

McDonnell Douglas F/A-18A Legacy Hornet

The Hickory Aviation Museum's F/A-18A Legacy Hornet Bureau Number 162411 was flown in from NAS Pensacola, FL by Blue Angels pilot CDR Frank Weisser. The aircraft is on loan from the National Museum of Naval Aviation.



Role	Multi Role Fighter/Attack Aircraft
National origin	United States
Manufacturer	McDonnell Douglas/Boeing
First flight	18 November 1978
Introduction	7 January 1983 (USMC) 1 July 1984 (USN)
Retired	A Models in 2020 by Blue Angels
Status	Follow on E/F and G Models Operational
Primary users	United States Navy U. S. Marine Corps Various Countries
Produced	380 F/A-18A's
Number built	1,480 total A/B/C/D
Propulsion	2 × GE F404-GE-402 Afterburning Turbo Fan Engines
Unit cost	US \$28mil (1996)

The McDonnell Douglas F/A-18A Hornet is a single seat, twin-engine, all-weather, supersonic, carrier-capable multi role fighter and attack aircraft designed by McDonnell Douglas and Northrop. It first entered service in 1983 with the US Marine Corps and the US Navy in 1984. The F/A-18A Hornet has a top speed of Mach 1.8 and was the aircraft flown by the Blue Angels from 1987-2020, this aircraft flew as Blue Angel #5. It can carry more than 13,700 pounds of weapons and external fuel stores on nine external hard-points, including air-to-air missiles, air-to-ground missiles, anti-shiping missiles, various bombs and three 330-gallon external fuel tanks. The F/A-18A also carries one 20mm M61A1 Vulcan nose mounted six barrel rotary cannon.

General characteristics

Crew: 1 Pilot
Length: 56 ft 1 in (17.1 m)
Wingspan: 40 ft 4 in (12.3 m) with AIM-9 Sidewinders on wingtip LAU-7 launchers
Height: 15 ft 5 in (4.7 m)
Wing area: 410 sq ft (38 m²)
Empty weight: 23,000 lb (10,433 kg)
Loaded weight: 36,970 lb (16,769 kg)
Max. takeoff weight: 51,900 lb (23,541 kg)
Fuel capacity: 1,629 U.S. gal internal, 990 U.S. gal with three external tanks (330 U.S. gal) tanks on the outer wing hardpoints and the centerline station).
Thrust to Weight: 0.96 (1.13 with loaded weight at 50% internal fuel)

Performance

Maximum speed: Mach 1.8 (1,034 kn (1,190 mph at 40,000 ft)
Cruise speed: 570 kn (660 mph, 1,060 km/h)
Combat radius: 400 nmi (460 mi, 740 km) air-air mission
Ferry range: 1,800 nmi (2,100 mi, 3,300 km)
Service ceiling: 50,000 ft (15,000 m)
Rate of climb: 50,000 ft/min (250 m/s)
Takeoff roll: 1,300 ft
Approach Speed: 134kts
Hardpoints: 9 total: **Missiles/Bombs/Other:** Air-to-air missiles: AIM-7 Sparrow, AIM-9 Sidewinder, AMRAAM, MK80, Rockets, Harm, JSOW JASSM, Maverick, Reconnaissance and Targeting Pods, Fuel Tanks, Harpoon

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Operational history

United States Navy and Marine Corps:

McDonnell Douglas rolled out the first F/A-18A on 13 September 1978 in blue-on-white colors marked with "Navy" on the left and "Marines" on the right. Its first flight was on 18 November. In a break with tradition, the Navy pioneered the "principal site concept" with the F/A-18, where almost all testing was done at Naval Air Station Patuxent River, MD, instead of near the site of manufacture, and using Navy and Marine Corps test pilots instead of civilians early in development. In March 1979, Lt. Cdr. John Padgett became the first Navy pilot to fly the F/A-18.

Following trials and operational testing by VX-4 and VX-5, Hornets began to fill the Fleet Replacement Squadrons VFA-125, VFA-106, and VMFAT-101, where pilots are introduced to the F/A-18. The Hornet entered operational service with Marine Corps Squadron VMFA-314 at MCAS El Toro, CA on 7 January 1983 and with Navy squadron VFA-25 on 1 July 1984, replacing F-4s and A-7Es, respectively.

Navy strike-fighter squadrons VFA-5 and VFA-113 (assigned to CVW-14) deployed aboard USS CONSTELLATION from February to August 1985, marking the first deployment for the F/A-18.

The initial fleet reports were complimentary, indicating that the Hornet was extraordinarily reliable, a major change from its predecessor, the F-4J. Other squadrons that switched to F/A-18 are VFA-146 "Blue Diamonds", and VFA-147 "Argonauts". In January 1985, the VFA-131 "Wildcats" and the VFA-132 "Privateers" moved from Naval Air Station Lemoore, CA to Naval Air Station Cecil Field, FL to become the Atlantic Fleet's first F/A-18 squadrons.

The F/A-18 first saw combat action in April 1986, when VFA-131, VFA-132, VMFA-314, and VMFA-323 Hornets from USS CORAL SEA flew Suppression of Enemy Air Defense (SEAD) missions against Libyan air defenses during Operation Prairie Fire and an attack on Benghazi as part of Operation El Dorado. During the Gulf War of 1991, the Navy deployed 106 F/A-18A/C Hornets and Marine Corps deployed 84 F/A-18A/C/D Hornets. F/A-18 pilots were credited with two kills during the Gulf War, both MiG-21s. On 17 January, the first day of the war, U.S. Navy pilots Lieutenant Commander Mark I Fox and his wingman, Lieutenant Nick Mongilio were sent from USS SARATOGA in the Red Sea to bomb an airfield in southwestern Iraq. While en route, they were warned by an E-2C of approaching MiG-21 aircraft. The Hornets shot down the two MiGs with AIM-7 and AIM-9 missiles in a brief dogfight. The F/A-18s, each carrying four 2,000 lb (910 kg) bombs, then resumed their bombing run before returning to *Saratoga*.

The Hornet's survivability was demonstrated when a Hornet took hits in both engines and flew 125 mi (201 km) back to base. It was repaired and flying within a few days. F/A-18s flew 4,551 sorties with 10 Hornets damaged including three losses, one confirmed lost to enemy fire during the Gulf War.

The U.S. Navy's Blue Angels Flight Demonstration Squadron switched to the F/A-18 Hornet in 1986, replacing the A-4 Skyhawk. The Blue Angels performed in F/A-18A, B, C, and D models at air shows and other special events across the US and worldwide. Blue Angels pilots must have 1,400 hours and an aircraft-carrier certification. The two-seat B and D models are typically used to give rides to VIPs but can also fill in for other aircraft in the squadron in a normal show, if the need arises. These "Legacy" Hornets did their final display flight along the Gulf of Mexico beaches near Pensacola in November 2020, and the team began the transition to flying the Super Hornet the same month.