS (EPG)	MIPR		4670	2426	1-2Q	2025	1-2Q	2082	1-2Q	Continue	11203	Continue
CAMBER (Testing)	CPAF	Fort Hood, TX	875	475	1Q	397	1-2Q	408	1-2Q	Continue	2155	Continue
Subtotal:			5545	2901		2422		2490		Continue	13358	Continue
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Not applicable			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
Project Total Cost:			22222	11316		9564		10228		0	35600	0

Schedule Detail (R4a Exhibit)					February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>C29</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Army Battle Command System (ABCS) 6.3 Test/Fixes/Integration							
ABCS 6.4 System of System (SoS) Integration							
Operation Iraqi Freedom (OIF)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q		
ABCS 6.4 Test Window	1Q	1Q					
Operation Enduring Freedom (OEF)	3-4Q	1-4Q	1-4Q	1-4Q	1-4Q		
I Corps Warfighter	1Q						
Prairie Warrior 05	3Q						
III Corps Warfighter		1Q					
Prairie Warrior		3Q	3Q	3Q	3Q		
Ulchie Focus Lens (UFL)		4Q	4Q	4Q	4Q		
Certification Software Blocking	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q		

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2006</b>	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>				PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>C34</b>	
COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
C34 ARMY TAC C2 SYS ENG	9264	16215	9130	9217	9016	0	0	0	92993
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> Project DC34 - Army Tactical Command and Control Systems (ATCCS) Engineering which is also referred to as Systems Engineering and Integration (SE&amp;I): Doctrine requires military leaders to make sound and timely command and control decisions to direct the activities of assigned and supporting units. The umbrella program to exploit automation technology in support of this mission is the ATCCS or SE&amp;I program. The effort to achieve horizontal integration of the ATCCS Battlefield Functional Areas (BFAs), although going on independently in each BFA, was not disciplined enough to address all connections and needs within the entire spectra of command, control and communications. Therefore, to ensure this horizontal integration effort is complete and fully automated, a significant management, systems engineering and integration effort is required. This effort, supporting the Army Battle Command Systems (ABCS) Version 6.30, includes fielding the ABCS Version 6.4 to the entire Army in four years and the current to the future transition path. The four year fielding is with "Good Enough" software and the future transition path was developed as the "Top Down Architecture".</p>									
<b><u>Accomplishments/Planned Program</u></b>						<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	
Continue Army Battle Command System (ABCS) Integrated Logistics Support						187	382	213	
Continue ABCS Testing and Evaluation of all Battlefield Functional Area (BFA) fielded software						477	803	447	
Continue ABCS Fielding/Scheduling						936	1410	785	
Continue ABCS Integrated Training Support						840	0	0	
Continue ABCS information engineering						1126	2209	1177	
Conduct and support system interoperability engineering						346	571	318	
Continue exploring state of the art technology insertion in support of the ABCS program						180	373	208	
Continue development and implementation of the ABCS information assurance						452	525	292	
Continue ABCS System Engineering						2738	5082	2987	
Continue System of Systems Development						1982	4860	2703	
Small Business Innovative Research/Small Business Technology Transfer Programs						0	0	0	
Small Business Technology Transfer Programs						0	0	0	
Total						9264	16215	9130	
<p><b><u>C. Acquisition Strategy</u></b> This project provides the technical and programmatic disciplines required for systems engineering and integration, experimentation, acquisition management, testing, interoperability, support to fielding and sustainment to ensure an interoperable and affordable Army Tactical Command and Control Systems (ATCCS).</p>									

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)		February 2006
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>	PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>	PROJECT <b>C34</b>
<p>The Program Executive Officer for Command , Control, Communications, Tactical (PEO C3T) has planned an evolutionary approach to fielding ABCS 6.4 in four years which ends in first quarter FY08. Fiscal years FY08 and FY09 will focus on "Systems of Systems" Engineering and integration for evolution toward JC2 and FCS.</p>		

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar								PROJECT C34	
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Northrop Grumman	C/CPIF	Fort Monmouth, NJ/Fort Hood, TX	9463	1090	1Q	595	1Q	692	1Q	Continue	0	Continue
CSC, NICHOLS	C/CPAF	Fort Monmouth, NJ/Fort Hood, TX	31283	1251	1Q	4044	1Q	888		Continue	0	Continue
MITRE	C/CPFF	Ft Monmouth, NJ/Eatontown, NJ	27425	4157	1Q	7517	1Q	4255	1Q	Continue	0	Continue
MANTECH (Direct Labor)	C/CPFF	Fort Monmouth, NJ/Fort Hood, TX	6496	0		0		0		0	6496	6546
CAMBER (Config Mgt/)	C/CPAF	Fort Hood, TX	1788	0		0		0		0	1788	855
ROBBINS-GIOIA	C/CPAF	Fort Monmouth, NJ/Fort Hood, TX	4972	540	1Q	1620	1Q	890	1Q	Continue	8022	Continue
LOCKHEED MARTIN	C/CPAF	Eatontown, NJ	6034	0		0		0	1Q	Continue	6034	Continue
GTE (Labor and Equipment)	C/CPFF	Fort Hood, TX	2281	0		0		0	1Q	Continue	2281	Continue
Misc Contracts	C/CPAF	Fort Monmouth, NJ/Fort Hood, TX	5703	185	1-2Q	250	1Q	90	1-2Q	Continue	0	Continue
Unixpros	C/CPAF	Eatontown, NJ	3711	0		0		0		0	3711	3711
ATSC	MIPR	Fort Leavenworth, KY	1850	0	1Q	0		0		Continue	1850	Continue
IDA	MIPR	Fort Monmouth, NJ	1724	0	1Q	0		0		Continue	1724	Continue
ITT	C/CPAF	Eatontown, NJ	1070	0		0		0		Continue	Continue	Continue
BOOZ-ALLEN	C/CPAF	Eatontown, NJ	1950	0		0		0	1Q	Continue	1950	Continue
MISCELLANEOUS SUPPORT	C/CPAF	Eatontown, NJ/Fort Hood, TX	1521	464	1-2Q	525	1-2Q	566	1-2Q	Continue	3076	Continue
Subtotal:			107271	7687		14551		7381		Continue	Continue	Continue
II. Support Costs	Contract Method &	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award	FY 2006 Cost	FY 2006 Award	FY 2007 Cost	FY 2007 Award	Cost To Complete	Total Cost	Target Value of

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>								PROJECT <b>C34</b>	
	Type				Date		Date		Date			Contract
IN-HOUSE SUPPORT	MIPRs	Fort Monmouth, NJ/Fort Hood, TX	5727	335	1Q	352	1Q	370	1Q	Continue	6784	Continue
CECOM MATRIX	MIPRs	Fort Monmouth, NJ/Fort Hood, TX	4045	982	1Q	1031	1Q	1083	1Q	Continue	7141	Continue
OTHER GOVERNMENT SUPPORT	MIPRs	Fort Monmouth, NJ/Fort Hood, TX/Fort Belvoir, VA	3339	130	1Q	137	1Q	144	1Q	Continue	3750	Continue
Subtotal:			13111	1447		1520		1597		Continue	17675	Continue
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
EPG	MIPR	Fort Huachuca, AZ	2463	130	1Q	144	1Q	152	1Q	Continue	2889	0
Subtotal:			2463	130		144		152		Continue	2889	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
SBIR/STTR	Various		792	0		0		0		0	792	0
Subtotal:			792	0		0		0		0	792	0
<b>Project Total Cost:</b>			<b>123637</b>	<b>9264</b>		<b>16215</b>		<b>9130</b>		<b>0</b>	<b>58288</b>	<b>11112</b>

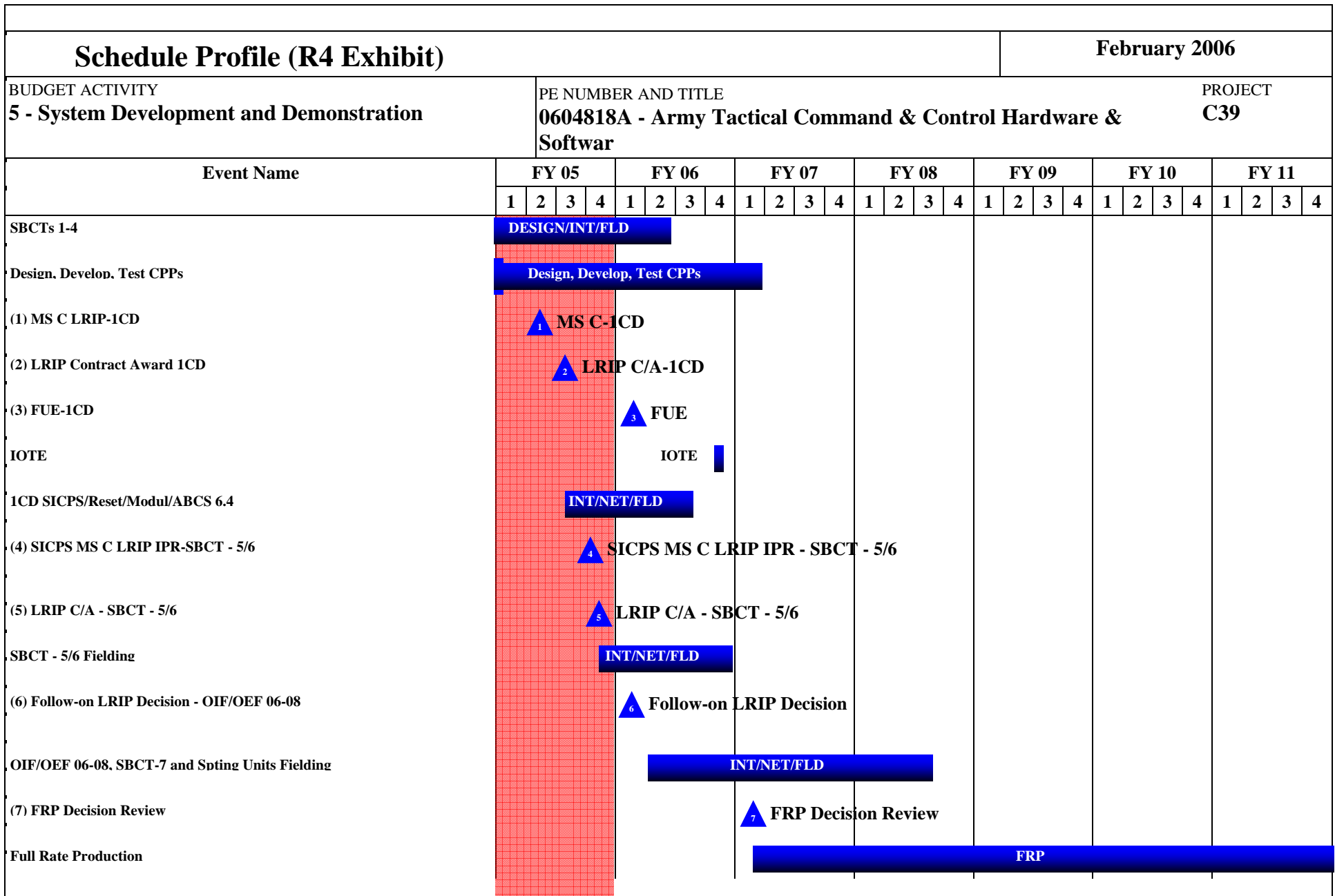
Schedule Detail (R4a Exhibit)					February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>C34</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
ABCS 6.3.X							
NATIONAL TRAINING CENTER (NTC) ROTATIONS	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q		
ABCS 6.4 SOFTWARE DEVELOPMENT and TESTING	1-2Q						
SBCT-2 FIELDING							
SBCT-3 FIELDING	1-3Q						
SBCT - 4 FIELDING	1-4Q	1-3Q					
SBCT-5 FIELDING	4Q	1-4Q	1-3Q				
SBCT-6 FIELDING		4Q	1-4Q	1-3Q			
FUTURE OPERATIONAL ARCHITECHTURE (OA)/SYSTEM ARCHITECTURE (SA)				1-4Q	1-4Q		
ABCS SYSTEMS ENGINEERING & INTEGRATION TRANSITION TO FCS				1-4Q	1-4Q		
FIELDING OF ABCS 6.4 TO ARMY	1-4Q	1-4Q	1-4Q	1Q			

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)								February 2006	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>				PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>C39</b>	
COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
C39 Tactical Operations Centers (TOCs)	10350	3005	4476	0	0	0	0	0	29122
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> The Tactical Operations Center (TOC) program provides commanders and their staffs with digitized platforms and command information centers, where courses of action become plans, plans become orders and battle tracking occurs. Based on the approved Standardized Integrated Command Post System (SICPS) Capabilities Production Document (CPD), a new start TOC program consisting of Command Post Platforms (CPPs) with standardized shelters, installation kits, large screen displays, environmentally-controlled tents and trailer-mounted support systems (TMSS), will be developed and fielded to future units. The CPPs will integrate Army Battle Command Systems (ABCS), communications equipment, intercoms, and local area networks into a standard Army platform. CPPs are digitized, tactically mobile, and fully integrated using military off-the-shelf, commercial off-the-shelf, non-developmental items, and emerging technologies. Network centric TOCs/SICPS support joint interoperability, ensuring that information superiority and force synchronization are gained on the tactical and operational battlefield. Fielded TOCs include Current Force TOCs for 4ID and Stryker Brigade Combat Teams (SBCT 1-3). SBCT-4 fielding to complete 2Q FY 06. SICPS Low Rate Initial Production (LRIP) is ongoing for 1CD, SBCT-5, SBCT-6 and OIF/OEF 06-08 rotation units. 1CD fielding to complete 3Q FY 06. The War on Terrorism and War in Iraq have emphasized the critical need for integrated command and control platforms where real time situational awareness and battle command can be executed in environmentally controlled, modular shelters, tents and TMSS that are deployable and supportable. The TOC program with development of state-of-the-art SICPS is providing this capability on an expedited schedule to meet the Army's requirement for OEF/OIF, and integrate the Army's updated ABCS systems as quickly as practicable. Currently, the TOC program is providing OEF/OIF support to the Coalition Forces Land Component Command (CFLCC), Coalition Joint Task Force 7, 4ID, and SBCT-3. TOCs/SICPS provide the command post migration path to Future Combat Systems (FCS). FY 07 provides incorporation of engineering changes resulting from IOT&amp;E and continues CPP weight reduction efforts to provide trade space for future BC and armor requirements.</p>									
<b><u>Accomplishments/Planned Program</u></b>						<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	
Design, engineering and test of TOCs						800	0	0	
Design, engineering and testing of Standardized Integrated Command Post Platforms						7013	1342	3392	
Government Test Support						1451	1410	826	
In-house Government Support						1086	253	258	
Total						10350	3005	4476	
<b><u>B. Other Program Funding Summary</u></b>		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total Cost
Other Procurement Army 2 - SSN: BZ9865		124035	129616	57707	385831	226982	222002	222165	CONT

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)		February 2006
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>	PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>	PROJECT <b>C39</b>
<p><b>C. Acquisition Strategy</b> The TOC evolutionary acquisition strategy relies on non-developmental items (NDI), Commercial Off-the-Shelf (COTS), and Government-furnished equipment (GFE) to design, integrate, assemble, test, train, and field Tactical Operations Centers (TOCs), Command Post Platforms (CPPs), and Tents and Trailer Mounted Support Systems (TMSS). A contract was awarded in August 2004, using full and open competition to design, develop and test CPPs. Tents/TMSS are being procured through the Defense Logistics Agency.</p>		

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>								PROJECT <b>C39</b>	
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Current Force TOCs	C/CPFF	GDDS (Huntsville, AL)	10567	800		0		0		0	11367	0
SBCTs 1,2 & 3	C/CPIF	NGMS (Huntsville, AL)	8745	0		0		0		0	8745	0
SBCTs 4	C/CPFF/FFP	PIF/JVYS	682	0		0		0		0	682	0
Command Post Platforms	C/CPIF	NGMS (Huntsville, AL)	365	7013	1Q	1342	1Q	3392	1Q	Continue	12112	0
In-House and Government Support		Various	1488	1086	1-2Q	253	1-2Q	258	1-2Q	Continue	3085	0
TOC 3D Survivable Carrier			4100	0		0		0		0	4100	0
Subtotal:			25947	8899		1595		3650		Continue	40091	0
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0									
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Government Test Support		various	110	1451	1-2Q	1410	1-2Q	826	1-2Q	Continue	3797	0
Subtotal:			110	1451		1410		826		Continue	3797	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract

ARMY RDT&E COST ANALYSIS (R3)							February 2006			
BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar							PROJECT C39	
Subtotal:		0								
Project Total Cost:		26057	10350		3005		4476		0	43888 0





Schedule Detail (R4a Exhibit)					February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>				PROJECT <b>C39</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
SBCTs Design/Int /Field	1-4Q	1-2Q					
Design, Develop, Test CPPs	1-4Q	1-4Q	1-2Q				
Milestone C LRIP - 1CD	2Q						
LRIP Contract Award -1CD	3Q						
First Unit Equipped - 1CD		1Q					
Initial Operational Test & Evaluation		4Q					
1 CD SICPS/Reset/Modul/ABCS 6.4 INT/NET/FLD	3-4Q	1-3Q					
SICPS MS C LRIP IPR - SBCT-5/6	4Q						
LRIP Contract Award - SBCT - 5/6	4Q						
SBCT 5 INT/NET/FLD	4Q	1-4Q					
SBCT 6 INT/NET/FLD		1-4Q					
Follow-On LRIP Decision - OIF/OEF 06-08		1Q					
OIF/OEF 06-08, SBCT-7 and Supporting Units INT/NET/FLD		2-4Q	1-4Q	1-3Q			
FRP Decision Review			1Q				
Full Rate Production			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2006</b>			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>					PROJECT <b>C3A</b>			
COST (In Thousands)			FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
C3A	ARMY AIRBORNE COMMAND & CONTROL SYS (A2C2S)		7580	7413	10200	0	0	0	0	0	81538
<p><b>A. Mission Description and Budget Item Justification:</b> This project funds the development of an Airborne Battle Command On The Move System required to horizontally and vertically integrate a linear and non-linear battlefield. Tasks in this project support research efforts in the engineering and manufacturing development phase of this system. The Army Airborne Command and Control System (A2C2S) is an Army Airborne Battle Command acquisition program for a system supporting the Unit of Employment, and Brigade Combat Teams. The A2C2S enables Commanders and their staffs, to traverse the battle space rapidly - maintaining situational awareness of all battlefield systems - and maintaining communications throughout the decision continuum. Using Battle Command Software and line-of sight and non-line-of sight voice and data communications the A2C2S provides information superiority through a common operational picture. In addition, A2C2S is to the airborne first-responder for Homeland Security and disaster relief by providing a robust communications platform for emergency response coordinators of air and ground operations. It will support initial and remote scene operations centers, convoy operations, and disaster coordination between state, federal, civilian and military assets. This system is critical to enhance the Battle Command Group's ability to effectively perform combat unit operations and serve as a force multiplier in the Future Force. Due to new technology and requirements to be compatible, design integration will be required to retrofit existing A2C2S systems. A2C2S supports the Chief's Vision and the modularity concept of the Army Over Time.</p>											
<b><u>Accomplishments/Planned Program</u></b>								<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	
Continue System Development and Evaluation								3107	3248	2718	
Continue "Good Enough" Integration (ABCS 6.4 and NLOS SATCOM)								3000	760	665	
Continue AWQ, Development and Operational Test								1473	2913	5217	
Complete Technical Manuals								0	492	600	
Develop Homeland Defense (HLD) Capabilities (Civil Use Waveforms and Applications)								0	0	1000	
Total								7580	7413	10200	
<b><u>B. Other Program Funding Summary</u></b>			FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
Airborne Command and Control SSN AA0710			28065	27678	40220	53853	79998	87740	18105	CONT	CONT

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)		February 2006
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>	PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>	PROJECT <b>C3A</b>
<p><b>C. Acquisition Strategy</b> A competitive cost type contract was awarded for A2C2S development in August 2001 to Raytheon. Raytheon produced three (3) prototype systems in FY03 in support of OEF/OIF. Raytheon produced five (5) LRIP Systems before the end of the contract period of performance, 30 Sep 05. The PIF produced three (3) LRIP A2C2S 1.0 Systems as described in MOA dated Jan 05 and will produce one (1) LRIP A2C2S 1.1 System. The Prototype Integration Facility (PIF) will produce four (4) LRIP A2C2S 1.1 Systems in FY06 and seven (7) LRIP A2C2S 1.1 Systems in FY07.</p>		

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Software</b>							PROJECT <b>C3A</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
System Dev and Eval	CPIF, MIPR	Raytheon Huntsville, and PIF JVYS	8672	3851	1Q	3914	2Q	4189	1Q	Continue	Continue	0
Prototype Integration (Systems 3 - 7)	CPIF	Raytheon	9497	0		0		0		Continue	Continue	0
Software Integration/Development	CPIF	Raytheon Huntsville	2618	0	1Q	0		0		Continue	Continue	0
Systems and Engineering Logistics Support	Various	Raytheon /AMCOM	12599	1285	1Q	0		0		Continue	Continue	0
ABCS SE&I	MIPR	Ft. Monmouth, NJ	195	0		0		0		0	195	0
Inhouse/Government	Various	Various	0	560	1Q	431	2Q	431	1Q	Continue	Continue	0
Subtotal:			33581	5696		4345		4620		Continue	Continue	0
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Support of System 1 and 2 deployed to 4th ID and 101st ABN	Various	Various	3759	0		0		0		0	3759	0
Subtotal:			3759	0		0		0		0	3759	0
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation and AWQ	MIPR/CPIF	ATEC/RTTC/AATD/AED/Raytheon/PIF JVYS	11903	1473	1Q	1400	2Q	4925	1Q	Continue	Continue	0
Operational Test	Various	Various	1883	0		1513	2Q	500	1Q	Continue	Continue	0
Subtotal:			13786	1473		2913		5425		Continue	Continue	0

ARMY RDT&E COST ANALYSIS (R3)										February 2006			
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar							PROJECT C3A		
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
In-House/Gov't			5219	411	1Q	155	1Q	155	1Q	Continue	Continue	0	
Subtotal:			5219	411		155		155		Continue	Continue	0	
Project Total Cost:			56345	7580		7413		10200		Continue	Continue	0	

Schedule Profile (R4 Exhibit)																		February 2006																	
BUDGET ACTIVITY 5 - System Development and Demonstration								PE NUMBER AND TITLE 0604818A - Army Tactical Command & Control Hardware & Softwar																		PROJECT C3A									
Event Name								FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
								1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Program Milestones																																			
Testing and Evaluation																																			
Operational Assessment								Operational Assessment																											
Field Test								Field Test																											
(1) IOC								1 IOC																											
(2) Material Release								2 Material Release																											
(3) Operational Test								3 Operational Test																											
(4) System Evaluation Report								4 System Evaluation Report																											
(5) FRP Decision								5 FRP Decision																											
FRP								FRP																											
Retrofits (JNN, Win-t, UAV, IBS etc.)								Retrofits																											



Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604818A - Army Tactical Command &amp; Control Hardware &amp; Softwar</b>			PROJECT <b>C3A</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
MS C							
Operational Assessment	2-4Q	1-3Q					
Field Test	4Q						
IOC		2Q					
Material Release		4Q					
Operational Test		4Q					
System Evaluation Report			1Q				
FRP Decision			2Q				
FRP			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Retrofits		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q