# Longbow Apache (AH-64D) (LBA)

#### INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

# **MISSION**

Conducts armed reconnaissance, close combat, mobile strike, and vertical maneuver missions when required, in day, night, obscured battlefield, and adverse weather conditions.

### DESCRIPTION

The AH-64D Longbow Apache (LBA) is the Army's only heavy attack helicopter for both the Current and Future Force. It is capable of destroying armor, personnel, and materiel targets in obscured battlefield conditions. The Longbow Apache is a 2-engine, 4-bladed, tandem-seat attack helicopter with 30mm cannon, Hydra-70 2.75-inch rockets, laser, and Radio Frequency (RF) HELLFIRE missiles. It upgrades 634 Apaches into AH-64D Longbow Block III configuration with procurement of 259 Fire Control Radars. There will also be 56 new Block III aircraft built to meet force requirements. The

Modernized-Target Acquisition Designation Sight/Pilot Night Vision Sensor (MTADS/PNVS) is a major combat multiplier on Longbow Apache.

The Apache fleet includes the A model Apache and D model Longbow. The A model fleet is being consumed by the Longbow remanufacturing program. There are fewer than 100 Apache A models remaining, with the last A model removed from the force structure in FY13. The Longbow remanufacturing effort uses the A model and incorporates a millimeter-wave FCR, radar frequency interferometer (RFI), fire-and-forget radar-guided HELLFIRE missiles, and other cockpit management and digitization enhancements. The Longbow is undergoing recapitalization modifications such as upgraded forward-looking infrared technology with the MTADS/PNVS, non-line-of-sight communications, video transmission/reception, and maintenance cost reductions. Longbow supports Brigade Combat Teams across the full spectrum of warfare. Apache is fielded to Active Army, National Guard and Army Reserve attack battalions, armed reconnaissance battalions, and cavalry units as defined in the Army Modernization Plan. The Longbow Apache Block III (AB3)

program is the next evolution of the Apache. Block III meets all the requirements for Army and Joint interoperability goals for the future and will add significant combat capability while addressing obsolescence issues, and the program will ensure the aircraft remains a viable combat multiplier beyond 2035.

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: Longbow 145 knots (max speed); AB3 164 Knots (max speed)
- Combat range: 260 nautical miles
- Combat endurance: 2.5 hours
- Maximum gross weight: 20,260 pounds
- Ordnance: 16 HELLFIRE missiles, 76 2.75-inch rockets, and 1,200 30mm chain gun rounds
- Crew: Two (pilot and copilot gunner)

#### SYSTEM INTERDEPENDENCIES

#### In this Publication

AVCATT; HELLFIRE Family of Missiles; 2.75 Inch Rocket Systems (Hydra-70); Air Warrior (AW); JTRS AMF; RQ-7B Shadow Tactical Aircraft System (TUAS); DCGS-A; GCCS-A; SINCGARS; Stryker Family of Vehicles; Black-Hawk/UH/HH-60; CH-47 Chinook

#### Other Major Interdependencies

TCDL; Link 16; JSTARS; AWACS; GPS; AMPS; BFT; Have Quick; SATCOM; Land Warrior; M-1 Tank; M-2 Bradley; Fire Support; A2C2S; OH-58D; ERMP UAS; Aircraft System (UAS); Laser Hellfire

#### PROGRAM STATUS

- 1QFY09: Block III system development and demonstration contract currently 83 percent complete
- 1QFY11: Milestone C decision
- Current: Upgrade Block I and II
   Longbow to Block III configuration with eventual acquisition objective of 634 remanufacture airframes and 56 new build airframes for a total of 690 Block III Longbows

#### PROJECTED ACTIVITIES

- FY11: Block I inductions into Block III remanufacturing assembly line
- 1QFY12: Initial Block III deliveries
- 3QFY12: Full-Rate Production Decision
- 3QFY13: Initial operating capability
- **FY25:** End of production

**ACOUISITION PHASE** 

Technology Develonment

**Engineering and Manufacturing Development** 

**Production and Deployment** 

Operations and Support



# Longbow Apache (AH-64D) (LBA)

#### **FOREIGN MILITARY SALES**

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

#### **DIRECT COMMERCIAL SALES**

Greece, Japan, United Kingdom

# CONTRACTORS

Airframe: Boeing (Mesa, AZ)

MTADS: Lockheed Martin (Orlando, FL)
REU: Lockheed Martin (Orlando, FL)
Northrop Grumman (Linthicum, MD)
APU: Honeywell (Phoenix, AZ)

**Technical:** Aviation and Missile Solutions

LLC (Huntsville, AL)

FCR: Longbow LLC (Orlando, FL)

**Radar:** Northrop Grumman

(Linthicum, MD)

**Logistics:** AEPCO (Huntsville, AL) **TADS/PNVS:** Lockheed Martin

(Goodyear, AZ)

**Programmatics:** DynCorp

(Ft. Worth, TX)

EGI: Honeywell (Clearwater, FL)
LRUs: Smiths (Clearwater, FL)
IPAS: Honeywell (Tempe, AZ)

