

Provides the primary artillery support for armored divisions, mechanized infantry divisions, and heavy brigade combat teams.



## DESCRIPTION AND SPECIFICATIONS

The M109A6 (Paladin) 155mm howitzer is the most technologically advanced self-propelled cannon system in the Army. The "A6" designation identifies several improvements to the standard model.

The fire control system is fully automated, providing accurate position location, azimuth reference, and on-board ballistic solutions of fire missions. The howitzer has a servo-driven, computer-controlled gun drive with manual backup. Paladin uses state-of-the-art components to achieve dramatic improvements in the following:

- **Survivability:** "Shoot and scoot" tactics; improved ballistic and nuclear, biological, and chemical protection
- **Responsive fires:** Capable of firing within 45 seconds from a complete stop with on-board communications, remote travel lock, and automated cannon slew capability
- **Accurate fires:** On-board position navigator and technical fire control
- **Extended range:** 30 kilometers with high explosive, rocket-assisted projectile and M203 propellant
- **Increased reliability:** Improved engine, track, and diagnostics

Upgrades include Global Positioning System (GPS)-aided self-location; M93 muzzle velocity system; and commercial off-the-shelf-based computer processor

Other Paladin specifications include the following:

**Max target range:** 30000 meters (rocket assisted), 22000 meters (unassisted)

**Min target range:** 4000 meters

**Max rate of fire (ROF):** Four rounds per minute for three minutes

**Sustained ROF:** One round per minute (dependent on thermal warning device)

**Max speed:** 38 miles per hour (highway)

**Cruising range:** 214 miles, or 220 miles in the accompanying M992 Field Artillery Ammunition Supply Vehicle (FAASV)

**Crew size:** Four, or five in the accompanying FAASV

**Weight empty (approx.):** 56,400 pounds

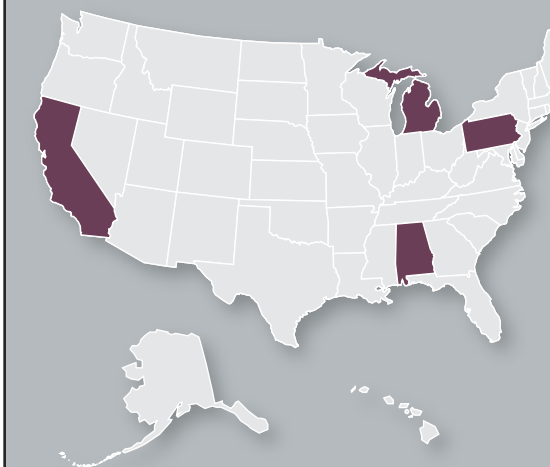
**Weight combat loaded (approx.):** 63,615 pounds

## PROGRAM STATUS

- **4QFY04** Began field retrofits of Modular Artillery Charge System (MACS) storage racks
- **In Progress** FAASV recapitalization line

## PROJECTED ACTIVITIES

- **Develop and field** Paladin Digital Fire Control System (PDFCS) software improvements
- **2QFY05** Fielding of 18 Paladins equipped with PDFCS to 1-109 PAANG
- **FY05** Begin field retrofits of PDFCS, continue MACS storage racks retrofits and continue FAASV recapitalization
- **FY05** Development and integration of Excalibur capabilities in Paladin fire control software



## CONTRACTORS

United Defense (York, PA)  
 Northrup Grumman (Carson, CA)  
 Anniston Army Depot (Anniston, AL)  
 Green Metal Products (Clinton Twp, MI)  
 Camber (Huntsville, AL)

## INVESTMENT COMPONENT

Maintenance

## ACQUISITION PHASE

- Production and Deployment
- Operations and Support