



Rolls-Royce RB53 Dart

This long-lived British turbo-prop engine was designed, built and manufactured by Rolls-Royce in the late 1940s. It powered the first Vickers Viscount's on it's maiden flight in 1948, and was in production until 1987. The RAF used it in the Andover and the Argosy and 2 of the latter were used on Halton's airfield to train apprentices in the ground running of multi-engined aircraft.

General characteristics

Type: Turboprop
Length: 97.6 in (2480 mm)
Diameter: 37.9 in (960 mm)
Dry weight: 1,207 lb (547 kg) (dry)

Components

Compressor: 10 stage axial flow
Combustors: 6 combustion chambers
Turbine: 2 stage
Fuel type: Kerosene
Oil system: Self contained, 25 pint(14L) oil tank

Performance

Maximum power output: 1,815 ehp (1,354 kW) (1,630 shp (1,220 kW)) at 15,000 rpm
Overall Pressure Ratio: 5.62:1
Air Mass flow: 23.5 lb/sec (10.66 kg/s)
Specific Fuel Consumption: 0.581 lb/ehp/hr
Power-to-Weight Ratio: 1.35shp/lb (2.48 kW/kg)



Armstrong Whitworth Argosy

Given to the Trenchard Museum by 55 Squadron, this engine has been restored by Mr Mick Burton