F/A-18A/B

RAAF selected 57 F/A-18A fighters and 18 F/A-18B two-seat trainers to replace the Dassault Mirage in October 1981.

Two aircraft were produced in the US with the remainder assembled in Australia. Deliveries to the RAAF began on 29 October 1984 and continued until May 1990.

After losing four aircraft in flying accidents during the late 1980s and early 1990s, 71 remain in operation.

The RAAF's F/A-18A and B-model Hornets are multi-role fighters designed for both air-to-air and air-to-ground missions. They are capable of air interception, air combat, close air support of ground troops, and interdiction of enemy supply lines including shipping.

They are operated by No. 3 Squadron at RAAF Base Williamtown, No. 75 Squadron at RAAF Base Tindal and No. 77 Squadron at RAAF Base Williamtown, with No. 2 Operational Conversion Unit, also at RAAF Base Williamtown, responsible for training pilots.

The Hornet was developed for the US Navy and Marine Corps and has been a very successful aircraft, also in service with Canada, Finland, Kuwait, Malaysia, Spain and Switzerland.

RAAF began a series of upgrades on airframes and avionics suites in the late 1990s to extend the service life of the fleet in an attempt to keep the aircraft in service until the now-delayed F-35 Lightning II Joint Strike Fighter can be brought into service.

Weapons	AIM-120 AMRAAM active-radar-guided missiles AIM-7 Sparrow radar-guided long-range missiles AIM-9 Sidewinder infra-red-seeking missiles Harpoon anti-ship missiles Conventional and laser-guided bombs M61 20mm nose-mounted cannon
Manufacturer	Boeing (originally McDonnell-Douglas)
Role	Multi-role fighter
Crew	One or two
Engines	Two F404-GE-400 turbofans
Thrust	14,516kg
Airframe	Length: 17.1m, height: 4.7m
Wingspan	12.4m
Weight	10,660kg basic, 20,412kg max
Speed	Mach 1.8 (2200km/h)
Range	Ferry 2700km (without refuelling) Interdiction > 1000km Combat radius 740km
Ceiling	>45,000 feet

F/A-18B

F/A-18F

F/A-18F

Pic Leading Aircraftman Benjamin Evans

In May 2007, a contract to buy 24 F/A-18F Super Hornets for the RAAF as an interim replacement for the ageing F-111 was signed, at a purchase cost of $2.9billion, with training and facilities upgrades bringing the total to about $6billion.

First deliveries arrived at RAAF Base Amberley in March 2010 with the first squadron declared operational in December the same year.

Super Hornet was purchased for the RAAF as an upgraded air-combat capability for both air-to-air and air-to-ground missions until the F-35 Lightning II Joint Strike Fighter (JSF) can be introduced – for which there is no firm date.

F/A-18F Super Hornets are larger than the classic model with many detail improvements. With increased wing area and more hardpoints, Super Hornets can carry a much bigger weapons payload over greater distances.

A significant visual difference between the Super Hornet the 'Classic' Hornet is in the engine air intakes – the Super Hornet sporting large rectangular intakes, compared to a much smaller oval shape on the 'Classic'.

Super Hornets are operated by No. 1 Squadron and No. 6 Squadron, both at RAAF Base Amberley, Queensland.

Currently, Australia is the only country outside the US to operate the Super Hornet.

Weapons	AIM-120 AMRAAM active-radar-guided missiles AIM-7 Sparrow radar-guided long-range missiles AIM-9 Sidewinder infra-red-seeking missiles Harpoon anti-ship missiles Conventional and laser-guided bombs M61 20mm nose-mounted cannon
Manufacturer	Boeing
Role	Multi-role fighter
Crew	Two
Engines	Two F414-GE-400 turbofans
Thrust	19,600kg
Airframe	Length: 18.3m, height: 4.9m
Wingspan	13.6m
Weight	13,387kg basic, 29,900kg max
Speed	Mach 1.6+ (1950km/h)
Range	Ferry 2700km (without refuel) Interdiction > 1000km Combat radius 740km
Ceiling	> 50,000 feet

AP-3C

Pic Flight Lieutenant Simon Longley

The Royal Australian Air Force AP-3C Orion is an extremely versatile aircraft capable of maritime surveillance, anti-submarine and anti-ship warfare, naval fleet support and search-and-rescue supply.

AP-3C Orion is the workhorse of No 92 Wing, located at RAAF Base Edinburgh near Adelaide, which is responsible for conducting long-range surveillance missions within Australia's Exclusive Economic Zone and throughout the Indian and Pacific Oceans.

Orion first entered service in 1962, with the P-3C first introduced in 1968. The significantly upgraded Australian AP-3C Orions were introduced into service in 2002 and are fitted with a variety of sensors, including digital multi-mode radar, electronic support measures, electro-optics detectors (infra-red and visual), magnetic anomaly detectors, identification-friend-or-foe systems and acoustic detectors.

AP-3C Orion may work alone or in conjunction with other aircraft or ships.

Wartime missions include locating and attacking enemy submarines and ships using torpedoes and Harpoon anti-ship missiles.

AP-3C

Weapons	Mk 46/MU 90 torpedoes AGM-84 Harpoon air-to-surface missiles Various sonobuoys and stores
Manufacturer	Lockheed Martin
Role	Surveillance, anti-sub/anti-ship warfare, search
Crew	Four flight crew Nine mission specialists
Engine	Four Allison T56-A-14 (4600shp each)
Airframe	Length: 35.6m, height: 10.44m
Wingspan	30.8m
Weight	61,200kg max
Speed	650km/h cruise, 370km/h loiter
Endurance	15 hours

PC-9/A(F)

Pic Leading Aircraftman Euan Grant

Pilatus PC-9/A is a two-seat, single-engine turboprop aircraft that, aside from pilot training and aerobatic display, is also used by the RAAF in a forward air control role.

The PC-9/A is best known to the public as the aircraft flown by the RAAF Roulettes in aerobatic displays at major events throughout Australia. These aircraft are based at RAAF Base East Sale in Victoria.

After successfully completing basic flying training at the ADF Basic Flying Training School at Tamworth, NSW, ADF fixed-wing pilots undertake an advanced course with No 2 Flying Training School at RAAF Base Pearce, WA, during which they fly 130 hours in the PC-9/A.

PC-9/A(F)

Forward Air Control Development Unit at RAAF Base Williamtown, near Newcastle, NSW, uses the aircraft to train Joint Terminal Attack Controllers (JTAC).

In the JTAC role, there are four modified PC-9/A(F) aircraft in grey paintwork fitted with smoke-grenade dispensers for target marking.

The PC-9/A, designed by Pilatus of Switzerland, and built under license by Hawker de Havilland in Sydney, was introduced into the Royal Australian Air Force in 1987, with pilot training in the aircraft commencing in 1989.

Weapons	Two underwing smoke grenade launchers
Manufacturer	Pilatus/Hawker de Havilland
Role	Two-seat advanced trainer; forward air control and aerobatics
Engine	Pratt and Whitney PT6A-62 turboprop (950shp)
Airframe	Length: 10.2m, height: 3.3m
Wingspan	10.2m
Weight	3210kg max
Range	1,850km (with two underwing tanks), combat radius 650km
Ceiling	25,000 feet
Avionics	VHF omni-directional range/instrument landing system, two multi-functional cathode ray tube displays

HAWK 127

Pic Leading Aircraftwoman Kylie Gibson

The Royal Australian Air Force ordered 33 Hawk 127 Lead-in Fighters in June 1997, 12 of which were produced in the UK and 21 in Australia.

Hawk 127 is primarily used for initial or lead-in fighter training to prepare aircrew for operational conversion to the F/A-18 Hornets.

It is operated by No. 76 Squadron at RAAF Base Williamtown, near Newcastle, and No. 79 Squadron at RAAF Base Pearce, near Perth.

Hawk 127 is a low-wing, all-metal aircraft, fitted with an integrated navigation and attack system and powered by a single Rolls-Royce Turbomeca Adour Mk 871 turbofan engine.

It features advanced avionics and displays so that the transition from Hawk to Hornet is smoother.

A head-up display in the front cockpit and three-colour multi-function displays in each cockpit present a range of flight information, from aircraft performance and attitude through to equipment status reports.

Hawk 127's armament system provides for the carriage, aiming and release or firing of practice and Mk 82 bombs, AIM-9M Sidewinder missiles and a 30mm cannon carried in a pod. Stores