

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

June 2001

BUDGET ACTIVITY 7 - OPERATIONAL SYSTEMS DEV			PE NUMBER AND TITLE 0203740A - Maneuver Control System						PROJECT 484	
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
484 MANEUVER CONTROL SYSTEM (MCS)	42161	48454	40231	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification:

PLEASE NOTE: This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

This program element funds the evolutionary development, integration and testing of the Maneuver Control System (MCS). Project D484, Maneuver Control System (MCS) satisfies an urgent need for 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 Tactical Picture (CTP). The CTP depicts information provided by all the Battlefield Functional Areas (BFAs) and includes a Situation Map (SITMAP) using Defense Mapping Agency map 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 OSD-DISA Common Operating Environment (COE) standard architecture with applications to automate C2 operations. The MCS Block IV 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 by echelon. 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 reporting battlefield units. MCS provides the Common Tactical Picture software supporting battlefield situation displays for all ATCCS BFAs. MCS provides the Army "ground track" segment of the joint tactical common picture to the Global Command and Control System-Army (GCCS-A).

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

FY 2000 Accomplishments

- 39121 Continue MCS Block IV software development.
- 1576 Participate in test events leading to Block IV IOT&E
- 1000 Integrate Tactical Voice Control
- 464 ABCS System Engineering and Integration efforts

Total 42161

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FY 2001 Planned Program

- 37517 Continue MCS Block IV software development
- 8180 Planning and preparation for Block IV Initial Operational Test & Evaluation (IOT&E)
- 1366 ABCS System Engineering and Integration efforts
- 1391 Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR) programs

Total 48454

FY 2002 Planned Program

- 37643 Continue MCS Block IV software development
- 2588 Conduct Block IV IOT&E

Total 40231

<u>B. Program Change Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2001 PB)	45776	48910	14070	0
Appropriated Value	46125	48910	0	0
Adjustments to Appropriated Value	0	0	0	0
a. Congressional General Reductions	0	0	0	0
b. SBIR/STTR	-1193	0	0	0
c. Omnibus or Other Above Threshold Reductions	-183	0	0	0
d. Below Threshold Reprogramming	-2422	0	0	0
e. Recissions	-166	-448	0	0
Adjustments to Budget Years Since FY2001 PB	0	-8	26161	0
Current Budget Submit (FY 2002/2003 PB)	42161	48454	40231	0

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Funding: FY 2002 (+26161) Increase for continued MCS Block IV software development and conduct of the Block IV IOT&E.
 FY 2003 (-1696) Funds realigned to higher priority requirements.
 Schedule: MCS Block IV contract completion requires extension from FY02 to FY04.

C. Other Program Funding Summary	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
BA9320 - Maneuver Control System (MCS)	23292	30570	6839	0	0	0	0	0	0	0
BS9710 - MCS Spares	0	0	499	0	0	0	0	0	0	0
BZ9962 - Standardized Integrated Command Post System (SICPS) for MCS	0	0	7489	0	0	0	0	0	0	0

D. Acquisition Strategy: The MCS acquisition strategy is based on modular development of application software, integrated with the common system software, hosted on the procured commercial off-the-shelf Common Hardware/ Software (CHS) computers and peripheral hardware. The current block of MCS software, Block IV, consists of development of two versions; MCS Version 6(FDD) and MCS Version 7(FDC). MCS Version 7(FDC) software will add applications and stand-alone functionality from MCS Version 6(FDD). Therefore, technical risk associated with each version is minimized. The use of CHS equipment enables the MCS to capitalize on state-of-the-art ruggedized, commercial equipment and reduce life cycle costs. MCS is moving to ruggedized commercial workstations and notebook computers to enhance software development, support and training. MCS will also integrate its CHS equipment into the Standardized Integrated Command Post System (SICPS) shelters.

E. Schedule Profile	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Participation in ABCS 6.X test events	1-4Q	1-4Q		0	0	0	0	0
Participation in FBCB2 Field Test 3		2Q		0	0	0	0	0
Participation in FBCB2 Field Test 4		4Q		0	0	0	0	0
Complete MCS V.6(FDD) Initial Operational Test & Evaluation			1Q	0	0	0	0	0
Participation in ABCS 7.0, 8.0,etc. test events			1-4Q	0	0	0	0	0

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<u>E. Schedule Profile (continued)</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
MCS Block IV Milestone III Decision			3Q	0	0	0	0	0
Initial Operational Capability				0	0	0	0	0
Complete MCS V.7(FDC) Operational Assessment/Operational Test				0	0	0	0	0
Evolving Software Upgrades				0	0	0	0	0

ARMY RDT&E COST ANALYSIS(R-3)

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Block IV (LMC) (See Remarks)	C/CPAF	Lockheed Martin Corp., Tinton Falls, NJ	70652	26889	1-3Q	26972	1-3Q	0	0	0	0	0
b . Other Contracts	C/Various		8382	3077	1-2Q	3820	1-2Q	0	0	0	0	0
c . Technical Support	MIPR	CECOM	4510	2571	1-2Q	2674	1-2Q	0	0	0	0	0
d . In-house			4775	1759	1-4Q	1830	1-4Q	0	0	0	0	0
e . PSE H/W & S/W	C/Various		1341	200	3Q	0		0	0	0	0	0
f . MITRE System Engineering	CPFF	MITRE Corp., Eatontown, NJ	3665	1935	1Q	1218	1Q	0	0	0	0	0
g . ABCS SE&I	MIPR	PEO C3S	464	1366		0		0	0	0	0	0
h . SBIR/STTR			0	1391		0		0	0	0	0	0
Subtotal:			93789	39188		36514		0		0	0	0

Remarks: MCS Block IV contract requires extension from FY02 to FY04 in order to complete Version 7 software delivery.

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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . In-House			1811	681	1-4Q	708	1-4Q	0	0	0	0	0
b . Other Contracts	C/Various		1122	405	1-2Q	421	1-2Q	0	0	0	0	0
Subtotal:			2933	1086		1129		0		0	0	0

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . OGA	MIPR	Various	400	1050	1-2Q	300	1-2Q	0	0	0	0	0
b . Other Contracts	C/Various		1347	750	1-2Q	788	1-2Q	0	0	0	0	0
c . Operational Test/Planning	MIPR	Various	442	6380	1-2Q	1500	1Q	0	0	0	0	0
Subtotal:			2189	8180		2588		0		0	0	0

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. None			0	0		0		0	0	0	0	0
Subtotal:			0	0		0		0		0	0	0
Project Total Cost:			98911	48454		40231		0		0	0	0