Mortar Systems

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.

All three Army variants of 120mm mortar systems, 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 Mortar Stowage Kit (MSK). The mounted variants are the M121 120mm mortar, used on the M395/396 81mm 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 MFCS-M, used on the M1066A3 and M1129, and the M150/M151 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, improving lethality, accuracy and crew survivability.

The XM395 Accelerated Precision Mortar Initiative (APMI) achieved an Urgent Materiel Release (UMR) in March 2011 to field to eight Infantry Brigade Combat Teams (IBCTs) in Operation Enduring Freedom based on an Operational Need Statement (ONS). UMR for an additional Stryker BCT (SBCT) was approved in May 2012. The Army fully funded the ONS requirement of 5,480 cartridges and associated fuze setting systems.

In 2011, Training and Doctrine Command and Army Test and Evaluation Command completed an assessment, with a recommendation for this capability to proceed to the Capabilities Development for Rapid Transition process. Any follow-on program of record will include full and open competition.

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
- 2QFY12-4QFY12: MFCS-M fielded to one Stryker Brigade Combat Team (SBCT), one Heavy Brigade Combat Team (HBCT) Reset, and one SBCT Reset
- 1QFY12-4QFY12: MFCS-D fielded to ten IBCTs and one Infantry Battalion
- 1QFY12-4QFY12: LHMBC fielded to two SBCTs, one SFG, and four IBCT Resets

PROJECTED ACTIVITIES
- 1QFY13-4QFY13: Continue production of 81mm mortar systems
- 1QFY13-4QFY13: Continue fielding of the 60mm Lightweight Mortar
- 2QFY13: Complete production of 60mm lightweight mortar systems
- 3QFY13: Initial Fielding of the 81mm Lightweight Mortar (M252A1)
- 1QFY13-4QFY13: Continue production and fielding of MFCS-D
- 3QFY13: Complete production of MSK

ACQUISITION PHASE
Technology Development
Engineering & Manufacturing Development
Production & Deployment
Operations & Support
**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 LHMB (R-PDA):
General Dynamics C4 Systems, Inc.
(Taunton, MA)

120mm, 81mm, and 60mm cannons, 120mm baseplates:
Watervliet Arsenal (Watervliet, NY)

---

<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>
</tr>
</thead>
<tbody>
<tr>
<td>M120/ M121 120mm</td>
<td>7240</td>
<td>319</td>
<td>16 for the first minute, 4 sustained</td>
<td>4 M121 carrier-mounted, 5 M120 towed</td>
<td>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>
</tr>
<tr>
<td>M252 81mm</td>
<td>5935</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), M89A2 (operational training), and FRP (M879)</td>
</tr>
<tr>
<td>M224 60mm</td>
<td>3489</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>
</tr>
</tbody>
</table>