

# Mortar Systems

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



## MISSION

Provides enhanced lethality, accuracy, responsiveness, and crew survivability while reducing the logistics footprint.

## DESCRIPTION

The Mortar Fire Control System (MFCS)-equipped mortar systems provide organic, indirect fire support to the maneuver unit commander. Mortars are employed in light and heavy forces, with towed and tracked carrier versions.

The Army uses three variants of 120mm mortar systems, and all have been qualified and are being equipped with MFCS. All of the mortar systems fire a full family of ammunition including high-explosive, infrared and visible light illumination, smoke, and training. The M120 120mm Towed Mortar System is transported by the M1101 trailer and is emplaced and displaced using the M326 “quick stow” system. The mounted variants are the M121 120mm mortar, used on the M1064A3 Mortar Carrier (M113 variant), and the 120mm Recoiling Mortar System, used on the M1129 Stryker Mortar Carrier.

Lightweight variants of the M252 81mm Mortar System and M224 60mm Mortar System have been qualified and are in production. Both systems provide high-rate-of-fire capability and are man-portable.

The M95/M96 Mortar Fire Control System–Mounted (MFCS-M), used on the M1064A3 and M1129, and the M150/M151 Mortar Fire Control System–Dismounted (MFCS-D), used with the M120, combine a fire control computer with an inertial navigation and pointing system, allowing crews to fire in under a minute, greatly improving mortar lethality, accuracy and crew survivability.

The M32 Lightweight Handheld Mortar Ballistic Computer (LHMBC) has a tactical modem and embedded global positioning system, allowing mortar crews to send and receive digital call-for-fire messages, calculate ballistic solutions, and navigate.

## SYSTEM INTERDEPENDENCIES

### In this Publication

Advanced Field Artillery Tactical Data System (AFATDS)

## Other Major Interdependencies

M95/M96 MFCS-M and M150/M151 MFCS-D

## PROGRAM STATUS

- **1QFY09–1QFY10:** MFCS fielded to two Heavy Brigade Combat Teams (HBCTs) and nine HBCTs reset
- **1QFY09–1QFY10:** LHMBC fielded to seven Infantry BCTs, four Special Forces groups, and 16 (IBCTs) reset
- **1QFY09–1QFY10:** Mortar weapons fielded to numerous IBCT, HBCT, Stryker BCT, and Special Forces groups
- **1QFY09–1QFY10:** Continue production and fielding of 60mm, 81mm, and 120mm mortar systems
- **2QFY09–1QFY10:** Production and initial fielding of M150/M151 MFCS-D
- **3QFY09:** Full materiel release (FMR) of MFCS-D
- **4QFY09:** FMR of M326 “quick stow” system

## PROJECTED ACTIVITIES

- **2QFY09–4QFY11:** Complete initial fielding of MFCS-M
- **1QFY10–4QFY12:** Continue fielding of M326 “quick stow” system
- **2QFY12:** Complete production and fielding of M32 LHMBCs

## ACQUISITION PHASE

Technology Development

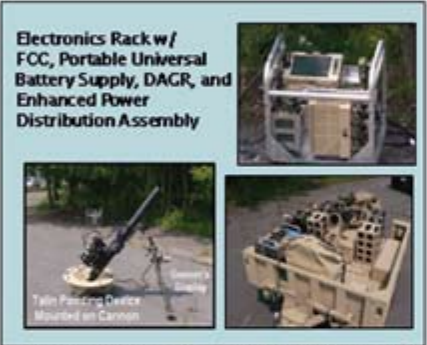
Engineering & Manufacturing Development

Production & Deployment

Operations & Support



**Mortar Fire Control System (MFCS-Mounted)**



**Motor Fire Control System (MFCS-Dismounted)**



**Mounted Weapon System Production**



**M1064A3 Mortar Carrier**

**Mortar Systems**

**FOREIGN MILITARY SALES**

Afghanistan, Australia

**CONTRACTORS**

**60mm and 81mm Mortar Bipod**

**Production:**

MaTech (Salisbury, MD)

**60mm and 81mm Baseplate**

**Production:**

AMT (Fairfield, NJ)

**MFCS-D and MFCS-M production, fielding, and installation:**

Elbit Systems of America (Fort Worth, TX)

**M32 LHMBC (R-PDA):**

General Dynamics C4 Systems, Inc. (Taunton, MA)

**120mm, 81mm, and 60mm cannons, 120mm baseplates:**

Watervliet Arsenal (Watervliet, NY)

Mortar	Range (meters)	Weight (pounds)	Rate of Fire (rounds per minute)	Crew	Ammunition
M120/ M121 120mm	7240	319	16 for the first minute 4 sustained	4 M121 carrier-mounted 5 M120 towed	High explosive (HE) (M934A1), white phosphorus smoke (M929), illumination (visible light, M930 and infrared [IR], M983), M933A1 (operational training), and full-range practice (FRP) (M931)
M252 81mm	5935	90	30 first two minutes 15 sustained	3	HE (M821A2), red phosphorus smoke (M819), illumination (visible light, M853A1 and IR, M816), M889A2 (operational training), and FRP (M879)
M224 60mm	3489	46.5 (conventional), 18.0 (handheld)	30 first four minutes 20 sustained	3	HE (M720A1), WP smoke (M722A1), illumination (visible light, M721 and IR, M767), M768 (operational training), and FRP (M769)

