



Long reach

The M107 had a longer range than all other land artillery.

Consistent loader

A new hydraulic loader-rammer system reduced barrel wear by seating rounds to match the tube's rifling grooves.

Transformer

The M107's 175 mm gun could be easily swapped with an 8-inch howitzer to become the M110 weapon.

Stable platform

Rear spade and the chassis's hydraulic suspension absorbed recoil forces.

Parts to spare

The M107's chassis used the same drive train as the M110 howitzer and the M578 light recovery vehicle, which was equipped with a crane to pick up vehicles damaged in battle.

M107 SELF-PROPELLED GUN

By Carl O. Schuster

On Feb. 22, 1967, the U.S. Army's 2nd Battalion, 94th Field Artillery Regiment, fired its M107 175 mm guns across the Demilitarized Zone and into North Vietnam's anti-aircraft artillery sites. The shelling, in response to an attack on a U.S. Air Force spotter aircraft, marked the first time U.S. ground forces aimed at targets inside North Vietnam. The battalion's M107s were the war's longest-range artillery pieces used by ground forces, exceeded only by the Navy's 8- and 16-inch guns.

The M107, which entered production in 1963, arose from the desire for a family of artillery weapons that were self-propelled (drivable), transportable by air and based on the same chassis. The result was two systems: the M107 gun and M110 howitzer, with common features including the chassis, diesel engine propulsion, and elevation, train and loading mechanisms. They differed primarily in armament: The M107 had a 175 mm weapon, and the M110 had a 203 mm weapon, also known as the "8-inch howitzer."

The two weapons could be swapped between chassis in less than 30 minutes. Their recoil and hydraulically controlled chassis bracing system made them stable firing platforms. Both used interrupted stepped-thread breech blocks and fired separate-loading ammunition. But the M107 suffered from high barrel wear and rapid bore erosion that affected accuracy at ranges beyond 17 miles and initially limited the barrel life to 300 rounds. By 1970 improved materials extended the life to 800-1,000 rounds.

The M107 was the only ground artillery piece that could knock out North Vietnamese M46 130 mm towed guns north of the DMZ and in Laos and Cambodia. It was the weapon of choice for firing on the Ho Chi Minh Trail. The M107 served with the U.S. Army and Marine Corps into the late 1970s and early '80s. It was also exported to more than a dozen countries and remains in service with some armies to this day. ▼

- Crew:** Five on vehicle, 13 total during firing
- Propulsion:** 405 horsepower super-charged diesel engine
- Vehicle weight:** 31 tons
- Max speed:** 50 mph
- Vehicle range:** 450 miles
- Bore:** 175 mm
- Length:** 34 ft.
- Elevation (barrel vertical movement):** Minus-5 degrees to plus-65 degrees
- Traverse (horizontal movement):** 30 degrees to left or right
- Ammunition:** high-explosive shells
- Rate of fire (max):** One round per minute
- Shell range (max):** 32,700 meters (20 miles)