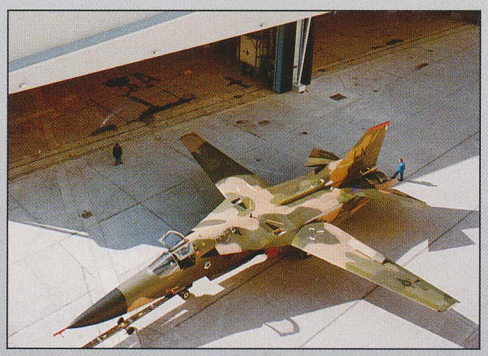
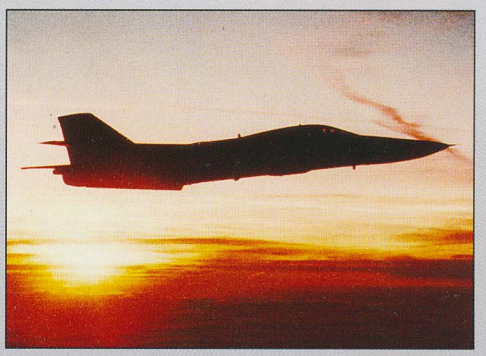
# FOCUS ON FILTON





# F-111

## Servicing the front line

*British Aerospace, Filton, carries out the major servicing of all United States Air Force F-111 fighter bombers based in Britain as part of the NATO defence force. Filton is now engaged in its second five year contract for a work programme which effectively amounts to re-lifing the swing wing aircraft.*

*From small beginnings in 1978 the number of maintenance tasks put to Filton has grown rapidly, to the point where no British-based F-111 needs to return to the United States for maintenance at anytime during its operational life in this country.*

*Filton's involvement began as a result of the need to establish an in-theatre maintenance facility which would reduce out of service time for the aircraft. It also represented a major saving in the time and money previously spent flying the aircraft back to Sacramento.*

*The workload commenced on a small scale with a contractors working party being sent to Lakenheath to change aircraft windscreens.*

*Today, most of the tasks revolve around a strip, inspect and rebuild cycle. Major components, such as the swing-wings and horizontal stabilisers are removed. Anything found at inspection in specific areas which needs repair receives the necessary attention. The aircraft's engines are also removed and returned to the air bases for maintenance.*

*As well as occupying a large portion of the site's main aircraft assembly hall, the growth of this project has led to the acquisition of several new facilities. An additional workshop has been commissioned to specialise in the servicing of major components such as the swing-wings, which have been removed from the aircraft.*

*A multi-million pound cold proof test station was completed in 1986. Aircraft entering the test chamber are cooled down to −40° centigrade and submitted to a series of tests designed to highlight any structural imperfections. The combination of loads and low temperatures will simulate the worst conditions that any aircraft will encounter in flight.*

*In addition, a two-bay hanger has been built to support the F-111 maintenance activities, providing a safe environment to carry out fuel system testing, refuelling and defuelling under cover.*

*A purpose-built paint bay has also been commissioned, enabling Filton to offer a comprehensive maintenance package.*

*The programme is monitored by a USAF and civilian detachment on site who accept the completed aircraft on behalf of the customer. British Aerospace itself has a dedicated team based in Sacramento to assist in the acquisition of spares to support the Filton programme.*

F-111 undergoing structural testing in the Cold Proof Test Chamber.

F-111's line up inside Filton's aircraft assembly hall.

# F-111

## F-111F

| | |
|---|---|
| Engine | Pratt & Whitney TF30-P-100 |
| Inlet | Triple Plow 2 |
| Take-off thrust | 21,100lb (11,385kg) |
| Wingspan 16° | 63ft (19.2m) |
| Wingspan 72½° | 31ft 11½in (9.74 sq. m) |
| Wing area 16° | 525sq.ft. (48.78 sq. m) |
| Fuselage length | 75ft 6½in (23.03m) |
| Height | 17ft 0½in (5.19m) |
| Fuel (internal) | 4,184 gal (19,020lt) |
| Weight (empty) | 47,481lb (21,537kg) |
| Take-off max weight | 100,000lb (45,360kg) |

AIRBUS DIVISION

BRITISH AEROSPACE COMMERCIAL AIRCRAFT

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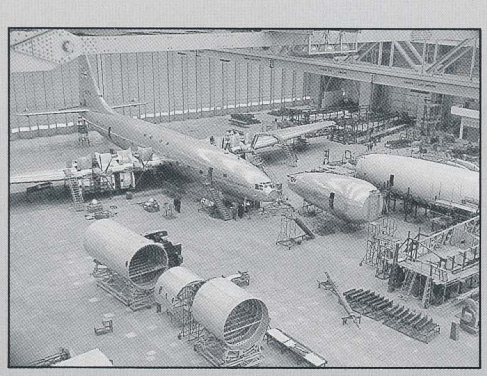


Bristol

# Brabazon

*The Bristol Brabazon was the largest piston-engined airliner ever built. Its origin was in one of the recommendations of the wartime Brabazon Committee. The largest type of aeroplane recommended by the Committee was an airliner capable of flying a London–New York service without refuelling stops. The task of designing and building this aircraft was assigned to The Bristol Aeroplane Company Limited, and the first drawings were issued in April 1945.*

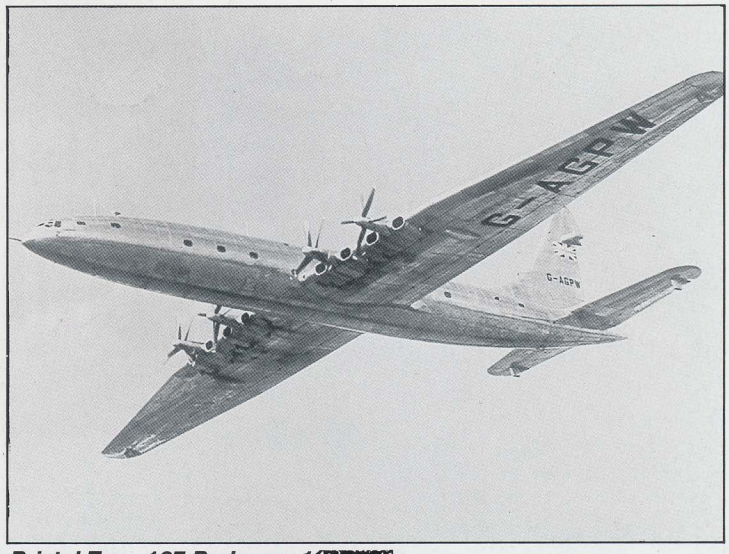
*While work on the aircraft itself proceeded a huge new Assembly Hall was erected in which the final assembly of the airframe was carried out.*

*Following a year of ground testing, the Brabazon 1 made its first flight on September 4th 1949 with Mr A J (Bill) Pegg, then the Company's Chief Test Pilot, at the controls. Brabazon 1 obtained its Certificate of Airworthiness on the 14th June 1950.*

*While this aircraft was engaged on flight development, work started on a second machine, to be powered by Bristol Proteus turboprop engines and incorporating many structural refinements. However, following a government decision in 1953, this machine was never completed and the Brabazon project was abandoned.*

*Although the Brabazon never entered service, the project proved of incalculable value to Bristol and to the whole of the British aircraft industry. In designing and building this huge aeroplane, much was learned about the reduction of structure weight etc., which made possible the construction of the Britannia.*

*The Brabazon was powered by eight Bristol Centaurus 2650 hp engines coupled in pairs to drive contra rotating Rotal airscrews.*



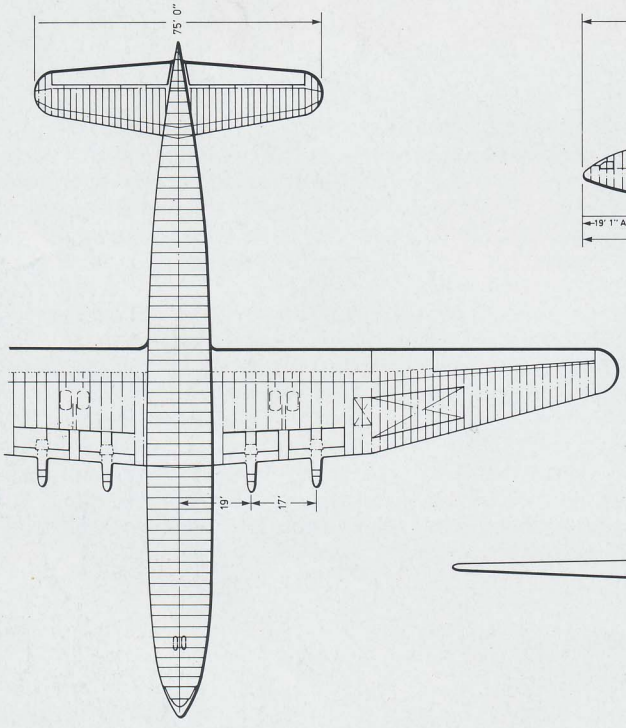

*Bristol Type 167 Brabazon 1*

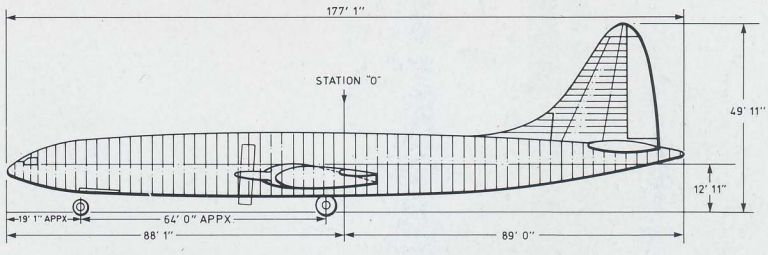
## LEADING PARTICULARS

| | | | | |
|---|---|---|---|---|
| **Engines:** | **Eight 2650hp Bristol Centaurus 20 air-cooled radial engines driving paired three-bladed Rotol airscrews, 16ft in diameter.** | | | |
| **Dimensions:** | **Length:** | **177ft** | **Wing Area:** | **5,317 sq.ft.** |
| | **Span:** | **230ft** | **Max. Take-off Weight:** | **290,000lb** |
| | **Height:** | **50ft** | | |

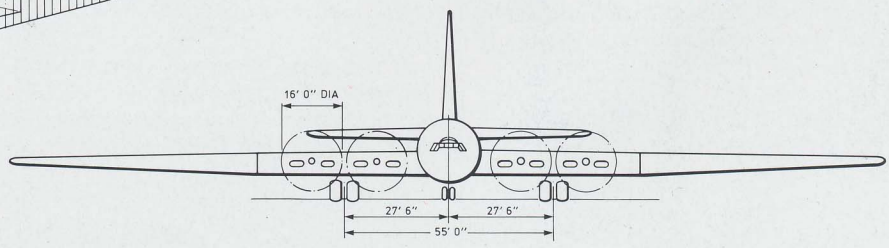
| **BRABAZON PRODUCTION** | **Construction No.** | **Registration** |
|---|---|---|
| | **12759** | **VX206/G-AGPW** |
| | ***12870** | **VX343/G-AIML** |

***Scrapped before completion**




Brabazon

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