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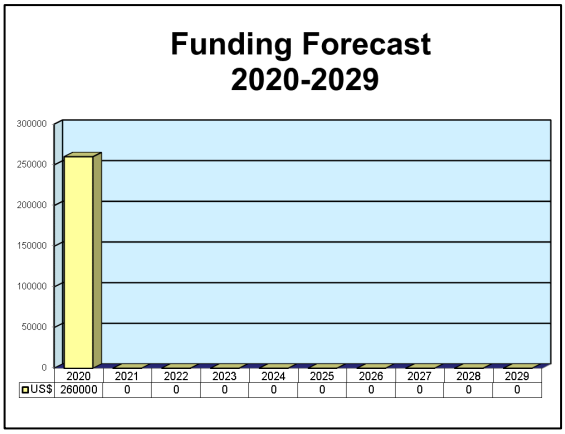
Maneuver Control System (MCS)

Outlook

- The Maneuver Control System program transitioned into sustainment in FY19



Orientation

Description. The U.S. Army's Maneuver Control System is a command, control, and communications (C3) system used in command posts from corps to battalion. The MCS provides Army commanders and staff with automated C3 at and between echelons.

Note: *The Maneuver Control System is composed of multiple systems. The focus of this report is on the MCS as a whole, rather than the individual systems that comprise it.*

Sponsor

U.S. Army
Project Manager
Operations Tactical Data Systems (OPTADS)
Program Executive Office - Command and Control Systems (PEO-CCS)
Communications and Electronics Command
Fort Monmouth, NJ

Status. Development completed. Program transitioned to system sustainment.

Application. Command, control, and communications.

Price Range. A C3 Maneuver Control System is estimated to cost $20,000, based upon U.S. DoD FY20 procurement budget requests.

Maneuver Control System (MCS)

Contractors

Prime

General Dynamics Mission Systems, Taunton Site	http://gdmissionsystems.com, 400 John Quincy Adams Rd, Taunton, MA 02780-1069 United States, Tel: + 1 (508) 880-4000, Fax: + 1 (508) 880-4800, Email: info@gdc4s.com, Program Participant (Development)

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; rich.pettibone@forecast1.com

Technical Data

The Maneuver Control System is an automated tactical command, control, and communications (C3) system that provides a network of computer terminals to process combat information for battle staffs. The MCS provides automated assistance in the collection, storage, review, and display of information to support the U.S. Army commander's decision process. Both text and map graphics are provided to the user. The MCS enables staff to process and distribute situational awareness information, plus relevant estimates, plans, orders, and reports. The system is designed to operate with both existing and planned communications networks.

The MCS is an essential component of the Army Battle Command System and provides critical coordination among Battlefield Functional Areas, or BFAs, within each echelon (functions performed on the battlefield can be divided into five major categories: maneuver, fire support, air defense, combat service support, and intelligence and electronic warfare). The MCS provides the Common Operational Picture. The COP depicts information provided by all the BFAs and includes a situation map that uses Defense Mapping Agency data to display friendly and enemy unit locations, control measures (e.g., boundaries, phase lines), intelligence and electronic warfare graphics, fire support graphics, air corridor information, and air-defense weapons control information.

Program Review

The following reviews activity from the past couple of decades.

From FY01 to FY03, the MCS program performed Army Battle Command System engineering and integration, and furthered the development of MCS software.

MCS 6.4 initial operational test and evaluation (IOT&E) ran from FY04 through FY05. FY06 efforts focused on system engineering and development of the Joint Tactical COP Workstation.

From FY09 through FY10, the MCS program continued to develop software to enhance the interoperability, usability, and functionality of the system.

From FY09 to FY15, progress was made on developing Battle Command Common Services. According to the U.S. Army, BCCS provide the "consolidated server and services infrastructure for systems supporting Army Battle Command, from Battalion to Army Component Command."

Additionally, from FY13 through FY15, the MCS program pursued development of a collaborative Mission Command environment – called Mission Command Convergence – for the Army Battle Command System. Mission Command Convergence will enhance the ability of commanders and staff to effectively conduct collaborative mission planning and execution across a range of operations and spectrum of conflict.

During the FY16-FY17 timeframe, the MCS program developed and integrated a concept called Tactical Applications. Formal test (joint certification, interoperability, and information assurance) and informal testing, such as acceptance and risk reduction testing, was conducted in FY18.

The Maneuver Control System program transitioned into sustainment in FY19.

Funding

The Maneuver Control System programs transitioned into sustainment in FY19, with procurement ending in FY20.

U.S. PROCUREMENT FUNDING

	FY19 QTY	FY19 AMT	FY20 QTY	FY20 AMT	FY21 QTY	FY21 AMT	FY22 QTY	FY22 AMT
Procurement (U.S. Army)								
Maneuver Control System (9742BA9320)		29.1	13	0.26	-	0	-	0

All $ are in millions.

Source: U.S. Army FY20 procurement budget document

Note: FY20 base procurement funding in the amount of $0.260 million supports remaining software licenses and software assurance, and will also be used to address cybersecurity vulnerabilities. The MCS program of record transitioned to sustainment in FY19.

Contracts/Orders & Options

No contract information regarding the Maneuver Control System has been identified.

Timetable

Year	Major Development
1982	Contract awarded for the full MCS evolutionary development effort
1987	$87 million contract awarded for MCS systems engineering and integration
1989	Integration of common hardware into MCS initiated
1990	Light Infantry Division experiment initiated
1992	MCS Force development test and evaluation
FY95	Subsystem engineering, integration, and testing
FY98	MCS software development
FY01	MCS Versions 12.1, 12.2, and 12.3 delivered and fielded
FY04	MCS 6.4 IOT&E begun
FY05	IOT&E of MCS 6.4 completed
FY06	System engineering and development of Joint Tactical COP Workstation
FY07-FY14	Develop Command Post of the Future
FY09-FY15	Develop Battle Command Common Services
FY13-FY15	Develop Mission Command Convergence for the Army Battle Command System
FY16	Develop Command Web
FY17	Develop Tactical Public Key Infrastructure (PKI) for TacApps
FY18	Conduct formal and informal MCS testing
FY19	MCS program transitions into sustainment

Worldwide Distribution/Inventories

The MCS is a **United States Army** system.

Maneuver Control System (MCS)

Forecast Rationale

The U.S. Army's Maneuver Control System is an essential component of the service's Battle Command System, providing critical coordination among Battlefield Functional Areas. The BFAs that pertain to the MCS are Maneuver, Fire Support, Air Defense, Combat Service Support, and Intelligence/Electronic Warfare. A prime element of the MCS is a situation map – part of the Common Operation Picture, or COP – that displays, via use of data from the National Geospatial-Intelligence Agency's Defense Mapping Agency, the locations of friendly and enemy units; intelligence, electronic warfare and fire support graphics; and air corridor information.

To form the MCS, multiple systems are linked, or "networked," including laptop computers, software, and servers located within tactical operations centers and selected battle command platforms.

After spending over half a billion dollars and two decades on development and enhancements, the MCS is in operation and transitioned into a sustainment effort in FY19. Broadly stated, the need to provide U.S. Army commanders and their staffs with information that can be used to direct forces on the battlefield has been the driver of this system.

This report will be archived in 2021.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR PROCUREMENT FUNDING (in US$)

Designation or Program	High Confidence					Good Confidence			Speculative			
	Thru 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
MFR Varies												
MANEUVER CONTROL SYSTEM <> United States <> Army												
	1,385,940,000	260000	0	0	0	0	0	0	0	0	0	260,000
Total	1,385,940,000	260000	0	0	0	0	0	0	0	0	0	260,000