

Mortar Systems

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

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



Description & Specifications

The U.S. Army uses three variants of 120mm mortar systems. All are smoothbore, muzzle-loaded weapons in mounted/dismounted configurations. The M120 120mm Towed Mortar System (TMS) mounts on the M1101 Trailer and is emplaced/displaced using a “Quick Stow” system. The mounted variants are the M121 120mm Mortar and the 120mm Recoiling Mortar System.

The **M252 81mm Mortar System** features a high rate of fire, extended range, and improved characteristics.

The **M224 60mm Mortar System** is a lightweight, man-portable, mortar with improved rate-of-fire capabilities. It can be drop-fired from the standard baseplate or handheld and trigger-fired.

The **M95/M96 Mortar Fire Control System (MFCS)** combines a fire control computer with an inertial navigation and pointing system,

allowing crews to fire in under a minute, greatly improving mortar lethality.

The **Lightweight 81mm Mortar Program’s** goal is to develop a mortar system 30 to 40 percent lighter than the current M252 81mm system.

The **M32 Lightweight Handheld Mortar Ballistic Computer (LHMBC)** has a tactical modem and embedded GPS so mortar crews can send and receive digital calls for fire messages, calculate ballistic solutions, and navigate. It can be fielded to 60mm, 81mm, and 120mm towed units as an M23 replacement.

Program Status

- **3QFY06:** Initial production of 134 120mm mortar systems completed
- **3QFY06–1QFY07:** 120mm mortar systems fielded to 12+ Infantry Brigade Combat Teams (BCTs)
- **3QFY06–1QFY07:** MFCS fielded to four Heavy BCTs and two Stryker BCTs

- **3QFY06–1QFY07:** LHMBC fielded to nine Infantry BCTs

Projected Activities

- **3QFY07:** Initiate fielding of 120mm Mortar Quick-Stow Device
- **2QFY07–4QFY08:** Complete production and fielding of M95/M96 MFCS and M32 LHMBC
- **2QFY07–4QFY08:** Complete production and fielding of 60mm and 120mm weapon
- **2QFY09:** Initiate fielding of Dismounted 120mm MFCS

ACQUISITION PHASE

Concept & Technology Development

System Development & Demonstration

Production & Deployment

Operations & Support

Mortar Systems



Lightweight Handheld Mortar Ballistic Computer (LHMCB)



Operation Enduring Freedom



M1064A3 Mortar Carrier



SBCT Mortar Carrier



FCS NLOS Mortar Carrier



| Mortar | Range (meters) | Weight (pounds) | Rate of Fire (rounds per minute) | Crew | Ammunition |
|------------------|----------------|---|--|--|---|
| 120mm | 7240 | 319 | 16 for the first minute 4 sustained | 4 - M121 carrier-mounted 5 - M120 towed | High explosive (HE) (M934A1), White Phosphorous (WP) 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 Phosphorous 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) |

FOREIGN MILITARY SALES

None

CONTRACTORS

Mortar weapon system production, staging, and fielding:

General Dynamics Ordnance and Tactical Systems (St. Petersburg, FL)

M95/M96 MFCS hardware integration:

Honeywell Aerospace Electronics (Albuquerque, NM)

M32 LHMCB (R-PDA):

(Tallahassee, FL)

