



SOUTH AUSTRALIAN AVIATION MUSEUM

Aircraft Profile

McDONNELL DOUGLAS / BOEING F/A-18A HORNET A21-32

Single seat Twin engine Multi-role Combat Jet



History of A21-032

A21-032 was ordered in November 1981 and was built as a Block 21 A model F/A-18 Hornet. This aircraft and A21-101, a 2 seat F/A-18B, were constructed with full test instrumentation included. A21-032 was delivered to the RAAF on 16 August 1988 and was displayed at the Laverton airshow that year.

A21-32 served with 81WG until 1991 when it was transferred to the Aircraft Research and Development Unit at RAAF Base Edinburgh where it was used for the next 25 years as a test and trials aircraft. It was involved in the development and testing of a range of systems and weapons including the AGM-158 JASSM (Joint Air-to-Surface Standoff Missile) and the JDAM (Joint Direct Attack Munition). A21-32 subsequently returned to 81WG and was retired from operational service on 16 December 2020.

On retirement from the RAAF, A21-32 was allocated by the RAAF History and Heritage Branch to SAAM and arrived at SAAM in June 2022. It is now on display in Hangar 1 alongside our F-111C (also ex-ARDU).





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HISTORY OF TYPE

The F/A-18 Hornet replaced the Mirage IIIO fighter in Australian service from 1985, as a result of the 'Tactical Fighter Project (TFP)' which considered a number of aircraft including the F-15 Eagle, F-16 Fighting Falcon, Mirage 2000 Panavia Tornado and the Northrop F-17 Cobra which evolved in to the F/A-18.

The Australian Government contracted to buy 75 F/A-18 aircraft, consisting of 57 single seat F/A-18A (serials A21-001 – A21-057) and 18 dual seat F/A-18B (serials A21-101 – A21-118), as well as support equipment, simulators and training equipment. The aircraft were to be assembled in Australia by Government Aircraft Factory at Avalon, with engines produced by Commonwealth Aircraft Corporation at Fisherman's Bend; a number of other Australian companies were also involved in the project. The 75 aircraft were delivered to the RAAF between 1985 and 1990.



Hornets were operated by three RAAF squadrons, 3SQN (RAAF Williamtown), 75SQN (RAAF Tindal) and 77SQN (RAAF Williamtown) as well as 2OCU (RAAF Williamtown). The two test-instrumented aircraft were also allocated to the Aircraft Research and Development Unit (ARDU) at RAAF Base Edinburgh.

From 1999 the Hornets have undergone a number of upgrades to maintain their operational effectiveness, including upgrades to communications, navigation, radar and avionics as well as structural upgrades to a standard broadly equivalent to the F/A-18C..

RAAF Hornets have been operationally deployed on a number of occasions since 2001, including undertaking escort to airborne tankers over Iraq in 2003 and close air support sorties in support of coalition ground forces. More recently Hornets have undertaken combat operation in support of Operation OKRA against ISIS, with detachments from each of the Hornet squadrons deployed in six month rotations.



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Retirement of the F/A-18A and F/A-18B fleet - referred to as the 'Classic Hornet' - began in 2018, with the last aircraft retired in late 2022.

Technical Specifications

Engines : 2 General Electric F404-GE-400 low bypass turbofans each producing 4808 kg (10,600 lb) thrust (dry) or 7257 kg (16,000 lb) with afterburner;

Maximum Airspeed : In excess of Mach 1.8 (1,910 km/hr / 1,187 mph);

Ceiling : In excess of 215,240 m (50,000 ft);

Range : Ferrying over 3,700 km / 2,300 miles (without refuelling); Interdiction over 1,000 km / 625 miles; Combat Radius 740 km / 460 miles;

Weights : Empty 10,455 kg (23,050 lb); maximum loaded 25,400 kg (56,000 lb);

Length : 17.07 m (56 ft); **Wingspan :** 12.31 M (40 ft 5 in); **Height :** 4.66 m (15 ft 4 in);

Armament : AIM-120 Advanced Medium Range Air-to-Air missile (AMRAAM)

AIM-132 Advanced Short Range Air-to-Air Missile (ASRAAM)

AIM-7 Sparrow

AIM-9 Sidewinder

Conventional and Laser Guided Bombs

Joint Direct Attack Munition (JDAM) and Laser JDAM

AGM158 Joint Air-to-Surface Stand-off Missile (JASSM)

Nose-mounted M61 20mm cannon;

Avionics : Mission Computers

Helmet Mounted Cueing System

Heads-up Displays

Radar and Infrared Sensing and Targeting Systems

Electronic Warfare and Infrared Self Protection Systems;

Crew : 1 pilot (F/A-18A)