

Abrams Upgrade

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

To provide mobile, protected firepower for battlefield superiority

DESCRIPTION

The Abrams tank 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 SA (Situational Awareness) and M1A2 SEP (System Enhancement Program) v2 and the 1,500-horsepower AGT turbine engine and special armor make the Abrams tank particularly lethal against heavy armor forces. The Abrams Modular Tank fleet includes two variants, the M1A1 SA and the M1A2 SEP v2.

M1A1 SA: Improvements include Block I forward-looking infrared (FLIR) and far-target locator. Lethality improvements include Stabilized Commander's Weapon Station (SCWS)

and ballistic solution upgrades for the M829A3 kinetic and the M1028 canister rounds. Common Abrams modifications include Blue Force Tracking (BFT), which is a digital command and control system that gives Army commanders across the battlefield current information about their location relative to friendly forces; and the Power Train Improvement and Integration Optimization Program (TIGER engine and improved transmission), which provides more reliability, durability, and a single standard for the vehicle's power train. Survivability improvements include frontal armor and turret side armor upgrades.

M1A2SEP v2: Upgrades include survivability, automotive power pack, computer systems, and night vision capabilities. Lethality improvements include Common Remotely Operated Weapon Station (CROWS) and ballistic solution upgrades for the M829A3 kinetic and the M1028 canister rounds. The M1A2 SEP v2 has improved microprocessors, color flat panel displays, improved memory capacity, better soldier-machine interface, and a new open operating system

designed to run the Common Operating Environment (COE) software. Both the Gunner's Primary Sight (GPS) and the Commander's Independent Thermal Viewer (CITV) on the M1A2SEP tank include the improved thermal imaging capabilities of the new Block I second-generation FLIR technology. The M1A2 SEP has improved frontal and side armor for enhanced crew survivability. The M1A2 SEP is also equipped with a battery-based auxiliary power unit, the total integrated revitalization (TIGER) engine, and upgraded transmission for improved automotive reliability and durability.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **Current:** The 1st Cavalry Division and 1st Brigade, 1st Armored Division are equipped with the Abrams M1A2 SEP v2.
- **Current:** Abrams production of M1A1 SA and M1A2SEP v2 tanks continue for both the Active Army and the Army National Guard (ARNG) to meet the Army's modularity goals by 2013.

PROJECTED ACTIVITIES

- **FY10-11:** M1A1 SA fielding continues to the ARNG, 1st Infantry Division, 2nd Infantry Division, Training and Doctrine Command/ Combined Arms Support Command, ARNG Regional Training Site-Maintenance (RTSM) units, and Army Prepositioned Stock 5 (Kuwait) and Army Prepositioned Stock 4 (Korea).
- **FY10-12:** M1A2 SEP v2 multiyear contract production continues.
- **4QFY09-2QFY10:** 1st, 2nd, and 3rd Brigades, 4th Infantry Division will be fielded with the Abrams M1A2 SEP v2 tank.
- **1QFY10-2QFY10:** 4th Brigade 1st Cavalry Division and the 1st Armored Division will be fielded with the Abrams M1A2 SEP v2 tank.
- **3QFY10:** Army Prepositioned Stock 5 (Southwest Asia) will be fielded with the Abrams M1A2 SEP v2 tank.
- **2QFY11-4QFY12:** 3rd Infantry Division and the 116th Army National Guard will be fielded with the Abrams M1A2 SEP v2 tank.
- **FY10-12:** TIGER production continues

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Abrams Upgrade

FOREIGN MILITARY SALES

M1A1: Australia (59), Egypt (1,005), Iraq (140)

M1A2: Kuwait (218), Saudi Arabia (315)

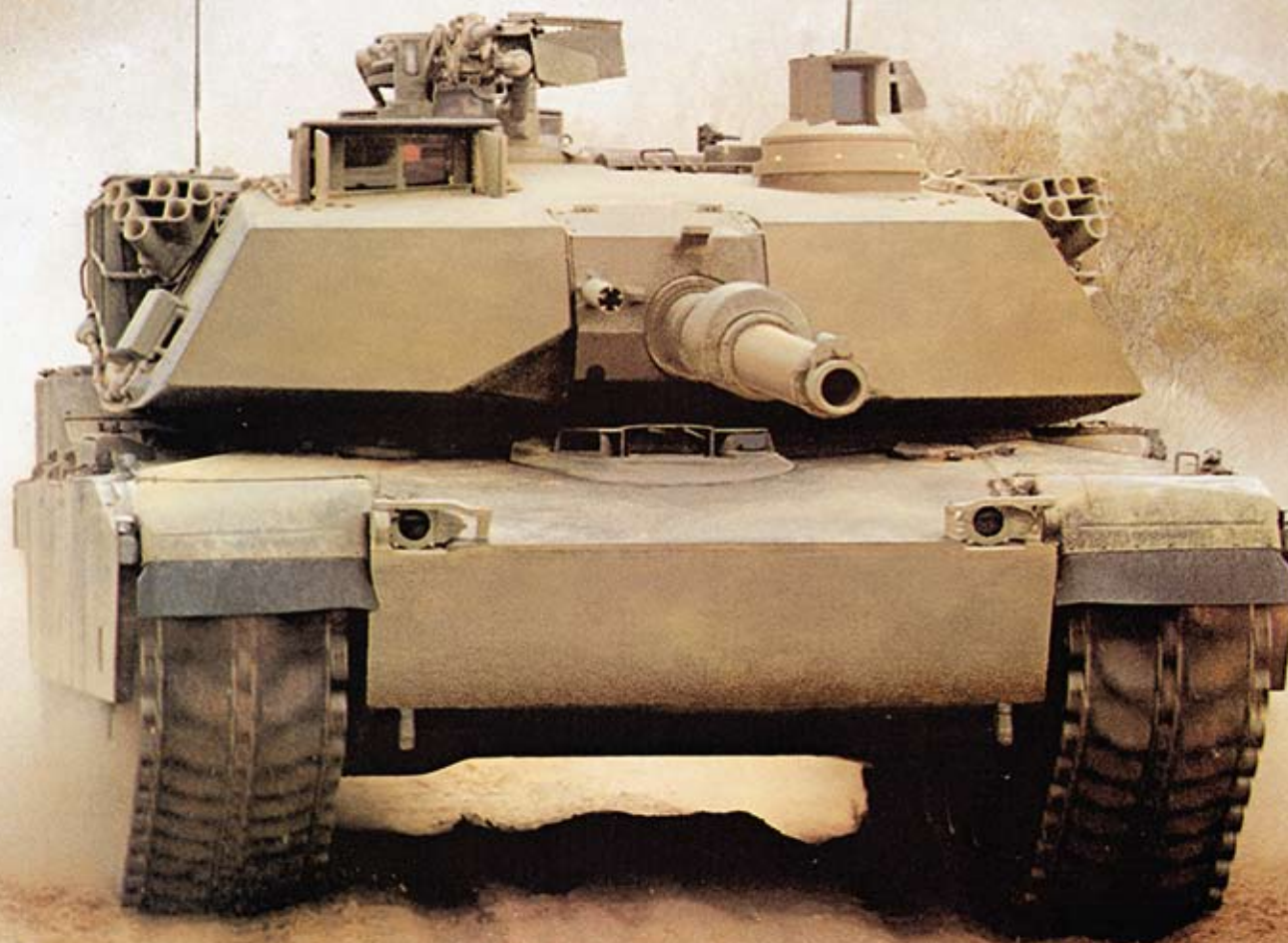
CONTRACTORS

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

Honeywell (Phoenix, AZ)

Simulation, Training, and Instrumentation Command (STRICOM) (Orlando, FL)

Anniston Army Depot (ANAD) (Anniston, AL)



	M1A1	M1A2	M1A2SEP
LENGTH (feet):	32.04	32.04	32.04
WIDTH (feet):	12.0	12.0	12.0
HEIGHT (feet):	8.0	8.0	8.0
TOP SPEED (mph):	41.5	41.5	42
WEIGHT (tons):	67.6	68.4	69.5
ARMAMENT:	120mm	120mm	120mm
CREW:	4	4	4

