AH-1W Super Cobra - 2003

United States



Type: Attack
Min Speed: 55 kt
Max Speed: 180 kt
Commissioned: 2003
Length: 13.9 m
Wingspan: 4.3 m
Height: 4.2 m
Crew: 2
Empty Weight: 4630 kg
Max Weight: 6690 kg
Max Payload: 0 kg
Propulsion: 2x T700-GE-401

Sensors / EW: - AN/AVR-2 - ESM, LWR, Laser Warning Receiver, Max range: 18.5 km
- AN/AAR-47A(V)2 - (2007) Infrared, MAWS, Missile Approach Warning System, Max range: 9.3 km
- AN/ALQ-144A(V)1 - (2007) ECM, IRCM, Max range: 0 km
- AN/APR-39B(V)2 - (USN/USMC) ESM, RWR, Radar Warning Receiver, Max range: 222.2 km
- Generic Laser Designator - (Surface Only) Laser Designator, Laser Target Designator & Ranger (LTD/R), Max range: 18.5 km
- Generic FLIR - (DEPRECATED - 2nd Gen, Weapon Director & Target Search, Tracking and Identification FLIR) Infrared, Infrared, Weapon Director & Target Search, Tracking and Identification Camera, Max range: 55.6 km

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Weapons / Loadouts:
- HYDRA 70mm Rocket - (Mk 66 Rocket, M229 Warhead, M423/7 Fuze) Rocket. Surface Max: 3.7 km. Land Max: 3.7 km.
- AIM-9M Sidewinder - (1984) Guided Weapon. Air Max: 18.5 km.
- BGM-71F TOW 2B - (1992) Guided Weapon. Surface Max: 3.7 km. Land Max: 3.7 km.
- AGM-114K Hellfire II - Guided Weapon. Surface Max: 9.3 km. Land Max: 9.3 km.
- AGM-114N Hellfire II [Thermobaric] - (2003) Guided Weapon. Surface Max: 9.3 km. Land Max: 9.3 km.

OVERVIEW: The Bell AH-1 SuperCobra is a twin-engine attack helicopter based on the United States Army's AH-1 Cobra. The twin Cobra family includes the AH-1J SeaCobra, the AH-1T Improved SeaCobra, and the AH-1W SuperCobra. The AH-1W is the backbone of the United States Marine Corps's attack helicopter fleet, but it will be replaced in service by the Bell AH-1Z Viper upgrade.

DETAILS: In the early 1980s, the U.S. Marine Corps sought a new navalized helicopter, but it was denied funding to buy the AH-64 Apache by Congress in 1981. The Marines in turn pursued a more powerful version of the AH-1T. Other

changes included modified fire control systems to carry and fire AIM-9 Sidewinder and AGM-114 Hellfire missiles. The new version was funded by Congress and received the AH-1W designation. Deliveries of AH-1W SuperCobras totaled 179 new-built helicopters plus 43 upgrades of AH-1Ts.

The AH-1T+ demonstrator and AH-1W prototype was later tested with a new experimental composite four blade main rotor system. The new system offered better performance, reduced noise and improved battle damage tolerance. Lacking a USMC contract, Bell developed this new design into the AH-1Z with its own funds. By 1996, the Marines were again not allowed to order the AH-64. Developing a marine version of the Apache would have been expensive and it was likely that the Marine Corps would be its only customer. They instead signed a contract for upgrading 180 AH-1Ws into AH-1Zs.

The AH-1Z Viper features several design changes. The AH-1Z's two redesigned wing stubs are longer with each adding a wing-tip station for a missile such as the AIM-9 Sidewinder. Each wing has two other stations for 70 mm (2.75 in) Hydra rocket pods, or AGM-114 Hellfire quad missile launcher. The Longbow radar can be mounted on a wing tip station.

TYPE: Twin Engine Attack Helicopter.

SPECIFICATIONS: Crew: (2) pilot, co-pilot/gunner (CPG) || Length: 58 ft (17.7 m) || Rotor diameter: 48 ft (14.6 m) || Height: 13 ft 9 in (4.19 m) || Max. takeoff weight: 14,750 lb (6,690 kg) || Powerplant: (2) General Electric T700-401 turboshaft, 1,690 shp (1,300 kW) each || Rotor systems: 2 blades on main rotor, 2 blades on tail rotor || Fuselage length: 45 ft 7 in (13.9 m) || Stub wing span: 10 ft 9 in (3.28 m).

PERFORMANCE: Max Speed: 190 knots (218 mph, 352 km/h) || Range: 317 nmi (365 mi, 587 km) || Service ceiling: 12,200 ft (3,720 m) || Rate of climb: 1,620 ft/min (8.2 m/s).

SENSORS: AN/AAR-47A (MAWS) Missle Approach Warning System || Generic FLIR || AN/APR-39B (RWR) Radar Warning Receiver || AN/AVR-2 (LWR) Laser Warning Receiver || ICRN || Laser Target Designator.

ARMAMENT: (1) 20 mm (0.787 in) M197 3-barreled Gatling cannon in the A/A49E-7 turret (750 rounds ammo capacity) || 2.75 in (70 mm) Hydra 70 rockets || APKWS II rockets || 5 in (127 mm) Zuni rockets || TOW missiles || AGM-114 Hellfire missiles || AIM-9 Sidewinder anti-aircraft missiles.

SOURCE: [SCO] Wikipedia http://en.wikipedia.org