Boeing 707 Tanker/Transporter

The Boeing 707 (B707) was a narrow-bodied commercial aircraft that helped change the way the world traveled. Its introduction was based on the vision of Boeing Company president William Allen and his management team, who believed the future of commercial aviation was jets.

The B707 design was based on the 367-80, known as the Dash 80, which the company's board committed $16 million to developing in 1952. It was used for press and customer flights and an advertising campaign promoting the comfort and safety of jet air travel.

Before entering service with Pan Am in 1958, the B707 underwent rigorous testing to prove the safety of commercial jet airliners following a number of catastrophic accidents with the world's first jet aircraft, the de Havilland Comet.

Boeing delivered 856 Model 707s in all versions between 1957 and 1994; of these, 725, delivered between 1957 and 1978, were for commercial use. Boeing designed 707 variants for different customers, including special long-range models for Qantas.

The Royal Australian Air Force (RAAF) operated a fleet of six B707s – two VIP/long-range transport aircraft, capable of carrying cargo or up to 160 passengers, and four tankers for aerial refueling. They were initially operated by No. 37 Squadron at RAAF Base Richmond in New South Wales before they were formed into No. 33 Squadron at RAAF Base Amberley in Queensland.

In 2002, the RAAF sought Boeing Australia Limited's (Boeing Australia) expertise to repair two B707s, A20-623 and A20-624, which were suffering significant cracking in the major structural floor beams that support the main landing gear. The aircraft were due to be decommissioned, however Boeing repaired both at RAAF Base Amberley within a tight schedule and on budget. This allowed the RAAF B707 refuellers to support allied forces in Operation Enduring Freedom in Afghanistan, where they refuelled French Mirage and U.S. Navy F/A-18 jets.

The success of the repair resulted in Boeing Australia being awarded a sole source contract for the deeper maintenance of the fleet in 2002. Shortly after, the company secured the through-life logistics support contract, which included activities associated with the fleet's transfer/disposal up until the B707's retirement in 2008. The first aircraft to undergo a deeper maintenance servicing, A20-629, was returned to the RAAF in February 2004, with the final aircraft, A20-624, was completed in February 2007.

The RAAF's B707 VIP/transporter role was retired in 2002 and replaced by the Boeing 737 Business Jets and Bombardier Challenger 604s, followed in June 2008 by the remainder of the fleet.

TECHNICAL DATA: Boeing 707 Tanker/Transporter

Power plant	Four 8165kg (18 000lb) thrust Pratt & Whitney JT3D-3 turbofans
Span	44.42m (145ft 8in)
Length	46.61m (152ft 11 in)
Height	12.93m (42ft 5 in)
Empty weight	66,406 kg (146,400 lb)
Loaded weight	151,315 kg (333,600 lb)
Maximum speed	965km/h (521kt)
Range	6,920km (3736nm) with max. payload
Service ceiling	39,000ft (11,885m)
Armament	NIL