## F-18 hornet essay sample

Environment, Air



The McDonnell Douglas now known as Boeing, F/A-18 Hornet is a twin-engine supersonic, all-weather carrier-capable multirole fighter jet, designed to dogfight and attack ground targets (F/A for Fighter/Attack). Designed by McDonnell Douglas and Northrop, the F/A-18 was derived from the latter's YF-17 in the 1970s for use by the United States Navy and Marine Corps. The Hornet is also used by the air forces of several other nations. It has been the aerial demonstration aircraft for the U. S. Navy's Flight Demonstration Squadron, the Blue Angels, since 1986. The F/A-18 has a top speed of Mach 1. 8. It can carry a wide variety of bombs and missiles, including air-to-air and air-to-ground, supplemented by the 20 mm M61 Vulcan cannon. The resilient F/A-18 Hornet was the first aircraft to have carbon fiber wings and the first tactical jet fighter to use digital fly-by-wire flight controls. Variants included a two-seater, an improved fighter, a reconnaissance aircraft and a night-attack fighter. Since the first Hornet entered service in 1980, McDonnell Douglas built over 1, 200.

Overseas, Hornets served with the Australian, Canadian, Spanish, Kuwaiti, Swiss, Finnish and Malaysian air forces. In November 1986, the 40th anniversary of the Navy's Blue Angels, the demonstration squadron replaced its A-4 Skyhawks with F/A-18 Hornets. They saw use as a show aircraft the following season. Hornets entered active duty in January 1983. In 1986, Hornets on the USS Coral Sea flew their first combat missions. During the 1991 Persian Gulf War, while performing an air-to-ground mission, Hornets destroyed two Iraqi MiG-21s in air-to-air combat.

F-18 Hornet's operational Service

F-18 in the US Navy Service

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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. The Hornet entered operational service with Marine Corps squadron VMFA-314 at MCAS El Toro on 7 January 1983 and with Navy squadron VFA-113 in March 1983, replacing F-4s and A-7Es, respectively. The initial fleet reports were complimentary, indicating that the Hornet was extraordinarily reliable, a major change from its predecessor, the F-4|. 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, California to Naval Air Station Cecil Field, Florida, and became the Atlantic Fleet's first F/A-18 squadrons. The US Navy's Blue Angels Flight Demonstration Squadron switched to the F/A-18 Hornet in 1986, when it replaced the A-4 Skyhawk. The Blue Angels perform in F/A-18A and B models at air shows and other special events across the US and worldwide. Blue Angels pilots must have 1, 350 hours and an aircraft carrier certification. The two-seat B model is 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. Combat operations

The F/A-18 first saw combat action in April 1986, when VFA-131 Hornets from USS Coral Sea flew SEAD missions against Libyan air defenses during Operation Prairie Fire and an attack on Benghazi as part of Operation El Dorado Canyon.

Non-U. S. service

Though U. S. Navy aircraft have generally not sold well on the export market, the F/A-18 has been purchased and is in operation with several foreign air services. Except for Canada, all export customers purchased their Hornets through the U. S. Navy, via the U. S. Foreign Military Sales (FMS) Program, where the Navy acts as the purchasing manager but incurs no financial gain or loss. Canada, the largest Hornet operator outside of the U. S., ordered its aircraft directly from the manufacturer. Australia

Australia selected the F/A-18 in October 1981. Original differences between the Australian and US Navy's standard F/A-18 were the removed nose wheel tie bar for catapult launch (later re-fitted with a dummy version to remove nose wheel shimmy), addition of a high frequency radio, an Australian fatigue data analysis system, an improved video and voice recorder, and the use of ILS/VOR (Instrument Landing System/Very High Frequency Omnidirectional Range) instead of the carrier landing system. The first two aircraft were produced in the US, with the remainder assembled in Australia at Government Aircraft Factories. F/A-18 deliveries to the Royal Australian Air force (RAAF) 1984, and continued until May 1990. In 2001, Australia deployed four aircraft to Diego Garcia, in an air defense role, during coalition operations against the Taliban in Afghanistan. In 2003, 75 Squadron deployed 14 F/A-18s to Qatar as part of Operation Falconer and these aircraft saw action during the invasion of Iraq. Australia had 71 Hornets in service in 2006, after four were lost to crashes.

## Canada

Canada was the first export customer for the F-18 Hornet. The aims were to improve air-to-air and air-to-ground combat abilities, upgrade sensors and the defensive suite, and replace the data links and communications systems on board Finland

The Finnish Hornets were initially to be used only for air defense, hence the F-18 designation. Finland is upgrading its fleet of F-18s with new avionics, including helmet mounted sights (HMS), new cockpit displays, sensors and standard NATO data link. Several of the 63 Hornets remaining are going to be fitted to carry air-to-ground ordnance. After the upgrades the aircraft are to remain in active service until 2020–2025. Kuwait

The Kuwait Air Force (Al Quwwat Aj Jawwaiya Al Kuwaitiya) ordered 32 F/A-18 Hornets in 1988 and delivery started in October 1991. Malaysia

The Royal Malaysian Air Force (Tentera Udara Diraja Malaysia) has eight F/A-18 Spain

In 1995 The Spanish Airforce obtained 24 ex-USN F/A-18A Hornets, with six more on option. These were delivered from December 1995 until December 1999. Spanish Air Force F-18 Hornets have flown Ground Attack, combat air patrol (CAP) combat missions in Bosnia and Kosovo, under NATO command, in Italy. They shared the base with Canadian and USMC F/A-18s. Six Spanish Hornets had been lost in accidents by 2003. Switzerland

The Swiss Air Force purchased 26 C models and eight D models. One D model was lost in a crash. Delivery of the aircraft started in 1996. Other Operators of the Hornet Include

The F/A-18C and F/A-18D were considered by the French Navy (Marine Nationale) during the 1980s for deployment on their aircraft carriers. Austria, Chile, Czech Republic, Hungary, Philippines, Poland, and Singapore evaluated the Hornet but did not purchase it. Thailand ordered four C and four D model Hornets but the Asian financial crisis in the late 1990s resulted in the order being canceled. (http://en. wikipedia. org/wiki/McDonnell\_Douglas\_F/A-18 Hornet)