

# Maverick Propulsion System and Heavy Warhead



A versatile air-to-ground missile effective against bridges, bunkers, ships, and airports.

## Overview

The Maverick weapon system is a versatile air-to-ground standoff missile designed to defeat hardened targets such as bunkers, bridges, radar or missile sites, and ships. The Maverick is a fire-and-forget missile that improves standoff capability and pilot/aircraft survivability. The missile can be equipped with one of two different warheads designated as light or heavy. The light warhead is the older version shaped-charge configuration used with a larger variety of aircraft. The Maverick can be launched from many aircraft, including F-16s, F-18s, F-111s, A-7s, AV-8Bs, and the A-10.

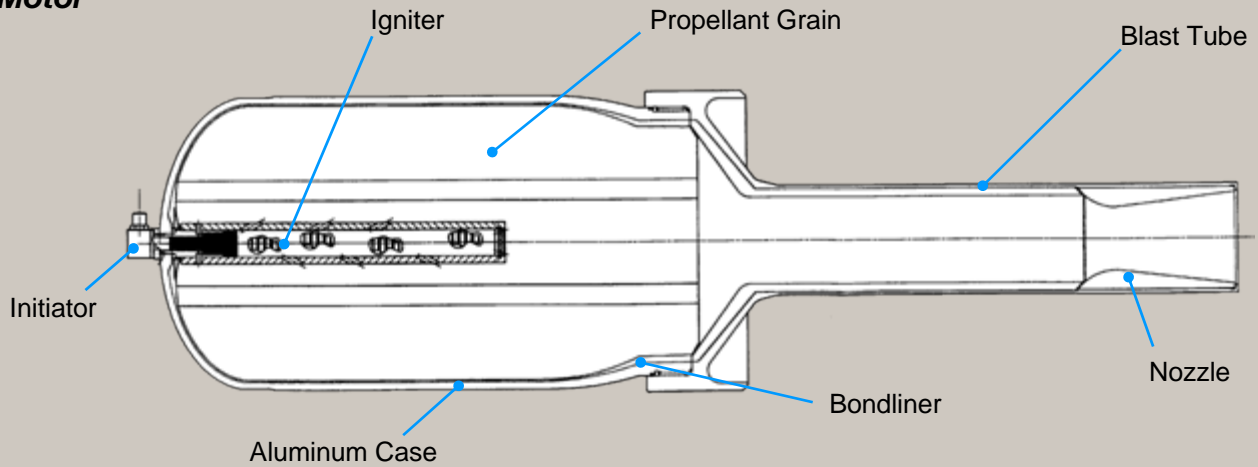
## Application

The Maverick solid-propellant rocket motor is a single boost/sustain thrust, reduced smoke propulsion system for the Maverick missile system. The Maverick destroys enemy targets such as bridges, bunkers, ships, and airports through the blast/penetrating heavy warhead.

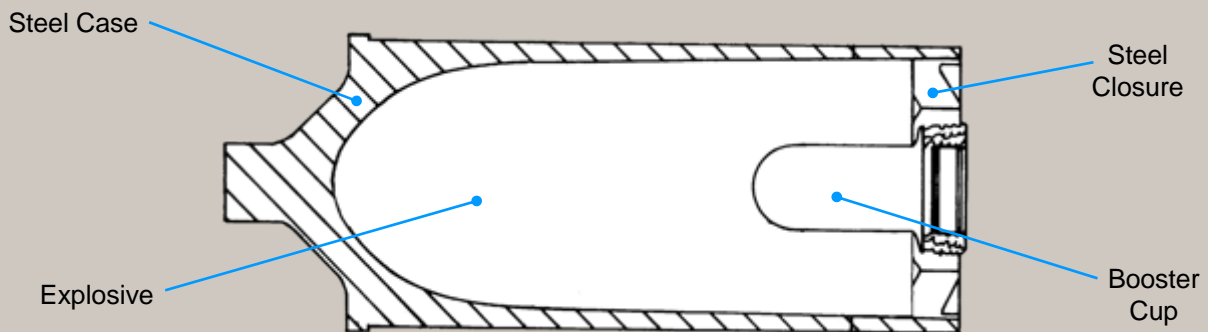
## Development

ATK is the sole supplier for the Maverick rocket motor and heavy warhead. ATK has manufactured over 15,000 Maverick heavy warheads since the early 1980s and is currently under contract to manufacture the reduced smoke rocket motor under a form, fit, and function contract with the Raytheon Missile Systems.

## Rocket Motor



## Warhead



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### ROCKET MOTOR FEATURES

- Single boost/sustain thrust propellant grain design
- Reduced smoke propellant
- Case bonded grain design maximizes propellant loading
- Aluminum forging aft closure/blast tube

### WARHEAD FEATURES

- High-strength steel case for penetration
- Proven PBX(AF)-108 explosive

### ROCKET MOTOR PERFORMANCE

- Temperature Limits:
  - Operating: -75°F to +170°F
  - Storage: -75°F to +170°F
- Service life: 15+ years

### WARHEAD PERFORMANCE

- Temperature Limits:
  - Operating: -80°F to +160°F
  - Storage: -80°F to +160°F

### ROCKET MOTOR TECHNICAL DATA

- Weight: 104.0 lbs
- Length: 40.1 in. (w/ blast tube)
- Diameter: 11.0 in.
- Case: 7075-T6 aluminum
- Insulator: HTPB liner
- Blast tube: 7075-T73 aluminum
- Propellant: reduced smoke HTPB
- Exit Cone: Glass phenolic

### WARHEAD TECHNICAL DATA

- Weight: 300.0 lbs
- Length: 28.6 in.
- Diameter: 11.0 in.
- Use: Penetrating/blast
- Case: 4340 steel
- Explosive: PBX(AF)-108

For information contact: ATK Tactical Propulsion & Controls  
Allegany Ballistics Laboratory  
210 State Route 956  
Rocket Center, WV 26726  
Tel: 304/726-5000 Fax: 304/726-5183

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