Mortar Systems

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

DESCRIPTION
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 and M224 60mm Mortar System have been qualified and are in production/fielding. 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, M150/M151 MFCS-D

PROGRAM STATUS
1QFY11-4QFY11: MFCS-M fielded to one Heavy Brigade Combat Team (HBCT), one HBCT Reset, and two Stryker Brigade Combat Team (SBCT) Resets
1QFY11-4QFY11: MFCS-D fielded to seven Infantry Combat Teams (IBCTs)
1QFY11-4QFY11: LHMBC fielded to five IBCTs, one Special Forces Group (SFG), one HBCT Reset, and twelve IBCT Resets
1QFY11-4QFY11: Mortar Weapon Systems (60mm, 81mm, 120mm) fielded to numerous IBCTs, HBCTs, SBCTs and Special Forces groups
1QFY11-4QFY11: Mortar Stowage Kits (MSK) fielded to seven IBCTs.
3QFY11: 60MM Lightweight Mortar (M224A1) fielded to one SFG, First Unit Equipped (FUE)
1QFY11-4QFY11: Continue production and fielding of 60mm, 81mm, and 120mm mortar weapon systems
1QFY12-4QFY12: Continue production and fielding of MSKs, MFCS-D and LHMBCs

PROJECTED ACTIVITIES
1QFY12: Initial Fielding of the 81mm Lightweight Mortar (M252A1)
1QFY12-4QFY12: Continue production and fielding of 60mm and 81mm lightweight mortar systems
1QFY12-4QFY12: Continue production and fielding of MSKs, MFCS-D, and LHMBCs
1QFY12-4QFY12: Complete fielding of MFCS-M
**Mortar Systems**

**FOREIGN MILITARY SALES**  
Afghanistan, Australia

**CONTRACTORS**  

<table>
<thead>
<tr>
<th>Mortar</th>
<th>Range (meters)</th>
<th>Weight (pounds)</th>
<th>Rate of Fire (rounds per minute)</th>
<th>Crew</th>
<th>Ammunition</th>
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<tbody>
<tr>
<td>M120/121</td>
<td>7,240</td>
<td>319</td>
<td>16 for the first minute 4 sustained</td>
<td>4 M121 carrier-mounted 5 M120 towed</td>
<td>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)</td>
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<tr>
<td>M252 81mm</td>
<td>5,935</td>
<td>90</td>
<td>30 first two minutes 15 sustained</td>
<td>3</td>
<td>HE (M821A2), red phosphorus smoke (M819), illumination (visible light, M853A1 and IR, M816), M889A2 (operational training), and FRP (M879)</td>
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<tr>
<td>M224 60mm</td>
<td>3,489</td>
<td>46.5 (conventional), 18.0 (handheld)</td>
<td>30 first four minutes 20 sustained</td>
<td>3</td>
<td>HE (M720A1), WP smoke (M722A1), illumination (visible light, M721 and IR, M767), M768 (operational training), and FRP (M769)</td>
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**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 LHMBM (R-PDA):**  
General Dynamics C4 Systems Inc. (Taunton, MA)

**120mm, 81mm, and 60mm Cannons and 120mm Baseplates:**  
Watervliet Arsenal (Watervliet, NY)