



Armstrong Siddeley Mamba

This British turboprop engine was produced in the late 1940s to replace piston engines such as the *Merlin*. The Mamba was a compact engine with a 10-stage axial compressor, 6 combustion chambers and a two-stage power turbine with its epicyclic reduction gearbox incorporated in the propeller spinner. Engine starting was by cartridge. Although tested in the RAF's Boulton Paul *Balliol* advanced trainer it was only used in the Fleet Air Arm's Shorts *Seamew*. However, when twinned to produce the *Double Mamba* it proved very successful in the Fairey *Gannet*.

General characteristics

Compressor: 10 stage axial flow
Combustors: 6 combustion chambers
Turbine: 2 stage

Components

Type: Turboprop
Length: 87.3 in (2217.4 mm)
Diameter: 29 in (737 mm)
Dry weight: 780 lb (354 kg)

Performance

Maximum power output: 1,320 shp plus
 405 lbf (1.80 kN) thrust (1,475 eshp)
 Overall Pressure Ratio: 5.35:1
Air Mass flow: 18.5 lb/s (8.4 kg/s)
Specific Fuel Consumption: 0.8 lb/h/eshp
Power-to-Weight Ratio: 1.9 esh p/lb



Balliol



Gannet

Originally presented to the RAF College by Armstrong Siddeley this engine came to the Trenchard Museum after the closure of Engineer Officer Training at Cranwell