

BRITISH AEROSPACE

Hatfield '84



Open Day Programme

Price 60p

Aircraft Group Site



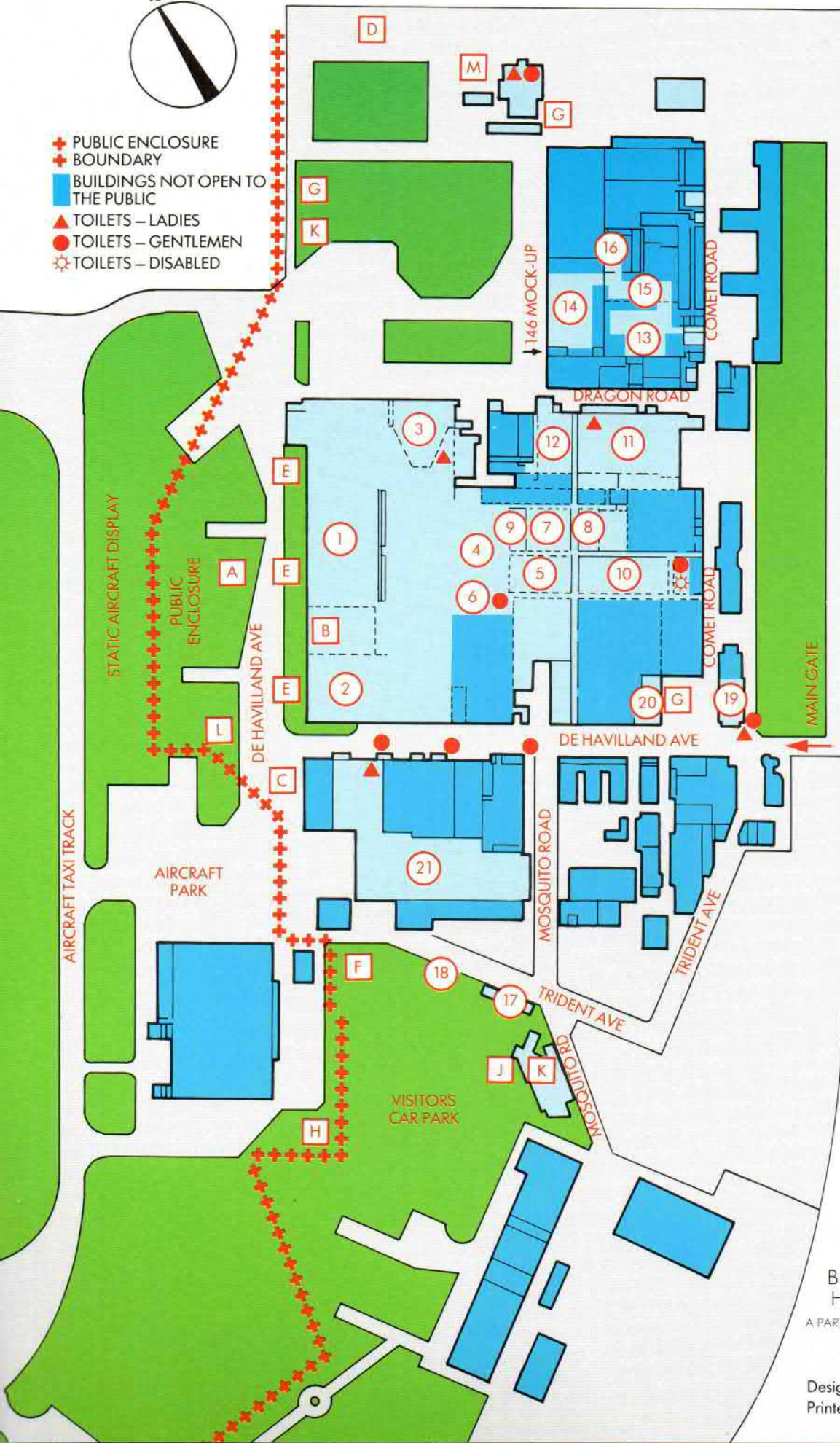
- + PUBLIC ENCLOSURE BOUNDARY
- BUILDINGS NOT OPEN TO THE PUBLIC
- ▲ TOILETS – LADIES
- TOILETS – GENTLEMEN
- ♿ TOILETS – DISABLED

BUILDING OPEN TO THE PUBLIC

- 1 – Aircraft assembly area
- 2 – New Machine shop
- 3 – Aircraft paint shop
- 4 – D.A.D.2
- 5 – E.S.A. Avionics
- 6 – Redux dept.
- 7 – D.A.D.1
- 8 – Upholstery
- 9 – Training module
- 10 – Production engineering and safety
- 11 – Press and foundry
- 12 – Metal form shop
- 13 – Systems test
- 14 – Mock-up shop
- 15 – Tech. services
- 16 – Structural test
- 17 – Sales centre with Film Shows
- 18 – DeHavilland Museum
- 19 – Restaurant — Lunch tickets on sale during the morning
- 20 – Surgery
- 21 – Machine Shop

DISPLAYS AND AMENITIES

- A — Outside Exhibitions
- B — Bandstand
- C — Fire Brigade Exhibition
- D — Children's Corner
- E — Snacks, Beverages and Ices
- F — Ices
- G — First Aid
- H — Aircrew Briefing
- J — Company Guests and aircrew
- K — Restaurant (Advanced booking only)
- L — Lost Child Centre
- M — Sports Club



British Aerospace Aircraft Group
Hatfield, Hertfordshire AL10 9TL

A PART OF BRITISH AEROSPACE PUBLIC LIMITED COMPANY

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Welcome



BRIAN THOMAS, GROUP DIRECTOR-HATFIELD

I would like to extend a very warm welcome to all of you visiting the factory to-day.

This is my first year at Hatfield and, equally, I am looking forward to to-day's programme and the opportunity of meeting many of you when you tour the facilities.

Since our last Open Day some fairly significant developments have taken place especially in relation to the B.Ae. 146 programme.

Firstly, we achieved a major success when Pacific Southwest Airlines of San Diego ordered 20 of our aircraft last Autumn. This order, worth some two hundred million pounds, also included an option for a further 25 aircraft and therefore made it the largest civil aircraft order won by British industry for 20 years. The first of these aircraft were delivered to P.S.A. during early June and are now in service with the airline in California.

Secondly, in February of this year British Aerospace announced a major reorganisation of its Civil aircraft activities which culminated in the formation of a new Civil Aircraft Division, of which Hatfield, in addition to being one of its major sites, has been elected as the Headquarters location.

Following this reorganisation I came to Hatfield to head up the Management team, having spent the last three years at B.Ae.'s Scottish Division at Prestwick where I was Managing Director.

To-day, you will have the opportunity of seeing not only some of the products of our new Civil Division but also aircraft built by our other Military Divisions within the Company.

I came to Hatfield aware of the opportunities now facing our new organisation with a determination that Hatfield will make the most of these challenges. In the 146 we have an aircraft offering significant attractions to airlines around the world and it is our collective responsibility to ensure that we obtain at least our fair share of that quite large market.

For many years, indeed since before the War, the name Hatfield has been synonymous world-wide with excellent aircraft. I am certain that, together, we have every intention of ensuring it stays that way.

As you tour the various parts of the factory to-day you will see considerable evidence of these programmes.

May I wish you all a most enjoyable day.

A handwritten signature in blue ink that reads "Brian Thomas". The signature is written in a cursive, flowing style.

BAe 146

The BAe 146 is a new generation, short haul feederjet which is built in two versions, the 100 series, seating between 82 and 93 passengers, and the 200 series, seating between 100 and 111, both of which are built side by side at Hatfield.

The 146 brings to its operators the advantages of a very quiet, economical aircraft, thanks to the Avco Lycoming ALF 502 turbo fan engines, and the highly efficient wing which utilises design features pioneered by British Aerospace for other successful types, such as the Airbus.

Although the 146 is finally assembled here at Hatfield, major assemblies are supplied by other British Aerospace factories at Filton, Weybridge, Manchester, Brough and Prestwick. In addition, we have two major overseas partners, Avco Aerostructure, in the U.S.A., who supply the wings, and SAAB Scania of Sweden, who build the tailplane and control surfaces.

The first 146 flew in September 1981 and was immediately involved in an intensive test programme. Aircraft 001 was soon joined on test by aircraft numbers 002, 003 and 008 (the first 200 series), all of which were fully instrumented development aircraft, carrying out the many hours of flying required to obtain certification. In late 1982 aircraft 004 joined them to fly a rigorous programme of route proving flights, to prove the reliability of the aircraft in service.

Whilst certification flying continued at Hatfield, aircraft 005 came into service as a demonstrator, and in October 1982 it embarked on the 146's first world tour, spending seven weeks in the Far East demonstrating to airlines in Japan, Australia, Malaysia, the Philippines, India and Pakistan. During this tour the 146 demonstrated its ability to fly, with great ease, from airfields which had never before been used by a jet aircraft. This tour was followed by another to Africa in February 1983.

The reward for the vigorous development flying came in March 1983 when both the series 100 and series 200 aircraft were awarded type certification, and deliveries commenced with 006 being put into service by Dan-Air in May, closely followed by their second aircraft, 007. By the end of 1983 ten 146's were in service in four different continents.

In November 1983 Pacific Southwest Airlines (PSA), of California announced an order for 20 146-200's with an option for a further 25. This was the largest order for a civil aircraft received in the UK for over 20 years. A major factor in the airline's decision was the fact that the 146 is the world's quietest jetliner, and PSA operate from some of North America's most noise sensitive airports.



Air Wisconsin was the first American operator of the 146. This photograph shows their second aircraft.



BAe 146 pays its first visit to Rio De Janeiro.

Since this order was placed aircraft 002 has been refurbished as a company demonstrator and in March this year carried out a sales tour of the United States. It was then delivered to PSA, where it was used for 2 months of intensive crew training, before returning to the UK in preparation for another tour of the Far East.

The 146 has now been chosen by operators from 5 continents of the world, with 13 aircraft in service to date with Dan-Air, The Royal Air Force, Air Wisconsin, Republic of Mali, PSA, TABA of Brazil and AIRPAC of Alaska. In addition to these aircraft in service, the 146 has also been ordered by Ansett of Australia.



The BAe 146 flying over the Victoria Falls during its African tour.



A BAe 146 in Royal Airforce livery.



The Airpac BAe 146-100 is seen here landing at Dutch Harbor, a community of Unalaska, in the Aleutian Island chain of Alaska. The 146 was the first four jet aircraft to land on Dutch Harbor's 3900 foot long runway.

BAe 125-800

The British Aerospace 125 was first seen publicly at Farnborough in 1962, and first went into service in July 1963. Since then the 125 has been sold in many different versions the latest being the Series 800. Total sales of all types of this highly successful business jet now exceed 580, making it the most popular jet of its size, in the world.

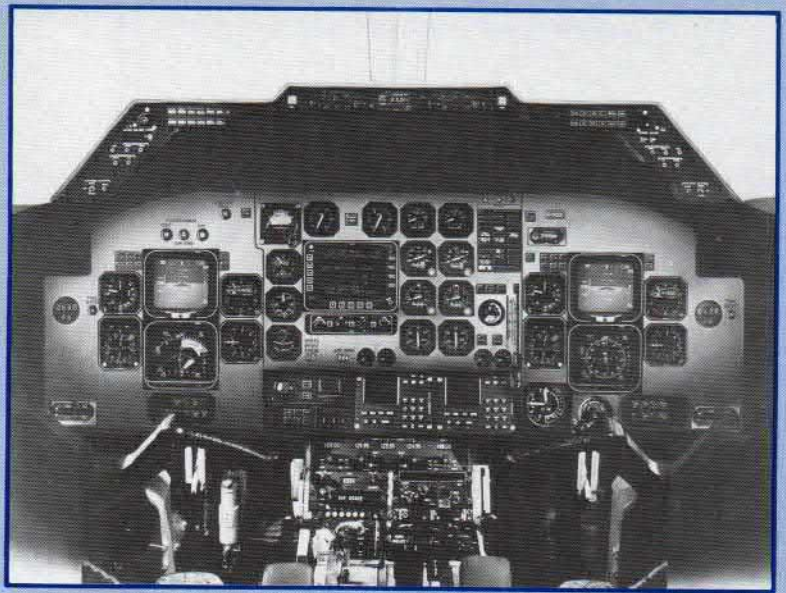
The 125 is designed and marketed here at Hatfield, with production taking place at Chester.

The 125-800 was rolled out and flown at Chester in May last year, taking the market by surprise, as development of this aircraft had been kept a closely guarded secret whilst its assembly took place.

The 125-800 is powered by the powerful and efficient Garrett TFE731-5 fan engines, which, combined with extra fuel tankage and new technology wings, give the aircraft a range of 3000 nautical miles, with a much improved performance over previous types.

The flight deck of the 125-800 has a new curved windscreen giving a wider cockpit and reduced noise levels inside. Standard flight instruments have also been replaced by T.V. display type instruments (EFIS). The new style "wide-body" cabin of the 800 gives its 8 to 10 passengers true V.I.P. comfort.

The 125-800 received its type certification in May this year and to date 15 of this type have been sold.



BAe 125 Series 800 flight deck.



BAe 125 Series 800 interior.



The BAe 125-800 demonstrator.



The BAe 125-800 demonstrator.

Airbus Family

British Aerospace are full decision making partners in the European Airbus consortium which trades under the name of Airbus Industrie.

The Airbus Family currently consists of three types of aircraft. Two are in full production and airline service, the 260 to 300 seat A300, and the 210 to 280 seat A310. The third, the 150 seat A320, is in detail design stage.

The wings for the A300 and A310 are finally assembled at our Chester factory, from components which are manufactured at various BAe sites throughout the country. At Hatfield we machine the large one piece wing spars and undercarriage attachment ribs, as well as the manufacture of various shroud panels for the wings.

The wings are transported from Chester to the final assembly line in Toulouse, South of France, by a Super Guppy Freighter aircraft, a fleet of which are used to transport assemblies to Toulouse from all around Europe.

The latest addition to the Airbus family is the A320, which was given the go ahead in March this year and once again British Aerospace will be responsible for the wing design and manufacture.

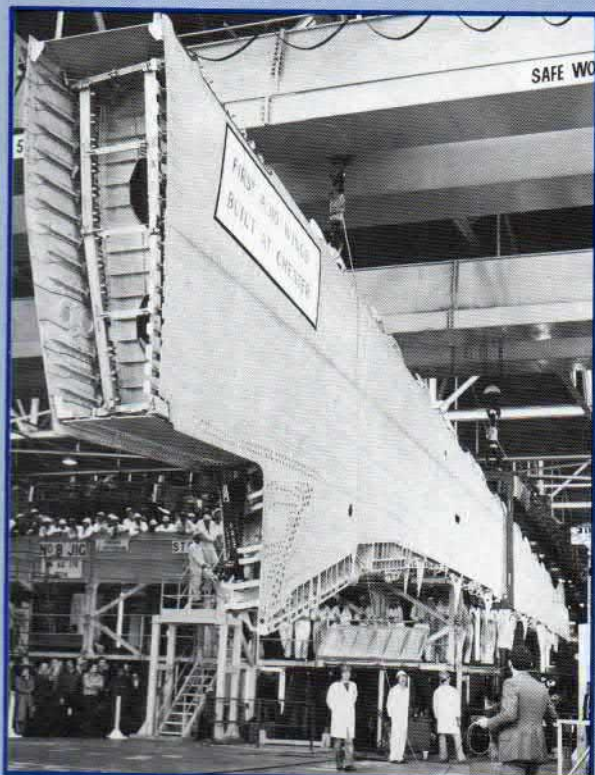
The A300 first went into service in 1974, and has captured over 30% of the wide body airliner market. World demand has led to the commissioning of a new machine shop at Hatfield to meet the production rate required.



Artist's impression of the Airbus A320 single-aisle transport.



First flight of the first A310 for British Caledonian Airways.



First A310 wings built at Chester.



The Airbus wing production line at BAe Chester, with the BAe 125 production line alongside.

Super Guppy

The Super Guppy seen here today is one of a fleet of four such aircraft used by Airbus Industrie to transport the large Airbus fuselage, wing and tail assemblies from production plants in various parts of Europe to the Airbus final assembly line at Toulouse in the South of France.

The Super Guppy was, originally, a converted Boeing 377 Stratocruiser, which was first built in 1965 to be used by NASA to support the Gemini, Apollo and Skylab programmes. In 1970 the first commercially certified Super Guppy was built, and went into service with Airbus Industrie in 1971.

The fuselage has a diameter of 7.6m (25ft), which is almost 2m (6ft 6in) wider than the Airbus, and swings open at the nose to allow free access to the interior. It can lift a maximum load of 24,740kg (54,500lb), and has the ability to carry larger parts than could possibly be shipped by either rail, road or any other type of aircraft.

The production of one Airbus A300 involves eight Super Guppy flights covering 8000 nautical miles, going to show that it is an essential tool in the Airbus production system.



A set of Airbus wings being loaded onto a Super Guppy at Manchester Airport, for delivery to Toulouse.



Jetstream 31

The Jetstream 31 is a twin turboprop aircraft which can seat up to 19 passengers in a commuter layout, or 8 to 10 passengers in a corporate layout including many of the luxuries found in business jets.

The Jetstream 31, which is powered by two Garrett TPE-331 turboprop engines, first flew in March 1980, the development aircraft being a conversion from an earlier Turbomeca Astazou powered aircraft. The first production aircraft flew in March 1982 and by the end of 1983 over 15 aircraft were in service, operating in a variety of roles including Commuter Airliner and high quality executive/business charter operations.

Other roles include various military applications making the Jetstream 31, a highly versatile aircraft.



McAlpine Aviation of Luton — one of Europe's most respected names in corporate aviation circles — has ordered four Jetstream 31's. Its affiliate airline company, Euroflite, flies Jetstream 31 on its intensive daily schedule between Brussels and several points in the U.K.



Contactair of Stuttgart has ordered a third Jetstream 31 to augment its existing fleet of aircraft.

748

Although not directly involved with the Civil Division, the BAe 748 is part of the family of civil aircraft manufactured by British Aerospace, being built by the Manchester factories of the Weybridge division.

The first 748 flew in January 1960, and the type went into service in late 1961. Since then over 369 aircraft have been sold to 79 different operators in 50 countries throughout the world, including a number of Andovers, a military version, to the Royal Air Force.

The latest version of this 44-52 seat aircraft is now available to customers, which incorporates a number of new developments including a new advanced cockpit, new-style galley, and installation of hush kits for the Rolls Royce Dart engines.



BAe 748.



BAe 748.

A.T.P.

The British Aerospace Advanced Turboprop aircraft (A.T.P.) is a second generation twin turboprop airliner, which will be powered by two Pratt and Whitney PW124 engines, fitted with new six bladed propellers designed and manufactured by British Aerospace Dynamics Group.

Go ahead for the development of the A.T.P. was given in March this year, and the first aircraft is expected to fly in August 1986.

The A.T.P. is a 64 seat aircraft, with many advanced design features, including an advanced cockpit layout incorporating an electronic flight instrumentation system which is much the same as the 125-800's. Like the 748, the A.T.P. will be built by the Weybridge division factories at Manchester.



An artist's impression of the A.T.P.



An artist's impression of the A.T.P.

DH 89A Rapide

The DH Rapide which is giving pleasure flights today is probably the oldest airliner in the public transport category in Great Britain. It is 40 years old this year. The aircraft was built in 1944, and was allocated the registration NF875, destined for the Royal Navy, but never saw service. Instead was operated in the Middle East until 1964, when it was used for fourteen years by the British Parachute Association.

The Rapide is now operated by Russavia Ltd, who are based at the Imperial War Museum site at Duxford, Cambridgeshire, and flies every weekend giving you the rare and exciting opportunity to fly in an old de Havilland aircraft.



The DH89A Rapide of the Russavia Collection, which is being used for pleasure flights today.

de Havilland Moth Club

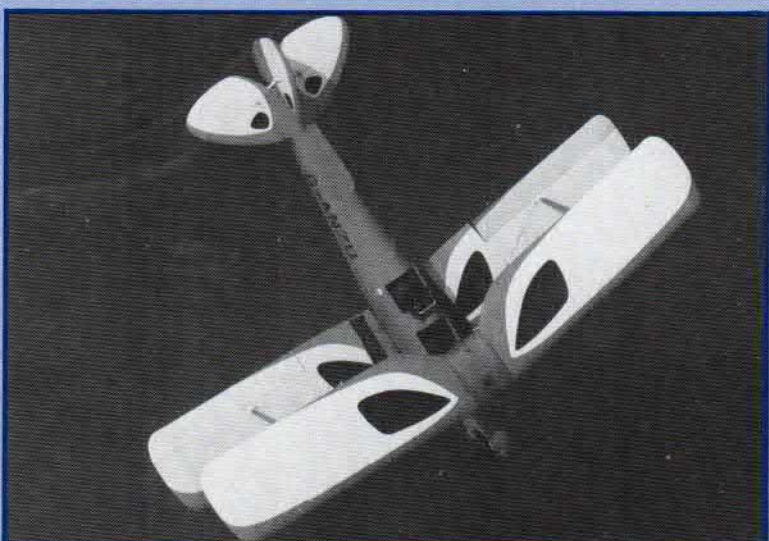
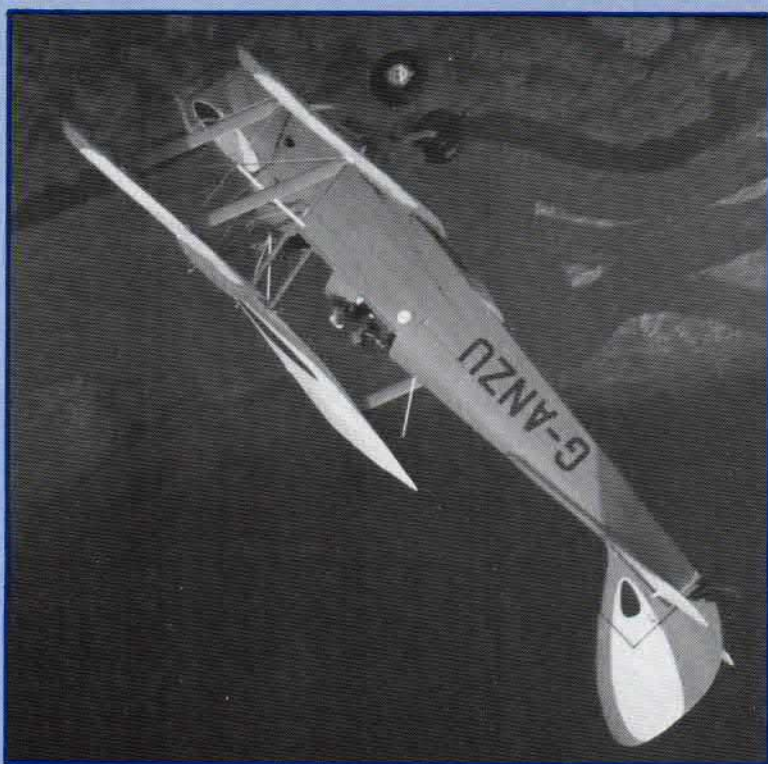
In early 1975 a group of Moth owners in the UK decided to combine their interests in de Havilland Moth aircraft and formed the "de Havilland Moth Club". Since that time, membership of the club has increased to over twelve hundred, and now represents Moth owners and enthusiasts from twenty nine different countries, whose sole aim is to attend the well being of all Moth types surviving today.

Membership of the de Havilland Moth Club is open to anybody with an interest in Moth aeroplanes. There is no requirement to be an owner, or a pilot, enthusiasm is the common factor.

If you are interested in the club please call at their stand at any time during the day.



The Tiger Moths of the Cambridge Flying Group.



Tiger Moth "G-ANZU" which is one of the oldest still flying.



The first 146-200 delivered to Pacific South-West Airlines



Revolutionary hypertechnology



No developments in world communications are of greater importance than the enormous advances in both international and internal air services. The 82-109 seat British Aerospace 146 – the world's quietest jetliner – has opened the way to a further revolution in short-haul air services, enabling regional airlines to introduce jet services on routes previously served only by turboprops of smaller capacity. Now in service in four Continents, the 146 is just one example of how the unequalled technological capability of British Aerospace is helping to shape the future of communications.

**British Aerospace family
of civil transports,
from left to right:**

- 125-800 5-10 seats
- Jetstream 31 18-19 seats
- Super 748 44-52 seats
- ATP (Advanced Turboprop) 64-72 seats
- Airbus A320 150-180 seats
- Airbus A310 190-252 seats
- Airbus A300 220-345 seats

BRITISH AEROSPACE
*unequalled in hypertechnology**

* **hypertechnology** n. The application of exceptional practical experience and the latest advances in scientific knowledge to meeting a complete spectrum of aerospace research, design, development and production requirements; the technology of today and tomorrow.

