

Mortar Systems

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



MISSION

To enhance mission effectiveness of the maneuver unit commander by providing organic indirect fire support.

DESCRIPTION

The Army uses three variants of 120mm mortar systems. All are smooth-bore, muzzle-loaded weapons in mounted or dismounted configurations. The M120 120mm Towed Mortar System mounts on 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. On the M224 mortar, cartridges can be drop-fired using the standard M7 baseplate or hand-held and trigger-fired using a smaller assault M8 baseplate.

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.

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

M95/M96 MFCS–M and M150/M151 MFCS–D: Army Field Artillery Tactical Data System

PROGRAM STATUS

- **1QFY09–1QFY10:** MFCS fielded to two heavy Brigade Combat Teams (BCTs) 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, SBCT and Special Forces groups
- **3QFY09:** Full materiel release MCFS-D

PROJECTED ACTIVITIES

- **4QFY09:** Full materiel release of M326 “quick stow” system
- **1QFY09–1QFY10:** Continue production and fielding of 60mm, 81mm, and 120mm mortar systems
- **2QFY09–1QFY10:** Production and initial fielding of M150/M151 MFCS–D
- **2QFY09–4QFY11:** Complete initial fielding of MFCS–M
- **1QFY10:** Initiate fielding of M326
- **2QFY12:** Complete production and fielding of M32 LHMBC

ACQUISITION PHASE

Technology Development

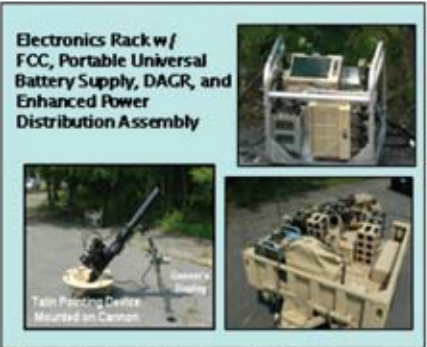
Engineering & Manufacturing Development

Production & Deployment

Operations & Support



Mortar Fire Control System (MFCS-Mounted)



Mortar Fire Control System (MFCS-Dismounted)



Lightweight Handheld Mortar Ballistic Computer (LHMBC)



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 (Ft. Worth, TX)

M32 LHMBC (R-PDA):

General Dynamics C4 Systems

(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), 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), 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), and FRP (M769)

