

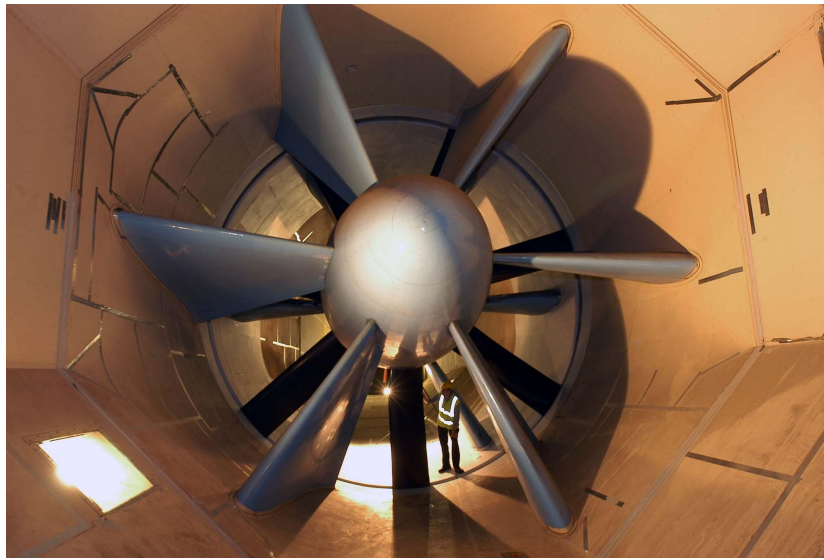
# Airbus Filton Low Speed Wind Tunnel

## NWTF Tunnel Managers Forum

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15 November 2023

# Airbus Filton 12' x 10' Low Speed Wind Tunnel

Airbus Amber



The Airbus Filton LSWT is of the Göttinger type, closed return circuit design, powered by an rpm controlled motor.

Construction of the wind tunnel commenced in 1954 and was commissioned in **1956**.

Test section dimensions: **3.65m x 3.05m x 8.5m** (12 ft x 10 ft x 28 ft) with corner fillets which reduce the cross section to octagonal.

Power: **1.6 MW**

Contraction ratio: **6.65**

Speed range: **0 to 97m/s**

In **2004** the existing wooden blades of the 7 bladed fan and the hub were replaced with carbon fibre blades with sacrificial tips incorporated in the design. The following year, the two existing wire gauze turbulence screens were replaced with a single screen in conjunction with a honeycomb flow straightener. In **2013**, a cooling matrix and its associated cooling plant was installed in the main diffuser.

**Force & Moment:**

**Underfloor Loadcell Balance  
[ATE-Aerotech]**

**O.N.E.R.A Internal Balance  
120 No 5**

**RUAG Internal Balance  
196-6C**

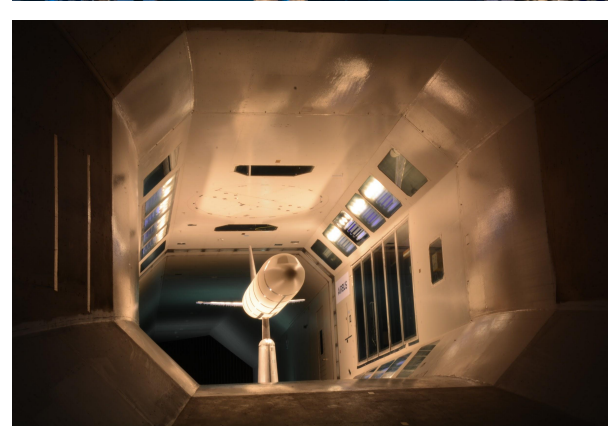
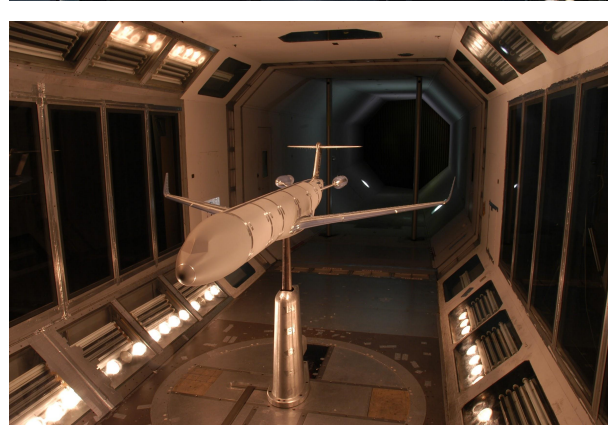
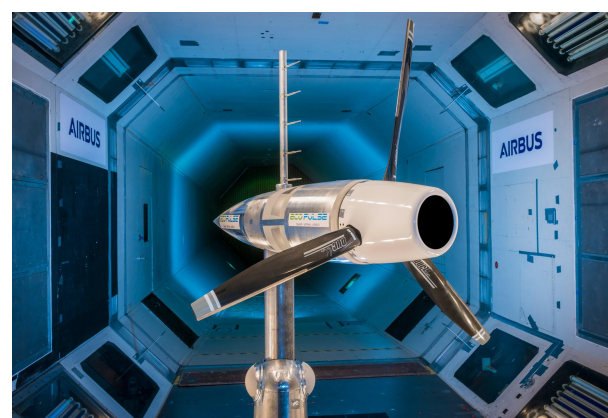
**RUAG Block Balance 796-6E**

**Optical Techniques:**

**Particle Image Velocimetry  
[LA Vision]**

**Pressures:**

**DTC Initium**



# Thank you

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