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|  | McDonnell Douglas (now Boeing)AH-64 Apache Attack Helicopter |

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| **HISTORY:**  |
| **First Flight**  | (AH-64A) 30 September 1975(AH-64D) 15 April 1992  |
| **Service Entry**  | (AH-64A) 26 January 1984(AH-64D) 1997  |
| **CREW:**  | 1 pilot and 1 weapons officer  |
| **ESTIMATED COST:**  | (AH-64A) $10 million(AH-64D) $35 million (new build)  |
| **AIRFOIL SECTIONS:**  |  |
| **Rotor Blade Root**  | HH-02  |
| **Rotor Blade Tip**  | NACA 64A006  |
| **DIMENSIONS:**  |
| **Length**  | 58.26 ft (17.76 m) with rotors turning48.17 ft (14.68 m) ignoring rotors  |
| **Rotor Diameter**  | 48.00 ft (14.63 m)  |
| **Height**  | 14.13 ft (4.30 m) to top of tail rotor12.89 ft (3.84 m) to top of main rotor16.25 ft (4.95 m) to top of radome  |
| **Rotor Disk Area**  | 1,809.5 ft2 (168.11 m2)  |
| **WEIGHTS:**  |
| **Empty**  | (AH-64A) 11,385 lb (5,165 kg)(AH-64D) 11,800 lb (5,350 kg)  |
| **Normal Takeoff**  | (AH-64A) 15,075 lb (6,840 kg)(AH-64D) 16,025 lb (7,270 kg)  |
| **Max Takeoff**  | (AH-64A) 17,650 lb (8,005 kg)(AH-64D) 22,280 lb (10,105 kg)  |
| **Fuel Capacity**  | *internal:* 2,440 lb (1,110 kg)*external:* 5,980 lb (2,710 kg)  |
| **Max Payload**  | 1,700 lb (770 kg)  |
| **PROPULSION:**  |
| **Powerplant**  | (AH-64A) two General Electric T700-701 turboshafts(AH-64D) two General Electric T700-701C turboshafts  |
| **Thrust**  | (AH-64A) 3,392 shp (2,530 kW)(AH-64D) 3,880 shp (2,894 kW)  |
| **PERFORMANCE:**  |
| **Max Level Speed**  | (AH-64A) 180 mph (295 km/h)(AH-64D) 160 mph (260 km/h)  |
| **Maximum Climb Rate**  | (AH-64A) 3,240 ft (990 m) / min(AH-64D) 3,090 ft (940 m) / min  |
| **Maximum VerticalClimb Rate**  | (AH-64A) 2,500 ft (760 m) / min(AH-64D) 1,555 ft (475 m) / min  |
| **Service Ceiling**  | 21,000 ft (6,400 m)  |
| **Hover Ceiling**(in ground effect)  | (AH-64A) 15,000 ft (4,570 m)(AH-64D) 17,210 ft (5,245 m)  |
| **Hover Ceiling**(out of ground effect)  | (AH-64A) 11,500 ft (3,505 m)(AH-64D) 9,810 ft (2,990 m)  |
| **Range**  | *typical:* 260 nm (480 km) [AH-64A]*typical:* 220 nm (410 km) [AH-64D]*ferry:* 1,025 nm (1,900 km)  |
| **Endurance**  | 3 hr 9 min [maximum]2 hr 30 min [typical mission]  |
| **g-Limits**  | +3.5 / -0.5  |
| **ARMAMENT:**  |
| **Gun**  | one M230A1 30 mm chain cannon (up to 1,200 rds)  |
| **Stations**  | 2 stub wings with 4 hardpoints and 2 wingtip rails  |
| **Air-to-Air Missile**  | AIM-9 Sidewinder, AIM-92 Stinger  |
| **Air-to-Surface Missile**  | AGM-114 Hellfire, AGM-122 Sidearm, TOW  |
| **Bomb**  | none  |
| **Other**  | 70 mm rocket pods, 127 mm rockets  |
| **KNOWN VARIANTS:**  |
| YAH-64A  | Prototype built by Hughes Helicopter to compete with Bell YAH-63 for US Army Advanced Attack Helicopter contract  |
| AH-64A  | First production model, all to be upgraded to AH-64D standard (but without for Longbow radar) by 2010  |
| GAH-64A  | AH-64A models grounded for use as trainers; 17 modified  |
| JAH-64A  | AH-64A models used for special testing; 7 modified  |
| AH-64B  | Proposed interim upgrade to improve 254 AH-64As with GPS, new radios, new rotor blades, and improved navigation systems; cancelled in 1992  |
| AH-64C  | Designation originally applied to AH-64A models upgraded to near AH-64D standard, including all upgrades except Longbow radar and new engines; approximately 540 to be so upgraded, but designation abandoned in 1993  |
| AH-64D Longbow  | New build model equipped with mast-mounted Longbow radar, uprated engines, and improved avionics; 227 to be built; older AH-64A models upgraded to AH-64Ds not to be equipped with Longbow radar but capability exists to convert such aircraft to the full Longbow standard in 4-8 hours  |
| WAH-64D  | AH-64D model for British Army license built by Westland, essentially same as AH-64D but powered by Rolls Royce engines; 67 to be built  |
| **KNOWN COMBAT RECORD:**  | Panama - Operation Just Cause (US Army, 1989)Iraq - Operation Desert Storm (US Army, 1991)Kosovo - Operation Allied Force (US Army, 1999)Israeli-Palestinian conflict (Israel, 2000-present)Afghanistan - Operation Enduring Freedom (US Army, 2001-present; Netherlands, 2004-present)Iraq - Operation Iraqi Freedom (US Army, 2003-present)  |
| **KNOWN OPERATORS:**  | US ArmyBahrainEgyptGreeceIsraelKuwaitNetherlandsSaudi ArabiaSouth KoreaUnited Arab EmiratesUnited Kingdom  |
| **3-VIEW SCHEMATIC:**  |
| **SOURCES:** * Bishop, Chris, ed. **The Encyclopedia of Modern Military Weapons: The Comprehensive Guide to Over 1,000 Weapon Systems from 1945 to the Present Day**. NY: Barnes & Noble, 1999, p. 321.
* [Boeing AH-64 site](http://www.boeing.com/rotorcraft/military/ah64d/ah64d.htm)
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* Donald, David, ed. [**The Complete Encyclopedia of World Aircraft**](http://www.amazon.com/exec/obidos/ASIN/0760705925/aerospacewebo-20). NY: Barnes & Noble, 1997, p. 618.
* [FAS AH-64 site](http://www.fas.org/man/dod-101/sys/ac/ah-64.htm)
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* Munro, Bob and Chant, Christopher. [**Jane's Combat Aircraft**](http://www.amazon.com/exec/obidos/ASIN/0004708466/aerospacewebo-20). Glasgow: Harper Collins Publishers, 1995, p. 148-151.
* Rendall, David. [**Jane's Aircraft Recognition Guide**](http://www.amazon.com/exec/obidos/ASIN/0007137214/aerospacewebo-20), 2nd ed. London: Harper Collins Publishers, 1999, p. 420.
* [US Army AH-64 Fact Sheet](http://www.army.mil/fact_files_site/aircraft.html)
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