M109 Family of Vehicles (FOV) (Paladin/FAASV, PIM SPH/CAT)

MISSION
Provides the primary indirect fire support for Heavy Brigade Combat Teams (HBCTs), armored and mechanized infantry divisions as well as an armored ammunition resupply vehicle.

DESCRIPTION
The M109A6 (Paladin) 155mm Howitzer is the most technologically advanced self-propelled cannon system in the Army. The Field Artillery Ammunition Support Vehicle (FAASV) provides an armored ammunition resupply vehicle in support of the Paladin.

The Paladin Integrated Management (PIM) program addresses concerns about obsolescence, space, weight, and power and ensures sustainment of the Paladin and FAASV fleet through 2050. The PIM, scheduled to be fielded in January 2017, consists of the Self-Propelled Howitzer (SPH) and the Carrier, Ammunition, Tracked (CAT). PIM provides indirect fire support for full spectrum operations and can support HBCTs, infantry and Stryker BCTs. PIM improves: Survivability with Increased Force Protection and Survivability to enable “off-Forward Operating Base” operations; responsive fires by firing within 45 seconds of a complete stop with on-board communications, remote travel lock, automated cannon slew capability, and pivot steer technology; increased commonality and reliability by using Bradley powertrain, track, and suspension components; electric drive technology with electric elevation/traverse drives gun system and an electric rammer; and growth potential with future requirements and technology insertions that provide growth for future network requirements and increased power with a 600 volt system.

Other specifications:
- **Crew:** Paladin and SPH = four; FAASV and CAT = four
- **Combat loaded weight:** Paladin = 34.25 tons; FAASV = 29.26 tons, SPH = 39 tons, CAT = 36 tons
- **Paladin on-board ammo:** 39 rounds, SPH: 42
- **FAASV on-board ammo:** 95 rounds, CAT: 95
- **Rates of fire:** Four rounds per minute for first three minutes maximum; one round per minute sustained
- **Maximum range:** high-explosive/Rocket Assisted Projectile, 22/30 kilometers
- **Cruising range:** Paladin and SPH = 180 miles; FAASV and CAT = 180 miles

**Fire Support Network:** Paladin Digital Fire Control System software supports Fire Support Network

**SYSTEM INTERDEPENDENCIES**
Advanced Field Artillery Tactical Data System (AFATDS), Excalibur (XM982), Force XXI Battle Command Brigade and Below (FBCB2), Artillery Ammunition, Precision Guidance Kit (PGK)

**PROGRAM STATUS**
- **2QFY12:** Capability Production Document JROC Approved
- **2QFY12:** Defense Acquisition Board approval for award of Comprehensive Contract Modification
- **2QFY12:** Completed Phase I Government Developmental Test (DT)
- **2QFY12:** PIM Acquisition Program Baseline approved
- **3QFY12:** Delta Critical Design Review
- **3QFY12:** Integrated Baseline Review
- **3QFY12:** Program Support Review
- **3QFY12:** Logistics Demonstration began
- **4QFY12-3QFY14:** Phase II Government DT

**PROJECTED ACTIVITIES**
- **3QFY11-3QFY14:** Developmental testing
- **3QFY13:** Milestone C
FOREIGN MILITARY SALES
None

CONTRACTORS
PIM Development:
BAE Systems (York, PA)
PIM SW Support/FATB/Matrix Support:
Armaments R&D Center (Picatinny Arsenal, NJ)
Program Management Support:
Tank-Automotive and Armaments Command (TACOM) (Warren, MI)
Testing:
Yuma Test Center/Proving Ground (Yuma, AZ)
Aberdeen Test Center/Proving Ground (Aberdeen, MD)