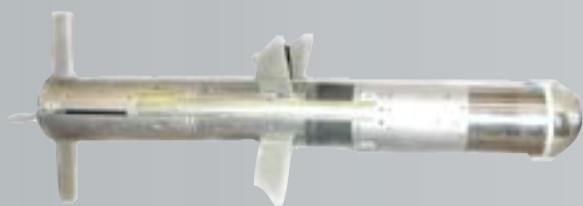


# Tube-Launched, Optically-Tracked, Wire-Guided (TOW) Missiles

Provides long-range, heavy antitank and precision assault fire capabilities to the Army and Marine forces.



## DESCRIPTION AND SPECIFICATIONS

TOW (Tube-Launched, Optically-Tracked, Wire-Guided) is a heavy anti-tank/precision assault weapon system, consisting of a launcher and a missile. The missile is 6 inches in diameter (encased, 8.6 inches), and 49 inches long. The gunner defines the aim point by maintaining the sight cross hairs on the target. The launcher automatically steers the missile along the line-of-sight toward the aim point via a pair of control wires, which physically link the missile and the launcher. The missile impact is at the aim point.

TOW missiles are employed on the High Mobility Multipurpose Wheeled Vehicle (HMMWV)-mounted Improved Target Acquisition System (ITAS), HMMWV-mounted M220A4 launcher (TOW 2), Stryker Anti-Tank Guided Missile Vehicles, and Bradley Fighting Vehicle Systems (A2/A20DS/A20IF/A3). TOW missiles are also employed on the Marine HMMWV-mounted M220A4 launcher (TOW 2), LAV-ATGM Vehicle, and AH1W Cobra attack helicopter. TOW is also employed by allied nations from a variety of ground and airborne platforms.

The TOW 2B Aero is the most modern and capable missile in the TOW family with an extended maximum range to 4,500 meters. This is accomplished with an increase of control wire and by affixing an aerodynamic nose to the missile. The TOW 2B Aero has an advanced counter active protection system capability. It defeats all current and projected threat armor systems. The TOW 2B Aero flies over the target (offset above the gunner's aim point) and uses a laser profilometer and magnetic sensor to detect and fire two downward-directed, explosively formed penetrator warheads into the target. The TOW 2B Aero's configuration weight is 49.8 pounds (encased, 65 pounds).

The TOW Bunker Buster is optimized for performance against urban structures, earthen bunkers, field fortifications, and light-skinned Armor threats. It has a 6.25 pound, 6-inch diameter

high-explosive, bulk-charge warhead, and its missile weighs 45.2 pounds. The TOW BB has an impact sensor (crush switch) located in the main-charge ogive and a pyrotechnic detonation delay to enhance warhead effectiveness. The PBXN-109 explosive is housed in a thick casing for maximum performance. The TOW BB can produce a 21-24 inch diameter hole in an 8-inch thick, double-reinforced concrete wall at a range of 65 to 3,750 meters.

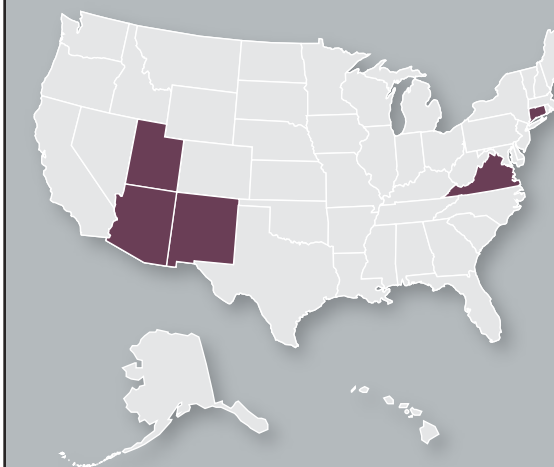
## PROGRAM STATUS

TOW 2B Aero

- **4QFY97** Last U.S. TOW 2B missile produced
- **1QFY04** Qualification testing complete
- **2QFY04** TOW 2B Aero multi-year production contract awarded for FY 04-06

## PROJECTED ACTIVITIES

- TOW 2B U.S. production will continue



## CONTRACTORS

### TOW 2B Aero

**Prime:** Raytheon (Tucson, AZ)

**Control Actuator, Shutter Actuator:**

Moog (Salt Lake City, UT)

**Warheads:** Aerojet General (Socorro, NM)

**Gyroscope:** Condor Pacific (Cheshire, CT)

**Sensor:** Thales (Basingstoke, UK)

**Launch Motor:** ATK (Radford, VA)

### TOW BB

U.S. Army development and production

## INVESTMENT COMPONENT

Modernization

## ACQUISITION PHASE

- Production and Deployment

Tube-Launched, Optically-Tracked, Wire-Guided (TOW) Missiles