

Lightweight 155mm Howitzer (LW155)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



MISSION

To provide direct, reinforcing, and general support fires to maneuver forces as well as direct support artillery for Stryker Brigade Combat Teams.

DESCRIPTION

The M777A2 Lightweight 155mm Howitzer (LW155) will replace all M198 155mm howitzers in operation with the Marine Corps and Army. The extensive use of titanium in all its major structures makes it 7,000 pounds lighter than its predecessor, the M198, with no sacrifice in range, stability, accuracy, or durability. Two M777A2s can be transported by a C-130, and it can be dropped by parachute. The M777A2's lighter weight, independent suspension, smaller footprint, and lower profile increase strategic deployability, and tactical mobility. The system uses a primer feed mechanism, projectile loader-assist, advanced digital fire control system, and other improvements to enhance reliability and accuracy, and significantly increase system survivability.

The M777A2 is jointly managed; the Marine Corps led the development of the howitzer and the Army led the development of Towed Artillery Digitization (TAD), the digital fire control system.

Software upgrades incorporating the Enhanced Portable Inductive Artillery Fuze Setter and the Excalibur Platform Integration Kit hardware gives the M777A2 the capability to program and fire the Excalibur precision-guided munition. Specifications for the M777A2 Excalibur-compatible howitzer are:

Weight: Less than 10,000 pounds

Emplace: Less than three minutes

Displace: Two to three minutes

Maximum range: 30 kilometer (rocket assisted round)

Rate-of-fire: Four to eight rounds per minute maximum; two rounds per minute sustained

Ground mobility: Family of Medium Tactical Vehicles (FMTV), Medium Tactical Vehicle Replacement, five-ton trucks

Air mobility: Two per C-130; six per C-17; 12 per C-5; CH-53D/E; CH-47D; MV-22

155mm compatibility: all fielded and developmental NATO munitions

Digital fire control: self-locating and pointing; digital and voice communications; self-contained power supply

SYSTEM INTERDEPENDENCIES

Army Software Blocking, FMTV Joint Light Tactical Vehicle Prime Movers, Excalibur and Precision Guidance Kit munitions, Single Channel Ground to Air Radio Station/Defense Advanced Global Positioning System Receiver/Advanced Field Artillery Tactical Data System

PROGRAM STATUS

- **Current:** The M777A2 is in full-rate production with 572 systems having been delivered to the Army and Marine Corps (354/218 respectively)
- **Current:** Seven Stryker Brigades have been fielded and two Fires Brigades
- **Current:** Both the Army and Marine Corps have deployed the weapon to Iraq and Afghanistan where it is currently engaged in combat operations.

PROJECTED ACTIVITIES

- **FY10:** Award Performance Based Logistics Contract

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

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FOREIGN MILITARY SALES

Canada and Australia

CONTRACTORS

BAE Systems (United Kingdom;
Hattiesburg, MS)

Castings:

Precision Castparts Corp. (Portland, OR)
Howmet Castings (Whitehall, MI)

Cannon Assembly:

Watervliet Arsenal (Watervliet, NY)

Howitzer body:

Triumph Systems Los Angeles
(Chatsworth, CA)

