

# General Dynamics F-111C

## A8-142

The F-111 provided the Royal Australian Air Force (RAAF) with one of the world's greatest long-range strike aircraft. F-111 A8-142 served from December 1968 and was retired from RAAF service in 2010.

F-111 A8-142 first flew on 18 December 1968; however, due to metal fatigue it was not received by the RAAF until 1 October 1973.

In 1974, A8-142 was used to re-enact the <u>1924 flight around Australia</u> as undertaken by Wing Commander Jimmy Goble and Flying Officer Ivor McIntyre in a Fairey IIID seaplane. While the original tour had taken 90 hours in flight over 44 days, A8-142 accomplished the task in 12½ hours. The <u>commemorative flight</u> was undertaken by pilot Wing Commander Ray Funnell and navigator Squadron Leader John Miller.

A8-142 served with Nos 1 and 6 Squadrons in open days, military exercises (including Pitch Black in Australia and Exercise Red Flag 2002 in the United States) and flying displays in Australia, the United Kingdom and New Zealand.

A8-142 retired in 2010. The aircraft was initially stored at RAAF Amberley in Queensland and was later assigned to RAAF Wagga in NSW. It has been on display in the Wagga Aviation Heritage precinct since November 2016.

### **Technical Specifications**

DESCRIPTION: Supersonic long-range precision strike aircraft; crew of two.

POWER PLANTS: Two 43.6kN (9,800lb) dry thrust or 82.3kN (18,500lb) with afterburner Pratt & Whitney TF30-P-103 or TF30-P-109 turbofans.

DIMENSIONS: Span (fully extended) 21.34m (70ft 0in); (fully swept) 10.35m (33ft 11.5in); overall length (including nose probe) 23.03m (75ft 6.5in); height 5.22m (17ft 1.5in).

WEIGHTS: Empty (with Pave Tack) 24,270kg (53,505lb); max loaded 51,845kg (114,297lb).

ARMAMENT: Four Harpoon anti-ship missiles; combinations of Mk.82 and Mk.84 bombs or Paveway II laser-guided bombs with AIM-9 Sidewinder air-to-air missiles. Also capable of delivering GBU-15 electro-optical glide bombs or AGM-142 stand-off missiles.

PERFORMANCE: Max speed Mach 1.1 (1345km/h/836mph) at sea level, Mach 2.4 (2550km/h/1584mph) at 12,190m (40,000ft); range cruise 778km/h (483mph); initial climb at max weight 853m (2800ft)/min; max climb at combat weight 7010m (23,000ft)/min; service ceiling (loaded) 15,240m (50,000ft); max unrefuelled range 5950km (3697 miles).

### **General Dynamics F-111C**

In 1963, the Australian Government made the decision to procure the General Dynamics F-111C as a replacement for the ageing Canberra bomber. Australia was the only foreign customer of the F-111. Originally designed as a common platform to meet the diverse requirements of the United States Navy and United States Air Force, the F-111 proved to be an exceptional long-range strike aircraft.

The F-111C was the first aircraft to use swing-wing or variable geometry technology, enabling it to achieve high speeds and low landing speeds. With the ability to fly at altitudes of up to 50,000 feet (15,240 metres) at speeds of Mach 2.5, the F-111C was the fastest aircraft ever operated by the RAAF. Equipped with afterburning turbofan engines and automatic Terrain Following Radar mode, it could perform blind precision attacks and penetrate hostile airspace at extremely low altitudes.



A8-142 carrying four 500lb MK82 laser guided bombs while serving with No 1 Squadron in September 1992. Source: ADF Serials

To enhance its operational effectiveness, the RAAF modified its F-111C fleet over the years. The installation of AN/AVQ Pave Tack targeting pods allowed for the use of guided weapons such as smart bombs and Harpoon anti-ship missiles. The avionics were upgraded from analogue to digital under the Avionics Update Program, providing improved accuracy, reliability and electronic-warfare capabilities. Additionally, surplus F-111G airframes were acquired, serving as training aids and sources of spare parts.

The F-111C played a vital role in the RAAF's Strike Reconnaissance Group and later Air Combat Group. Its long-range all-weather strike capabilities and versatility made it suitable for maritime and land strike missions.

By 2010, the increasing costs of sustaining the ageing F-111 fleet, coupled with the limitations of its capabilities in a rapidly evolving aviation landscape, led to its retirement. The last flight of an F-111G took place in September 2007, followed by the final flight of the F-111C in RAAF service on 3 December 2010. Today, 12 preserved F-111s are on display across Australia.

The F-111C became the longest-serving bomber/strike aircraft in the history of the RAAF, with a service life spanning 37 years.

#### Sources

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