ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	February 2003

BUDGET ACTIVITY **7 - Operational system development**	PE NUMBER AND TITLE **0203740A - Maneuver Control System**	PROJECT **484**

COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
484 MANEUVER CONTROL SYSTEM (MCS)	40231	42229	39581	17883	11106	10367	0	0	0	307379

A. Mission Description and Budget Item Justification: This program element funds the evolutionary development, integration and testing of the Maneuver Control System (MCS). Project satisfies an urgent need for the efficient command and control (C2) of tactical operations on the battlefield. MCS is the Army's tactical C2 system used in command posts from corps to battalion to provide automated C2 for the commander and staff at and between echelons (i.e., Force Level Control). MCS is an essential component of the Army Battle Command System (ABCS) and provides critical coordination among Battlefield Functional Areas (BFAs) within each echelon. The primary component of Force Level Control is MCS's provision of the Common Operational Picture (COP). The COP depicts information provided by all the BFAs and includes a Situation Map (SITMAP) using Defense Mapping Agency data to display friendly and enemy unit locations, control measures (e.g., boundaries, phase lines, etc.), Intelligence and Electronic Warfare graphics, Fire Support plans, combat service support location information, air corridors and air defense weapons control information.

MCS software is based on the Defense Information Systems Agency (DISA) Common Operating Environment (COE) standard architecture with applications to automate C2 operations. The MCS software uses the Joint Mapping Tool Kit (JMTK), a Defense Information Infrastructure Common Operating Environment (DII COE) product, for terrain analysis, planning and SITMAP graphical displays. The Task Organization (TO) tool provides the commander and staff a means of organizing (graphically and textually) tactical Army units. Unit commanders and their staffs can quickly and efficiently prepare and disseminate combat orders with MCS's automated Operations Order (OPORD) generating tool. MCS report displays provide resource information roll-ups on all battlefield units. MCS supports battlefield situation displays for all ABCS BFAs. MCS provides the Global Command and Control System - Army (GCCS-A) the Army "ground track" segment of the joint tactical common picture.

This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Conduct MCS Block IV and Block V software development and support	39631	35279	31881	16391
Plan and participate in test events, and prepare for the MCS Operational Tests	600	6950	2300	992
Conduct MCS IOT&E (Block IV)	0	0	5400	500
Totals	40231	42229	39581	17883

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B. Program Change Summary	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2003)	39883	44444	31956	17644
Current Budget (FY 2004/2005 PB)	40231	42229	39581	17883
Total Adjustments	348	-2215	7625	239
Congressional program reductions		-851		
Congressional rescissions				
Congressional increases				
Reprogrammings	348	-245		
SBIR/STTR Transfer		-1119		
Adjustments to Budget Years			7625	239

FY04: Funds increased for replanned MCS Block IV IOT&E ($7625K).

C. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
BA9320 - Maneuver Control System (MCS)	9589	7378	37141	50658	48304	38009	29205	30133	Continue	Continue
BS9710 - MCS Spares	440	2942	1967	2012	1837	1860	1461	1486	Continue	Continue
BZ9962 - Standardized Integrated Command Post System (SICPS) for MCS	8037	0	0	0	0	0	0	0	0	8037

C. Other Program Funding Summary: Note: Beginning in FY04, 'SICPS for MCS' funded from the MCS line (BA9320).

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D. Acquisition Strategy: The MCS acquisition strategy is based on modular development of application software, integrated with the common system software, hosted on the ruggedized commercial off-the-shelf Common Hardware/ Software (CHS) computers and peripheral hardware that are procured under the Army CHS ordering contract. MCS software development will follow a blocked approach based on functionality prioritization. Software capabilities will be developed and delivered in blocks over time with the intent of supporting warfighter tactical and training requirements. Block IV will provide the minimum essential operational capability required to set and maintain the conditions for success in the close fight. Block V will deliver the capability to fully synchronize the battlefie ld framework (close, deep, rear, security and reserve). Subsequent development will be competitively awarded to provide the operational capabilities consistent with the future operational environment in a transformed US Army (e.g., future joint interoperability). The MCS Block IV system will consist of two CHS components, each providing a combination of software capabilities. The two components are the MCS-Heavy box and the MCS-Light box. Together, those components provide all of the minimum essential capabilities to support the functions of Battle Command at battalion and above level maneuver units. MCS, together with its CHS components, will be integrated into the Standardized Integrated Command Post System (SICPS) shelters.

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ARMY RDT&E COST ANALYSIS(R-3)

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I. Product Development	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	Cost To Complete	Total Cost	Target Value of Contract
a . MCS Software Development	C/CPAF	Lockheed Martin Corp., Tinton Falls, NJ	130082	21809	1-3Q	18433	1-3Q	3110	1Q	0	173434	173434
b . Follow-on Software Upgrades (e.g., joint interoperability,COE compliance, etc.)	C	TBD	0	0		0		1067	1-3Q	Continue	Continue	0
c . Misc Contracts	Various	Various	10563	3729	2Q	3135	1-2Q	1373	1-2Q	Continue	Continue	0
d . Software Development & Technical Support	MIPR	CECOM, NJ	13014	5500	1-2Q	5775	1-2Q	6000	1-2Q	Continue	Continue	0
e . Technical Support	In House	PM GC C2, NJ	8111	1915	1-4Q	2011	1-4Q	2112	1-4Q	Continue	Continue	0
f . PSE H/W & S/W	Various	Various	2155	210	2Q	210	2Q	250	2Q	Continue	Continue	0
g . MITRE System Engineering	CPFF	MITRE Corp., Eatontown, NJ	6536	990	1Q	1089	1Q	1198	1Q	Continue	Continue	0
h . ABCS SE&I	MIPR	PEO C3T, NJ	1830	0		0		0		0	1830	0
Subtotal:			172291	34153		30653		15110		Continue	Continue	173434

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Cost Analysis

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II. Support Cost	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	Cost To Complete	Total Cost	Target Value of Contract
a . Misc Support	In House	PM GC C2, NJ	2498	433	1-4Q	455	1-4Q	477	1-4Q	Continue	Continue	0
b . Misc Contracts	Various	Various	1713	100		150		150		Continue	Continue	0
Subtotal:			4211	533		605		627		Continue	Continue	0

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	Cost To Complete	Total Cost	Target Value of Contract
a . OGA	MIPR	Various	1400	750	1-2Q	788	1Q	414	1Q	Continue	Continue	0
b . Misc Contracts	Various	Various	3021	500	1-2Q	550	1-2Q	578	1-2Q	Continue	Continue	0
c . Operational Test/Planning	MIPR	Various	4401	5700	1-2Q	6362	1Q	500	1-2Q	Continue	Continue	0
Subtotal:			8822	6950		7700		1492		Continue	Continue	0

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IV. 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	Cost To Complete	Total Cost	Target Value of Contract
a . Program Office Mgmt	In House	PM GC C2, NJ	889	593	1-4Q	623	1-4Q	654	1-4Q	Continue	Continue	0
Subtotal:			889	593		623		654		Continue	Continue	0
Project Total Cost:			186213	42229		39581		17883		Continue	Continue	173434

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Schedule Profile Detail (R-4a Exhibit)

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Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Participation in Field Test 4	1Q							
Participation in DCX-II	1Q							
Participation in Field Test 5	4Q							
MCS System Stress Test	2-3Q	2Q						
MCS Block IV Software Segment Acceptance Test		3Q						
Participate in Field Test 6		4Q						
Complete MCS Block IV Initial Operational Test & Evaluation			3Q					
MCS Milestone III Decision				1Q				
Initial Operational Capability				3Q				
Prepare and conduct Block V Operational Assessment/Operational Test				4Q	1-2Q			
Evolving Software Upgrades (e.g., joint interoperability, COE compliance, etc.)				1-4Q	1-4Q	1-4Q		

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