



## South Australian Aviation Museum

### *Aircraft Profile*

#### **FOKKER F27-109 FRIENDSHIP VH-CAT**

*Twin engine passenger transport or survey aircraft*

#### **History of VH-CAT**

The aircraft first flew at Amsterdam in September 1959. It was handed over to the Department of Civil Aviation and continued in Government service until 31 March 1978. In July 1978 it was transferred to the CSIRO Division of Cloud Physics in Tamworth and named *Cyrano*. CSIRO used the F27 for various atmospheric research projects.

In November 1993 the aircraft was taken over by Australian Flight Test Services (based at Mawson Lakes) and it went to Parafield. VH-CAT continued in a research and flight testing role until 2001. Following an ownership change, it fell into disuse and was ultimately disposed of by Parafield Airport to SAAM in February 2008. The aircraft was moved from Parafield Airport to the Museum on 13 December 2008.

Two RR Dart engines and propellers were obtained and various cockpit instruments were located to complete the aircraft's restoration. In 2013 the CSIRO kindly donated various items of equipment and external probes to partly restore the aircraft back to its flight testing days.





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### **FOKKER F27-109 FRIENDSHIP VH-CAT – Research Flying**

The Friendship was fitted with probes to collect data for atmospheric experiments. Many of these probes have been refitted and show how the aircraft appeared.

The cabin of the aircraft was fitted with many racks of sensing and recording equipment. This enabled scientists to carry out their work in flight.





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### **History of Type**

In the 1950s the Fokker Aircraft Company in The Netherlands started on a design for a replacement of the renowned Douglas DC-3. The project was known as the P275, powered with Rolls-Royce Dart turboprops and featuring a shoulder wing and 32 seats. The aircraft was later developed to the 40-seater F27, with a range of 483 km (270 nm) in 1952. The first of two prototypes flew on 24 November 1955, and the second on 29 January 1957. The first prototype was fitted with Dart 507 engines, but a second one had Dart 511s and a 0.9 m (3 ft) longer fuselage. The latter aircraft was adopted for production aircraft. Several different variants were produced from the basic aircraft (the F27-100). The Mk200 had more powerful Mk528 Darts and increased weight; the Mk300 a large freight door in the forward fuselage, the Mk400 was the Mk300 but with Dart 528s; the Mk500 fuselage was lengthened 1.5 m (4 ft 11 in); and lastly, the Mk600 was a Mk400 with Mk528 Dart engines and the large freight door, but without the all metal, watertight freight floor. The Fairchild Corporation also built F27s in the USA, which were designated the F27 and FH227 (lengthened).

**For a more detailed History of Type (prepared by the SAAM History Group),**  
[click here](#).



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### **Technical Specifications**

Engines: 2 x Rolls-Royce Dart 510 turboprops

Maximum take-off weight: 18,150 kg

Length: 23.1 m

Wingspan: 29 m

Height: 8.51 m

Cruising speed: 208 kt (395 kph)

Range: 1,300 nm (2,335 km)

Crew: 2 pilots and specialist technical crew

Capacity: 32 seats (airliner version)