	ARMY RDT&E BUDGET ITEM JU	STIFIC	CATION	(R2 E	xhibit)		Fe	ebruary 2	2004	
BUDGET A	ACTIVITY Prational system development		PE NUMBER <b>0203759<i>I</i> and Belo</b>	A - Force	XXI Batt	tle Comn	nand, Br	igade	PROJECT <b>120</b>	
	COST (In Thousands)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	
120	FORCE XXI BATTLE CMD, BRIGADE & BELOW (FBCB2)	5988	7 47901	23510	14744	8010	8333	8335	Continuing	Continuing

A. Mission Description and Budget Item Justification: The Force XXI Battle Command Brigade and Below (FBCB2) is a digital, battle command information system that provides integrated, on-the-move, timely, relevant battle command information to tactical combat, combat support and combat service support leaders and soldiers. FBCB2 incorporates state-of-the-art information technology to allow commanders to concentrate combat system effects rather than combat forces, enabling units to be both more survivable and more lethal. FBCB2 provides the capability to pass orders and graphics allowing the warfighter to visualize the commander's intent and scheme of maneuver. FBCB2 affords combat forces the capability to retain the tactical/operational initiatives under all mission, enemy, terrain, troops, and time available conditions to enable faster decisions, real/near-real-time communications and response. The system includes a Pentium based processor, display unit, keyboard and removable hard disk drive cartridge. FBCB2 supports situational awareness (blue and red force positions) and command and control down to the soldier/platform level across Battlefield Operating Systems (BOS) and echelons. FBCB2 as a key component of the Army Battle Command System (ABCS), completes the information flow process from brigade to platform and across platforms within the brigade task force and across brigade boundaries.

FY05 funds complete Type 1 Encryption and interoperability between TI and L-Band based FBCB2 systems. FBCB2 is an Army designated Horizontal Technology Integration (HTI) program. This system supports the Current/Stryker Brigade Combat Team (SBCT) transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Support Govt testing (IE Cold Region Test Center, NTC 03/03 - 03/10, Stryker demo and Stryker Certex	3588	0	0
Devolopment of OEF Software Enhancements and Database Adjustments for Blue Force Tracking	14880	0	0
Support to Joint Blue Force Tracking Situational Awareness (JBFSA) Advanced Concept Technology Demonstration (ACTD)	1494	0	0
Future Communications Study	928	0	0
Complete Army Battle Command System (ABCS) architecture and system of systems network engineering and integration	25424	14900	0
efforts in support of v6.4.1 and Software Block Functionality			
PM FBCB2 Program Management.	6180	3932	2124
Type I Encryption and NSA Endorsement	310	8100	5700

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

February 2004

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

PROJECT

0203759A - Force XXI Battle Command, Brigade

120

and Below (FBCB2

Accomplishments/Planned Program B(continued)	FY 2003	FY 2004	FY 2005
Conduct Development Test/Operational Test for Block I Capability of FBCB2-BFT at Electronic Proving Ground (EPG) and	4883	6200	500
multiple FORSCOM unit NTC rotation at Ft. Irwin, CA			
Develop/Maintain Joint Interoperability (USMC, Land Warrior/Dismount) and implement Coalition (UK) interoperability	2200	8088	9700
Develop Satellite Spectrum and Tactical Internet Interoperability, Data Loading/Management initialization to synchronize	0	5312	5486
updates. Small Business Innovative Research/Small Business Technology Transfer Programs	0	1369	0
Totals	59887	47901	23510

B. Program Change Summary	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	61961	48436	20224
Current Budget (FY 2005 PB)	59887	47901	23510
Total Adjustments	-2074	-535	3286
Congressional program reductions		-456	
Congressional rescissions			
Congressional increases			
Reprogrammings	-2074	-79	
SBIR/STTR Transfer			
Adjustments to Budget Years			3286

FY03 \$1M Reprogramming to higher priority program.

FY05 represents increased integration cost to support additional production in support of Operation Iraqi Freedom (OIF).

## **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)** February 2004 PE NUMBER AND TITLE **PROJECT BUDGET ACTIVITY** 7 - Operational system development 0203759A - Force XXI Battle Command, Brigade 120 and Below (FBCB2 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 ToCompl TotalCost C. Other Program Funding Summary 0 84883 120073 142329 139376 0 0 Other Procurement Army Activity 2 SSN 182231 752736 2791 6075 Motes Procurement Army Activity 4 SSN 1904 3361 3553 4179 3549 26646 BS9736 (Spares)

<u>D. Acquisition Strategy:</u> The initial System Development and Demonstration (SDD) contract, awarded in 1995, is a Cost Plus Incentive Fee (CPIF), Systems Engineering and Integration (SE&I) effort. The contract is for the development of software versions v1.0-v3.4, prototype computers, and associated hardware. A follow-on SE&I contract (Cost Plus Award Fee (CPAF)) was awarded in May 2001 for software versions v3.5. SE&I Contract Delivery Order was awarded for development of Software Version 6.4.1 on 14 June 2002. This will satisfy the Operational Requirements Document (ORD) Block II requirements and synchronize with ABCS 6.4.

A Low Rate Initial Production (LRIP) Fixed Price Incentive Fee (FPIF) contract was awarded in January 2000 for the production of 5,952 systems with OPA funds. An LRIP Contingency Option for an additional 6,774 FBCB2 Systems was authorized in Nov 2002 and an Acquisition Decision Memorandum was approved Sept 22, 2003 for an additional one-year of LRIP. A Full Rate Production (FRP) decision is planned following Developmental Test/Operational Test, 2QFY04.

## ARMY RDT&E COST ANALYSIS(R3) February 2004 BUDGET ACTIVITY PROJECT PE NUMBER AND TITLE 0203759A - Force XXI Battle Command, Brigade and 7 - Operational system development 120 **Below (FBCB2** Product Development Contract Performing Activity & Total FY 2003 FY 2003 FY 2004 FY 2004 FY 2005 FY 2005 Cost To Total Target Method & PYs Cost Cost Value of Location Cost Award Award Cost Award Complete Cost Type Date Date Date Contract a . Software/Systems CPIF/CPAF Northrup Grumman, 135621 17080 1Q 15305 1Q 5400 1Q Continue Continue Engineering Northrup Grumman. FFP b . Hardware 0 0 0 27645 27645 Development CA Northrup Grumman, c . Software Development CPIF/CPAF 184929 31744 1Q 22464 1Q 15486 1Q Continue 254623 0 CA d. TACNAV **CPIF** TRW CA 1000 0 0 0 1000 0 37769 349195 48824 20886 Continue Continue 0 Subtotal: FY 2005 FY 2003 FY 2005 II. Support Cost Contract Performing Activity & Total FY 2003 FY 2004 FY 2004 Cost To Total Target Method & Location PYs Cost Cost Award Cost Award Cost Award Complete Cost Value of Type Date Date Date Contract a . PM Office Support N/A CECOM. Ft. 1300 750 Continue Continue 10937 1Q 1200 1-4Q 1-4Q Monmouth CECOM, Ft. Continue Continue b. Matrix Support **MIPR** 3941 176 1Q 313 1-2Q 350 1-2Q 0 Monmouth c. Misc. Contracts MIPR/PWD CECOM, Ft. 18307 4704 1Q 2409 1-2Q 1024 1-2Q Continue Continue 0 Support Monmouth Continue Continue 0 33185 6180 3922 2124 Subtotal:

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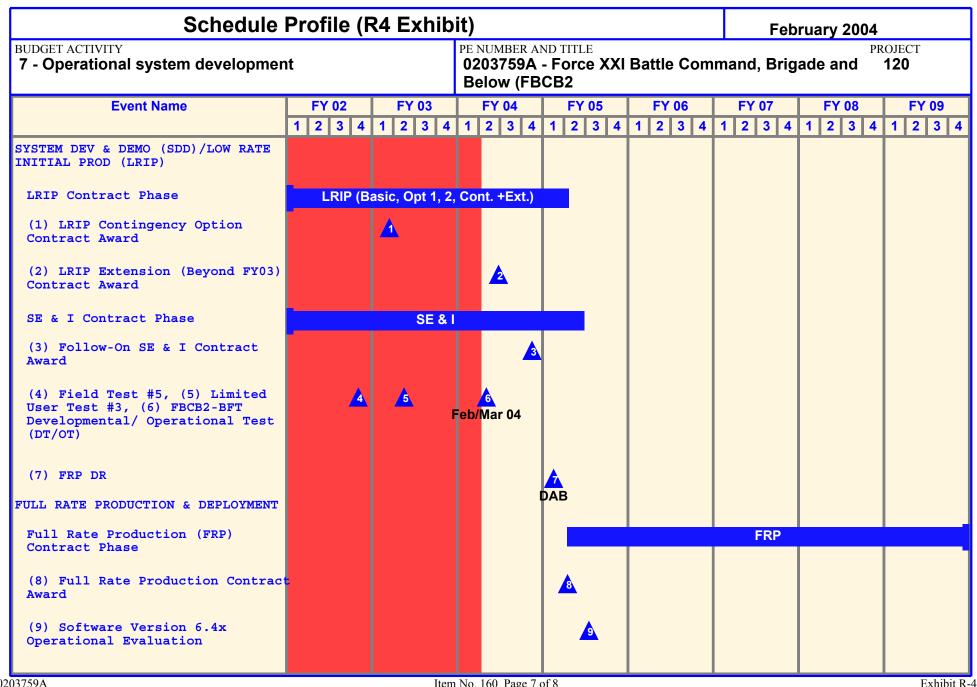
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## **ARMY RDT&E COST ANALYSIS(R3)** February 2004 PE NUMBER AND TITLE 0203759A - Force XXI Battle Command, Brigade and BUDGET ACTIVITY PROJECT 7 - Operational system development 120 Below (FBCB2

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Complete		Target Value of Contract
a. CTSF	MIPR	CTSF	2133	190	2Q	0		0		0	2323	0
b. ATEC	MIPR	ATEC	32610	370	1Q	2300	1Q	500	1Q	Continue	Continue	0
c. EPG	MIPR	EPG	14739	795	1Q	3910	1Q	0		Continue	Continue	0
d. CRTC	MIPR	CRTC	0	1040	1Q	0		0		0	1040	0
e . Misc Contract Support			0	2488	1-3Q	0		0		0	2488	0
Subtotal:			49482	4883		6210		500		Continue	Continue	0

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	ARM	Y RDT&E CO	ST AN	ALYS	IS(R3)				Feb	ruary 20	04	
udget activity 7 - Operational sys	stem deve	lopment		020	UMBER AN 13759A - Iow (FBC	Force XX	KI Battle	Comma	nd, Brig	ade and	PROJEC <b>120</b>	
'. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Complete	Total Cost	Targe Value d Contra
Subtotal:			0	0		0		0		0	0	
Project Total Cost:			431862	59887		47901		23510		Continue	Continue	



Schedule Detail (R4		February 2004							
BUDGET ACTIVITY 7 - Operational system development	020375	PE NUMBER AND TITLE  0203759A - Force XXI Battle Command, Brigade and  Below (FBCB2							
Schedule Detail	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Climatic (Extreme Cold) Testing Ft. Greely, AK	2Q								
Developmental Test/Operational Test		2Q							
Award Follow-on SE&I Contract		4Q							
Full Rate Production Decision Review			1Q						
Full Rate Production Contract Award			2Q						
FBCB2 Software v6.4.1 Delivery			1Q						
Operational Test on v6.4.1 software			3Q						
FBCB2 SW Upgrade and Test				3Q					
FBCB2 SW Upgrade and Test						1Q			
FBCB2 SW Upgrade and Test							3Q		

NOTE: The Office of the Secretary of Defence, Director of Operational Test and Evaluation and the Army Test & Evaluation Command have changed the Initial Operational Test & Evaluation (IOT&E) to a Developmental Test/Operational Test (DT/OT) which will include the validation of the FBCB2 System performance during Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF). Software Version 7.0 has been changed to V6.4.1.