

# Abrams Upgrade

Provides mobile, protected firepower for battlefield superiority.

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



## Description & Specifications

The Abrams upgrade includes two variants, the M1A1 and M1A2, and provides the lethality, survivability, and fightability to defeat advanced threats on the integrated battlefield using mobility, firepower, and shock effect. The 120mm main gun on the M1A1 and M1A2 and the 1,500-horsepower AGT turbine engine and special armor make the Abrams tank particularly lethal against heavy armor forces.

The M1A1 upgrade includes increased armor protection, suspension improvements, and a nuclear, biological, and chemical (NBC) protection system for survivability. An integrated applique computer, an embedded diagnostic system, a second-generation thermal sensor, and a far-target-designation capability can be incorporated on the M1A1.

The M1A2 upgrade includes a commander's independent thermal viewer, an improved weapon station,

position navigation equipment, distributed data and power architecture, embedded diagnostics, and an improved fire control system.

The M1A2 system enhancement program (SEP) adds second-generation thermal sensors and a thermal management system. It includes upgrades to processors/memory that enable use of the Army's common command and control software, effecting rapid transfer of digital situational data and overlays.

The Abrams upgrade includes the total integrated revitalization (TIGER) program, a rebuild effort consisting of engine data collection, transition of parts management to the contractor, and implementation of commercial production processes. The Abrams integrated management (AIM) overhaul program recapitalizes the high operational tempo of the M1A1 tank fleet. The Abrams parts

obsolescence program tracks obsolete components for spare parts and maintains a database of current parts.

## Program Status

- **FY07:** M1A2 SEP upgrade production complete (547 total)
- **FY07:** M1A2 to M1A2 SEP retrofit program continues to equip the 3rd Armored Cavalry Regiment (ACR)
- **FY07:** M1A1 AIM continues fielding to the 3rd Infantry Division (ID)

## Projected Activities

- **FY07-09:** M1A1 AIM continues fielding to the Army National Guard (ARNG), 1st ID, 2nd ID, and TRADOC
- **FY07-09:** M1A2 SEP production
- **FY07-09:** Continue fielding M1A2 SEP to the 3rd ACR, 1st Cavalry Division, and 1st Armored Division (AD), and M1A1 AIM to the ARNG, 1st AD, and 2nd ID
- **FY07:** TIGER production begins with initial deliveries beginning May 2007

## ACQUISITION PHASE

Concept & Technology Development

System Development & Demonstration

Production & Deployment

Operations & Support

## Abrams Upgrade

### FOREIGN MILITARY SALES

**M1A1:** Australia (59); Egypt (1,005)

**M1A2:** Kuwait (218); Saudi Arabia (315)

### CONTRACTORS

General Dynamics (Sterling Heights, MI;  
Warren, MI; Muskegon, MI; Scranton,  
PA; Lima, OH; Tallahassee, FL)

Honeywell (Phoenix, AZ)

Raytheon (McKinney, TX)



	M1/1PM1	M1A1	M1A2	M1A2 SEP
<b>LENGTH</b> (feet):	32.04	32.04	32.04	32.04
<b>WIDTH</b> (feet):	12.0	12.0	12.0	12.0
<b>HEIGHT</b> (feet):	7.79	8.0	8.0	8.0
<b>TOP SPEED</b> (mph):	45.0	41.5	41.5	42
<b>WEIGHT</b> (tons):	61.4/62.8	67.6	68.4	69.5
<b>ARMAMENT:</b>	105mm	120mm	120mm	120mm
<b>CREW:</b>	4	4	4	4

