

# Longbow Apache

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

## MISSION

To conduct close combat attack, deep precision strikes, and armed reconnaissance and security in day, night, and adverse weather conditions.

## DESCRIPTION

The AH-64D Longbow Apache is the Army's only attack helicopter for both the Current and Future Force. It is capable of destroying armor, personnel, and materiel targets in obscured battlefield conditions. The Apache fleet includes the A model Apache and D model Longbow. The Longbow remanufacturing effort uses the A model and incorporates a millimeter wave fire control radar (FCR), radar frequency interferometer (RFI), fire-and-forget radar-guided Hellfire missiles, and other cockpit management and digitization enhancements. Both A and D models are undergoing recapitalization modifications such as upgraded

forward-looking infrared (FLIR) technology with the Arrowhead Modernized Target Acquisition Designation Sight/Pilot Night Vision Sensor (MTADS/PNVS), non-line-of-sight communications, video transmission/reception, and maintenance cost reductions.

The Army's goal is to convert its remaining A models to the Longbow Apache configuration. The Longbow program began with two multi-year contracts: the first delivered 232 Longbows from FY96–FY01; the second delivered an additional 269 aircraft from FY02–FY06; 120 A to D conversions will occur between FY07–FY10. In addition, 52 Wartime Replacement Aircraft (WRA) are planned with deliveries complete CY2010. Apache is fielded to Active Army, National Guard (NG) and Army Reserve (AR) attack battalions, armed reconnaissance battalions, and cavalry units as defined in the Army Modernization Plan. Fielding of Longbow Apache began in 1QFY99 and will conclude in FY11. As of the end of FY08, 535 AH-64D Block I/II have been fielded to 17 Longbow Battalions and Fort Rucker, AL. In addition, 219 (10 Battalions) out of a

634 planned deliveries of the MTADS/PNVS sub-system have been completed and fielding will be complete in FY2010.

The Longbow Block III program is the next evolution of the Apache. Block III is the Army's only attack helicopter solution capable of interoperability with the Future Combat Force and will add significant combat capability while addressing obsolescence issues to ensure the aircraft remains a viable combat multiplier beyond 2030.

The Block III modernized Longbows will be designed and equipped with an open systems architecture to incorporate the latest communications, navigation, sensor, and weapon systems.

**Combat mission speed:** 167 miles per hour

**Combat range:** 300 miles

**Combat endurance:** 2.5 hours

**Max. gross weight:** 20,260 pounds

**Armament:** Hellfire missiles, 2.75-inch rockets, and 30mm chain gun

**Crew:** Two (pilot and copilot gunner)

## SYSTEM INTERDEPENDENCIES

E-IBCT, Longbow Apache maintains digital interoperability with multiple battlefield systems through adherence of the Army's Software Blocking Policy.

## PROGRAM STATUS

- **1QFY09:** Block III system development and demonstration contract currently 50% complete
- **4QFY08:** Block III first prototype flight conducted
- **Current:** Upgrade Block I and II Longbow to Block III configuration with eventual acquisition objective of 634 total airframes

## PROJECTED ACTIVITIES

- **1QFY10:** Block III limited user test
- **3QFY10:** Block III milestone C and low-rate initial production award
- **FY10:** Block I inductions into Block III remanufacturing assembly line
- **2QFY11:** Initial Block III deliveries
- **3QFY12:** First unit equipped (FUE)
- **2QFY13:** Initial operating capacity (IOC)
- **FY25:** End of production

## ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

## Longbow Apache

### FOREIGN MILITARY SALES

Egypt, Greece, Israel, Kuwait, Netherlands, Saudi Arabia, Singapore, United Arab Emirates

**Direct commercial sales:** Japan, Greece, United Kingdom

### CONTRACTORS

**Airframe/fuselage:**

Boeing (Mesa, AZ)

**Fire Control Radar:**

Northrop Grumman (Linthicum, MD)

Lockheed Martin (Owego, NY;

Orlando, FL)

**MTADS/PNVS:**

Lockheed Martin (Orlando, FL)

Boeing (Mesa, AZ)

**Rotor blades:**

Ducommun AeroStructures (Monrovia, CA)

