

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

February 2002

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0203740A - Maneuver Control System						PROJECT 484		
COST (In Thousands)	FY 2001 Actual	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)	47071	39883	44444	31956	17644	10305	9561	Continuing	Continuing

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 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 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 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 battlefield units. MCS supports battlefield situation displays for all ATCCS 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).

FY 2001 Accomplishments:

- 43304 Continued MCS Block IV software development and support
- 2401 Planned and participated in test events, and conducted data collection and analysis
- 1366 Conducted ABCS System Engineering and Integration

Total 47071

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PE NUMBER AND TITLE
0203740A - Maneuver Control System

PROJECT
484

FY 2002 Planned Program

- 35533 Conduct MCS Block IV and Block V software development and support
- 4350 Plan and participate in test events, and prepare for the MCS Initial Test & Evaluation (IOT&E)

Total 39883

FY 2003 Planned Program

- 35244 Complete MCS Block IV development and continue MCS Block V software development and support
- 1000 MCS test activities in support of ABCS
- 8200 Conduct MCS IOT&E

Total 44444

<u>B. Program Change Summary</u>	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2002 PB)	48454	40231	12957
Appropriated Value	48910	40231	0
Adjustments to Appropriated Value	0	0	0
a. Congressional General Reductions	0	-348	0
b. SBIR/STTR	-1319	0	0
c. Omnibus or Other Above Threshold Reductions	0	0	0
d. Below Threshold Reprogramming	0	0	0
e. Rescissions	-448	0	0
Adjustments to Budget Years Since FY2002 PB	0	0	31487
Current Budget Submit (FY 2003 PB)	47143	39883	44444

Funding: FY 2003 (+31487) Increase for continued testing and MCS software development under planned contract extension

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0203740A - Maneuver Control System

PROJECT
484

C. Other Program Funding Summary

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
BA9320 - Maneuver Control System (MCS)	30571	5397	7584	30003	42506	17223	26616	Continue	Continue
BS9710 - MCS Spares	0	493	3023	1384	237	1407	1905	Continue	Continue
BZ9962 - Standardized Integrated Command Post System (SICPS) for MCS	0	8041	0	13502	9474	22153	13530	Continue	Continue

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. MCS will follow a development process that is a prioritized blocking approach for software development. 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 IV is also the essential threshold level of functionality required for the MCS IOT&E. Block V will deliver the capability to fully synchronize the battlefield framework (close, deep, rear, security and reserve). Subsequent blocks are planned to be competitively awarded and will provide the desired operational capabilities consistent with the future operational environment in a transformed US Army. 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 will also integrate its CHS components into the Standardized Integrated Command Post System (SICPS) shelters.

E. Schedule Profile

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Participation in ABCS 6.X test events	1-4Q						
Participation in FBCB2 Field Test 3	2Q						
Participation in FBCB2 Field Test 4		1Q					
Participation in DCX-II		1Q					
MCS Block IV Software Segment Acceptance Test		3Q					
Participation in FBCB2 Field Test 5		3-4Q					
Complete MCS Block IV Initial Operational Test & Evaluation			1Q				

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February 2002

BUDGET ACTIVITY
7 - Operational system development

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PROJECT
484

E. Schedule Profile (continued)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Participation in ABCS 7.0, 8.0, etc. test events		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
MCS Milestone III Decision			3Q				
Initial Operational Capability			4Q				
Complete Block V Operational Assessment/Operational Test				3Q			
Evolving Software Upgrades				2-4Q	1-4Q	1-4Q	1-4Q

ARMY RDT&E COST ANALYSIS(R-3)

February 2002

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0203740A - Maneuver Control System

PROJECT
484

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 . MCS Software Development	C/CPAF	Lockheed Martin Corp., Tinton Falls, NJ	72286	32004	1-4Q	24906	1-3Q	26447	1-3Q	Continue	Continue	0
b . Misc Contracts	Various	Various	6748	2308	1-2Q	2287	1-2Q	2524	1-2Q	Continue	Continue	0
c . Technical Support	MIPR	CECOM, NJ	4510	3334	1-2Q	4500	1-2Q	2200	1-2Q	Continue	Continue	0
d . Technical Support	In House	PM ATCCS, NJ	4775	1777	1-4Q	1875	1-4Q	1969	1-4Q	Continue	Continue	0
e . PSE H/W & S/W	Various	Various	1341	614	3-4Q	200	2Q	250	2Q	Continue	Continue	0
f . MITRE System Engineering	CPFF	MITRE Corp., Eatontown, NJ	3665	1935	2Q	930	1Q	977	1Q	Continue	Continue	0
g . ABCS SE&I	MIPR	PEO C3S, NJ	464	1366	2Q	0		0		0	1830	0
Subtotal:			93789	43338		34698		34367		Continue	Continue	0

Remarks: MCS software development contract will extend to FY04 in order to complete Block V requirements of reblocked MCS ORD.

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February 2002

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484

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 . Misc Support	In House	PM ATCCS, NJ	1811	335	1-4Q	352	1-4Q	370	1-4Q	Continue	Continue	0
b . Misc Contracts	Various	Various	1122	591	2-3Q	0		0		0	1713	0
Subtotal:			2933	926		352		370		Continue	Continue	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	470	1-3Q	450	1-2Q	300	1-2Q	Continue	Continue	0
b . Misc Contracts	Various	Various	1347	835	1-4Q	600	1-2Q	400	1-2Q	Continue	Continue	0
c . Operational Test/Planning	MIPR	Various	442	1096	2-4Q	3300	1-4Q	8500	1-2Q	Continue	Continue	0
Subtotal:			2189	2401		4350		9200		Continue	Continue	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 . Program Office Mgmt	In House	PM ATCCS, NJ	0	406	1-4Q	483	1-4Q	507	1-4Q	Continue	Continue	0
Subtotal:			0	406		483		507		Continue	Continue	0

Project Total Cost:			98911	47071		39883		44444		Continue	Continue	0
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