



155MM MOBILE ARTILLERY CONCEPT

HYBRID SOFT RECOIL HOWITZER & MOBILE AMMUNITION SUPPORT

Directly supports the mission of field artillery to
destroy, neutralize or suppress the enemy



Re-purposes existing cannons, fire control equipment, basic issue items, and vehicles to deliver enhanced firing capabilities, mobility, and reduced crew vulnerability



By leveraging fielded cannons, existing ballistics kernel and reusing the fielded prime mover, the **“time to field”** is significantly improved



Reduced testing, parts commonality, reduced maintenance needs, and limited training requirements result in an **affordable** and **sustainable** solution, backed by AM General's global lifecycle support

SPECIFICATIONS

Weapon System: 155 mm Mobile Hybrid Soft Recoil Howitzer

Caliber: 155 mm (6.10 in.)

Length: 25 ft. (7.6 m)

Width: 8 ft. (2.44 m)

Height: 11 ft 6 in. (3.5 m)

Total System Weight w/weapon: 29,620 lb. (no ammunition), stabilizers

M776 Cannon w/Breech: 3,700 lb.

Cradle/Recoil Mechanism: 1,170 lb.

Total Tipping Parts: 4,870 lb.

Top Carriage Group: 1,500 lb.

Total w/o Fire Control: 6,370 lb.

M171A1 Telescope Mount: 75 lb.

M17A1 Fire Control Quadrant: 8.5 lb.

M137A2 Panoramic Telescope: 24 lb.

MG9000 Digital Fire Control System: 13 lb.

Crew Requirements: 5-7 personnel (extreme conditions: 5 personnel)

Cannon: 155 mm, M776

Projectile Travel: 200 in.

Caliber: 39

No. of Grooves: 48

Muzzle Brake Double Baffle: 250 lb.

Breech Block: Screw Block

Recoil Mechanism: Hydro-Pneumatic, Soft Recoil

Carriage: Aluminum Alloy

Traverse limits: 6,400 mils (360°)

Elevating limits: 89 to 1,173 mils (-5° to +72°)

Temperature Range

Lower Limit -40°F (-40°C) Upper Limit +125°F (+52°C)

FIRE CONTROL

OPTICAL

M1372A Panoramic Telescope
M171 Telescope Mount

DIGITAL

Pointing and Aiming System;
Inertial Navigation System; GPS
Antenna; Muzzle Velocity Radar
System; Direct Fire Sight with Laser
Range Finder; Gunners Display
Unit

AMMUNITION

Uses all ammunition currently fired by M776 Cannon

RATE OF FIRE

Maximum: 5 rounds per minute
Sustained: 2 rounds per minute

MAXIMUM RANGE

Charge 5: 15.5 mi. (25 km)
RAP: 18.75 miles (30 km)



THE ADVANTAGE OVER TOWED HOWITZERS

MOBILITY

Off-road mobility matches maneuver units, significantly increasing artillery batteries' emplacement, shooting, displacement, and maneuverability during responsive firing.

SURVIVABILITY

"Shoot and scoot" capability rapidly displaces firing batteries and platoons after firing, boosting crew survival against enemy detection, counterfire, and attack drones.

LETHALITY

The advanced digital fire control system with improved navigation, integrated muzzle velocity radar, and enhanced targeting delivers precise fires faster than traditional towed howitzers, and reaches targets up to 18.75 miles away.

MAINTAINABILITY

The hybrid hydro-pneumatic recoil system greatly reduces components compared to traditional towed cannons (250 vs. 2,500). With 90% fewer components, maintenance is simplified, and low-level repairs are possible. The elevation and direction system features a simplified design, enhancing reliability.

REDUCED MANPOWER

Crewed by 5-7 personnel based on mission needs, the system reduces the manpower required for emplacing, firing, and displacing a towed howitzer. Additional howitzers can be deployed without raising manpower, further enhancing lethality.