

Hatfield Aerodrome Heritage Trail

The Heritage Trail is one of the products of a project conceived by the University of Hertfordshire. Two other products are an Oral History Archive and a Beacon Heritage Monument. Another product is a booklet entitled 'The de Havilland Legacy – Hatfield Aerodrome Remembered'. The text following in italics is part of the Introduction to the booklet.

'The seeds of the Hatfield Aerodrome Community Project were sown in the autumn of 2008 when History colleagues at the University of Hertfordshire looked out of their office window on the de Havilland Campus and over the former aerodrome. They were struck by how little remained of the huge industry that had dominated the landscape only two decades before. The initial thought was to hold a reminiscence event to record the experiences of ex-employees at the site. Then the idea grew that this could form part of a wider heritage project : the University could play a role in developing a shared sense of community between residents, schools and businesses. As 2009 was the sixtieth anniversary of the de Havilland Comet, it seemed the right moment to act. An application was made to the Heritage Lottery Fund for a series of events and activities to explore the heritage of the aerodrome and to provide a lasting public record of the achievements of those who worked there. The Heritage Lottery Fund saw the value of the project and generously awarded a grant to cover most of the costs. The University committed considerable staff time to ensuring its success, with colleagues from Humanities, Creative Arts, Geography and Environmental Sciences, Education and Estates all getting involved.'

The route of the Trail and the location of information boards was discussed at a series of meetings with representatives of the de Havilland Aircraft Heritage Centre, Hatfield Local History Society, de Havilland Forty Year Club, Hatfield Aviation Association, de Havilland Aeronautical Technical School Association, DH Moth Club, Mill Green Museum, de Havilland Residents Association and with notable former employees. The outcome was a series of ten information boards around the site, some sponsored by local businesses. Each includes descriptive text, images and a portion of an old map showing how the area around each board once appeared, plus a "you are here" location map as shown, right. This example is on board 10, adjacent to the Flight Hangar, now a sports centre and hotel. The starting point is on the University Campus, near Bishop Square. Here will be displayed, as a heritage monument, the beacon that once was atop the squash courts of the London Aeroplane Club.



The Trail is nearly four miles long. The following pages show each of the ten information boards, which are A2 size (approximately 23 ins by 16 ins). On the final page is an aerial view of the site marked up with names of occupiers, reproduced with the kind permission of Goodman, managers of Hatfield Business Park. It will necessary to zoom in to see the detail of all these images.

Hatfield Aerodrome Heritage Trail

Beginnings and the Beacon

Welcome to the Hatfield Aerodrome Heritage Trail. The story of this site's rise to national importance began in the spring of 1930, when Geoffrey de Havilland (1882-1965), founder of the de Havilland Aircraft Company, decided to move the Company aerodrome from Stag Lane, in North London, to farm land purchased on the outskirts of Hatfield. Geoffrey, a pioneering aviator and aircraft engineer (knighted in 1944), had founded the Company at Stag Lane in 1920, but urban land pressure limited scope for expansion there. So in 1934 a new Company headquarters and a factory were built at Hatfield, transforming the small country town, and profoundly shaping its future. In its first year at Hatfield the Company employed around 900 people. By the 1960s some 10,000 people worked at the site.



Geoffrey de Havilland with the second aeroplane he designed and which he flew successfully in 1910. Frank Howte is in the background. Courtesy of BAE Systems



de Havilland Aeronautical Technical School group photograph, 1952. Courtesy of Ed Martin, Ken Watkins, de Havilland Aeronautical Technical School Association

The Beacon

In the early days of aviation pilots identified their position by following railway lines, roads and other features in the landscape. Railway stations also bore their names on their roofs to help navigation. But as the sun set, aviators turned their attention to landing. Lamps and flares were placed alongside runways to guide pilots. Permanent beacons based on technology used in marine lighthouses were also installed at some aerodromes to aid location finding. A system of these inland aerial lighthouses was created on high ground in south-eastern England to mark the busy air route from Paris to Croydon. The airfield at Croydon served as the principal airport for London in the 1920s.

The beacon at Hatfield was not part of the Croydon route. In 1934 it was placed on the roof of the recently completed squash courts belonging to the London Aeroplane Club. It had a range of 38 miles in clear weather, and originally showed a white flashing light of 0.92 second duration every five seconds half an hour after sunset for one hour. Although with the advent of radar the Hatfield beacon became redundant, it remained on top of the squash courts until 1988 when the old 1930s clubhouse building was converted into a new sales centre for British Aerospace (BAe).

When it was removed from the site, the beacon fell from a lorry and was damaged. It was subsequently taken to North Weald Airfield Museum. Now this iconic monument has been restored and returned to mark the great heritage of Hatfield Aerodrome.



The newly installed beacon at Hatfield in 1934. Courtesy of Flight Magazine

Acknowledgements:

The creation of this board was kindly sponsored by the gallery.



The de Havilland aerodrome in the late 1930s. You can see the beacon on top of the squash courts and in the background the 94 shop just beyond the tennis courts. Courtesy of BAE Systems



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Trail maps are available from the de Havilland Campus reception.

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Hatfield Aerodrome Heritage Trail

The Early Years

"Within easy access of London, yet situated amid delightful Hertfordshire country surroundings, Hatfield Aerodrome is undoubtedly the largest and finest private flying ground in Great Britain." (1936).

In its early years Hatfield Aerodrome was an important national centre for training pilots. From 1923 the **de Havilland School of Flying** was the first Reserve School for the Royal Air Force (RAF). It moved from Stag Lane Aerodrome to the new Hatfield site in 1930, and became the RAF No. 1 Elementary Flying Training School in 1935. It would go on to train over 3000 RAF and Army pilots during the War.

The **London Aeroplane Club** was founded in 1925 and also moved from Stag Lane to Hatfield in 1930. People joined from overseas. In 1934, for example, Sabah El Said joined the Club. His father would later become Prime Minister of Iraq, and Sabah El Said the manager of Iraqi Airways. One of its most famous members was the great aviatrix **Amy Johnson**, who gained her pilot's licence in 1929. The following year, with 75 hours of flying experience under her belt, she set off on her celebrated solo flight from Croydon Airport to Australia in a de Havilland Gipsy Moth.

The proximity of Hatfield Aerodrome to Elstree Studios made it an ideal location for filming flying scenes, such as those in the popular **Bulldog Drummond** films of the 1930s. A Stage and Screen Aero Club was set up in 1932. Amongst its members was the actor **Ralph Richardson** who garaged his Gipsy Moth at the site. Leisure facilities also proved attractive. The London Aeroplane Club provided a first-class restaurant, lounge and cocktail bar. There was also an outdoor swimming pool and squash courts; even riding lessons were offered.

These facilities made Hatfield Aerodrome an ideal place for staging major aviation events. The magazine *Flight*, reporting on a flying display in 1933, observed that attendees "stayed on afterwards to bathe, dine, dance and discuss many matters of great and little importance". Due respect was given to the town's more venerable historic landmark though, with the Aerodrome rulebook forbidding pilots from flying over the aristocratic residence of Hatfield House.

The cross-country air race, the **King's Cup**, established by King George V in 1922, was held at Hatfield between 1933 and 1938. **Geoffrey de Havilland** won the 1933 race in a **Leopard Moth**.

In 1936 and 1937 the aerodrome also hosted the Society of British Aircraft Constructors Show. The public were not admitted, but this event, which began in 1932, was the predecessor of the popular Farnborough International Air Shows.



Geoffrey de Havilland being carried. Courtesy of BAE Systems



Geoffrey de Havilland receiving the King's Cup in 1933. Courtesy of BAE Systems



The Society of British Aircraft Constructors Show 1937. Courtesy of Flight International Collection



The route of the King's Cup air race held on 11 July 1936. Twelve circuits had to be flown. Prize money was £500. Image courtesy of Flight Magazine



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Hatfield Aerodrome Heritage Trail

The Runway

Before de Havilland arrived, the site belonged to the Sinclair family who lived at Harpsfield Hall. The Sinclair family came from Scotland in 1863 and at one time farmed much of the land between Astwick Manor and North Mimms. The de Havilland Aircraft Company bought the farm for its new aerodrome and Harpsfield Hall disappeared from the landscape around 1935. Memories of Harpsfield Hall were briefly rekindled in 1947. The buried threshold stone of the farmhouse damaged equipment used to prepare the ground for a concrete runway. Again, when Salisbury Village was built in 2002, archaeologists uncovered the foundations of the old Hall and evidence of a medieval building beneath.



Gipsy Moth

In the early days of the aerodrome no aeroplanes took off more frequently than the Gipsy Moth and subsequently the Tiger Moth. The names of both reflected Geoffrey de Havilland's interest in entomology (the study of insects). Lightweight, easy to pilot, and relatively cheap, the Gipsy Moth was by far the most popular aeroplane for leisure flying in Britain and across the Commonwealth during the late 1920s and 1930s. The Tiger Moth, which was the first aeroplane built at Hatfield, first flew in 1931 and went on to become the main primary training aeroplane for the Royal Air Force until the 1950s.



The ATA

During the Second World War the Air Transport Auxiliary (ATA) provided a crucial service flying newly-built war aeroplanes from the factories to air bases across the country. Women, veterans, and those too old for the RAF, stepped in to free up RAF pilots for combat missions. By the end of the War, the ATA operated twenty-two 'Ferry Pools'. The first all-female Pool (No. 5), one of three, was located at Hatfield until 1943. It was the inspiration of the aviatrix Pauline Gower (1910-1947) who also headed the unit.



Hollywood Connections

Hatfield Aerodrome has a long association with Hollywood glamour. The film stars Olivia de Havilland and Joan Fontaine were Geoffrey de Havilland's cousins. Stephen Spielberg shot several scenes for his feature film Saving Private Ryan (1998) at the site just as it was scheduled for demolition. He returned to conduct even more extensive filming for his epic World War II television series Band of Brothers (2001). A set representing twelve different European towns, and a major river, was constructed on the open grassland around the runway.



Satellite image of the film set for Band of Brothers taken in December 2000



Harpsfield Hall and James Sinclair photographed in 1925. Courtesy of Mill Green Museum

The de Havilland Aerodrome in 1935, shortly after the construction of the new headquarters. In the background you can see Harpsfield Hall and farm. Courtesy of BAe Systems

To learn more about the heritage and natural history of the runway see the information boards located in Ellenbrook Park, kindly provided by Goodman.



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Hatfield Aerodrome Heritage Trail

Astwick Manor

Astwick is first mentioned in the county records in 1274, as part of the feudal domains of the Bishops of Ely. Its name is thought to originate from "Ast" being a variant of "east" and "wic," meaning dairy farm. From the thirteenth to the sixteenth centuries, the Astwick estate was held by the Bassingbourne family, who were also tenants of the neighbouring manor at Hatfield Woodhall. By 1535, Catherine Bassingbourne and her husband, the lawyer Sir Nicholas Hare, had inherited the manor and estate. They died without direct descendants and over the following century the estate passed through several different families.

In 1712 the estate was sold again and eventually inherited by John Churchill, the 1st Duke of Marlborough. The estate remained in the possession of the Dukes of Marlborough until 1819, when George, the 5th Duke, sold it to John Lloyd, a wealthy merchant and landowner. Successive generations of the Lloyd family held the estate until June 1940 when the RAF requisitioned all but a small proportion of the farm and its buildings, which were rented out to Mr Lloyd's former

balliff. Astwick then became the headquarters of No. 2 (Army Co-operation) Squadron, under the command of A.J.W. Geddes. This squadron left the following September and a new squadron was formed under Squadron-leader R. H. Donkin.

In 1949 Astwick Manor became the new headquarters of the de Havilland Aeronautical Technical School and housed a training workshop. Geoffrey de Havilland and his long-time friend and colleague, Frank Hearle, had set up the School in 1928. Its initial aim was to increase the pool of trained ground engineers.

The School moved to Hatfield in 1934, but during the War it was relocated first to Welwyn Garden City and then to Salisbury Hall, which is now the location of the de Havilland Aircraft Heritage Centre. Following the absorption of the de Havilland Aircraft Company into Hawker Siddeley Aviation,

in 1965 it was renamed the Hawker Siddeley Aviation Apprentice Training School. In 1978 Astwick Manor passed into the ownership of British Aerospace (BAe). Many of the students of the School went on to work at the de Havilland Hatfield site.



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Rocket Development

After the Second World War Hatfield Aerodrome became an important centre of rocket research, design and development. The United States and the Soviet Union were ahead of the game, but in the 1950s Britain invested heavily in promoting its own rocket industry. The de Havilland Aircraft Company was at the forefront of this. Numerous innovations in missile and rocket technology were developed at the site.

Firestreak

In 1952 the de Havilland Propeller Company, which had been founded in 1935 as a division of the de Havilland Aircraft Company, secured a government contract to develop an air-to-air missile with an infra-red guidance device. Work began at the Propeller Company test site at the northern end of the aerodrome. The missile came to be known as Firestreak. Initial air trials used Venom aircraft, and in 1958 it became the first such missile to be adopted by the Royal Air Force and Royal Navy.

Blue Streak

In August 1957 the Ministry of Defence announced its support for a British intercontinental ballistic missile. The contract was won by de Havilland, working in partnership with Rolls-Royce and the Sperry Gyroscope Company. This new long-range ballistic missile, Blue Streak, had, in fact, been in development for several years. The design team worked from de Havilland offices in London while the huge stainless steel rocket airframe was constructed at Hatfield. Despite the secrecy, local residents surely had suspicions that something was afoot, for a large rocket testing tower at the southern end of the site was clearly visible from the main road. During 1957 and 1958 further impressive, aluminium-painted rocket towers appeared near where you are standing now. For the few years of their existence they were one of the more remarkable features in the Hatfield landscape.



Blue Streak rocket in a test tower at Hatfield. Courtesy of BAE Systems.

Successful firing tests of Blue Streak, powered by liquid oxygen and kerosene, took place at the Weapons Research Establishment at Woomera Australia. In 1960, however, the government terminated military funding for the project. Blue Streak was considered too vulnerable to first-strike attack and the focus of Defence spending turned to nuclear weapons. This was not the end for Blue Streak. Focus now shifted to the European space satellite launcher, Europa 1. Blue Streak was the first stage rocket; France and West Germany provided the second and third stages. In 1964 the three stages of the 104 ft vehicle were assembled at Hatfield. Blue Streak performed well in a series of launches from Woomera between 1964 and 1970, but no satellite was put into orbit. In 1973 the Blue Streak programme finally closed.

Turbojet Engines

The de Havilland Engine Co. Ltd, founded in 1944, used test beds located near here to test turbojet engines such as the de Havilland **Ghost** and the **Sprite** and **Spectre** rocket engines.



Blue Streak and test towers at de Havilland Propellers, Hatfield. Flight Magazine 11 September 1959. Courtesy of Flight Archive.



A de Havilland Firestreak air-to-air missile photographed at RAF Elvington. © Brian Burnell. Courtesy of Brian Burnell and Ian Dunster.



The three-stage Europa 1 launch vehicle assembled at Hatfield in 1964. Courtesy of Flight Archive.



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Community

In 1948 the government designated Hatfield a New Town. This controlled the chaotic development of housing and industry around the aerodrome and de Havilland employees took many of the new houses. By 1953 the de Havilland Aircraft Company employed 7000 skilled workers; thousands more, who provided services and unskilled labour, also depended economically on the aerodrome.

The Company established a youth club in the 1940s and provided female employees with a nursery for their children. A Social Committee organised community events such as the Hatfield and District Children's Talent Contest and Neighbours Days. In 1950 it paid the salary of a youth worker for the town. The chairman of the de Havilland Aircraft Company, Alan Samuel Butler, donated land on which Hertfordshire County Council established the Hatfield Technical College in 1952. This was the origin of the University of Hertfordshire.

Arts

The de Havilland Club sponsored numerous societies for employees. During the 1940s and 1950s the de Havilland Choral Society gave concerts in and around Hatfield. In November 1948 the BBC recorded their popular 'Jazz Club' broadcast from the de Havilland Club Hall. The de Havilland Art Society launched an annual exhibition in 1943 with prizes for oil and water colours, line drawings, sculptures and handicrafts. The drama group performed in the Club Hall and at local drama festivals.



The Gipsy Number 1950s. Courtesy of BAE Systems



de Havilland Hatfield 1955. They came fourth in the league that year. Courtesy of BAE Systems; F.C.H.D.



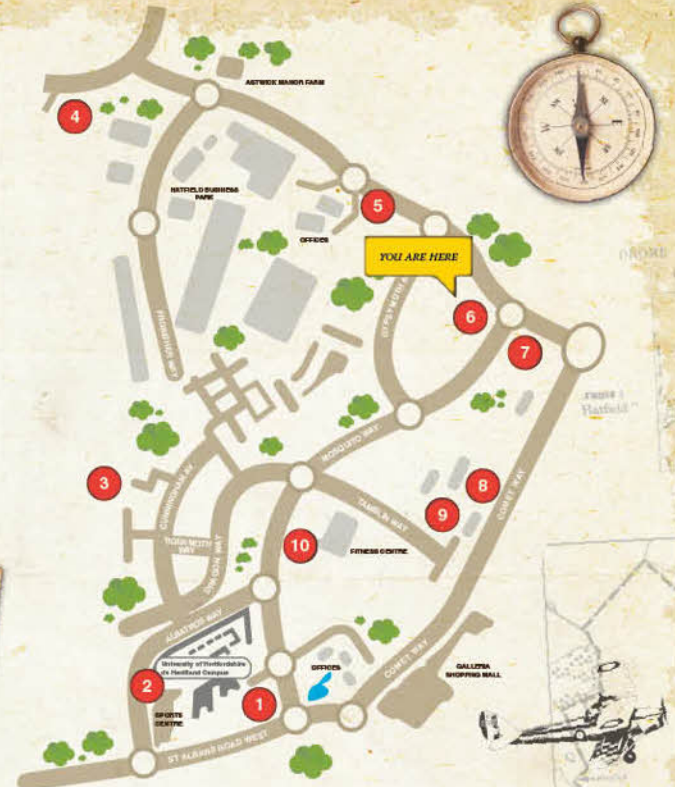
The Coat Office Dance 1951. Courtesy of BAE Systems



Hatfield Open Day 1977. Courtesy of Flight.



Butler Trophy 1958. Courtesy of BAE Systems



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Sports

In the early 1950s the de Havilland Hatfield Rugby Club fielded three regular teams, while the Football Club called upon the coaching services of Harry Hibbs, a former England goalkeeper. The Company had two football teams in the Hertfordshire County League Division One - de Havilland Propellers and de Havilland Hatfield. Badminton, netball, squash, bowls, tennis, cricket, angling and snooker clubs were another feature of life on the aerodrome. In the 1940s and 1950s annual competitive events were organised between the different de Havilland Company sites. They were known as the Butler Trophy Competition in honour of Alan Samuel Butler. Butler's Canadian wife, Lois, was an Olympic skier and founding member of the Air Transport Auxiliary.

Open Days

The de Havilland Aircraft Company held very successful public open days and Hawker Siddeley and British Aerospace continued the tradition. With their aerial displays by historic and current de Havilland aeroplanes, these were big national events and the subject of many fond childhood memories. During the 1980s the Hatfield Concert Band appeared regularly at the British Aerospace open days. The Band's first musical director John Collinge wrote a special composition called 'Jetset 81' to mark the first flight of the BAe 146 medium-sized passenger airliner in 1981.

Acknowledgements:

The creation of this board was kindly sponsored by T-Mobile



Design innovation

In the mid-fifties a large design block was built just north of the Administration Block and main factory. It was one of the few areas of the aerodrome prohibited to visitors. There was good reason, for de Havilland had built up an international reputation for design innovation - from the *Gipsy Moth*, on which the success of the de Havilland Aircraft Company was founded, to the jet age and the Comet airliner.

The first de Havilland Comet was not a jet aeroplane, but the prize winning **DH88 Comet Racer**. In 1933 the Australian industrialist Macpherson Robertson announced a £10,000 prize for an England to Australia air race. Geoffrey de Havilland was determined his company would win it, but a new plane was needed to ensure success. The result was a design classic, a wooden, twin-propeller monoplane. Three were built for the race and one, painted in striking scarlet, was the winner.

Experience gained from designing the **Comet Racer** inspired the creation of the **Mosquito**. The 'Wooden Wonder', as it was affectionately known, was a versatile fighter-bomber. In 1941 it was the fastest aeroplane in the sky. Its contribution to the British war effort was immense. The **Mosquito** was also the first twin-engine aircraft to operate from an aircraft carrier, landing on HMS *Indefatigable* in March 1944. Although its wings had to be folded manually, the de Havilland **Sea Hornet** overcame this problem through a hydraulic folding system. It made its first landing on the carrier *Ocean* in August 1945.



The Design Block in 1954. Courtesy of BAE Systems



Vampire FB M&S. Courtesy of the de Havilland Aircraft Heritage Centre



DH88 Comet Racer, 1951. Courtesy of BAE Systems



Sir Geoffrey de Havilland. Courtesy of the de Havilland Aircraft Heritage Centre



Female employees making wing sections. Courtesy of BAE Systems



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Mosquito. Courtesy of the de Havilland Aircraft Heritage Centre

The **Vampire** jet fighter was a big commercial success for the Company, and was purchased by some twenty-five air forces across the world. Geoffrey de Havilland Jr conducted the first test flight from Hatfield in 1943. It was the second jet fighter to be adopted by the RAF after the **Gloster Meteor**. In 1948 the de Havilland test pilot John Cunningham achieved a world record height of 59,446 feet in a Vampire. Although the Vampire was developed at Hatfield, by 1950 its production, and increasingly that of other de Havilland aeroplanes had shifted to a factory de Havilland had purchased near Chester in 1948.

Hatfield was also at the centre of the development of Vertical Take-Off and Landing (VTOL) aeroplanes, which led to the iconic **Harrier Jump Jet**. In 1965 the Company built Europe's first wind tunnel designed to test VTOL aircraft at the northern end of the site, behind trail board no. 5. British *Pathé News* reported the event. During the late 1960s designers and planners at de Havilland Hatfield also proposed a revolution in civil aviation. They developed the idea of a VTOL passenger aeroplane programme to alleviate pressure on London airports through the creation of city centre airports.

Acknowledgements:

The creation of this board was kindly sponsored by Porsche.



Administration Block and the Bombing

From its Hatfield headquarters de Havilland controlled a global business. Before it even moved to Hatfield the Company had set up overseas branches in Commonwealth countries. The first was in Melbourne in 1927; the following year a branch opened in Karachi. One of the most successful operations was in Canada.

During the 1920s Canada was one of the most important overseas markets for the Moth series of aircraft. As more aircraft were bought, the demand for spares and repairs increased. In 1928 de Havilland opened an assembly plant and after-sales facilities on the outskirts of Toronto. Originally housed in a former canning factory, de Havilland Aircraft of Canada Limited came to play a major role in the Company's history. During the Second World War it built hundreds of Tiger Moths and over 1,100 Mosquitos. After the War de Havilland Canada began to design and produce its own aircraft named after local fauna: the Chipmunk, Beaver, Otter and Caribou. Hundreds of Tiger Moths and Mosquitos were also built by de Havilland Australia. Its best-known, home-grown product was the Drover, a small transport plane. Geoffrey de Havilland chose the name from suggestions offered by the Company's Australian employees.



Front entrance of the Administration Block. Courtesy of BAE systems



The bombed 94 Shop. Courtesy of BAE systems



The Administration Block during wartime. Courtesy of BAE Systems

War and Bombing

As a major centre of aircraft development and production, Hatfield Aerodrome was an obvious target for the Luftwaffe. Considerable effort was made to protect it. The Mosquito was designed at Salisbury Hall a few miles to the south of the aerodrome to ensure secrecy. The Administration Block was painted in camouflage colours. In 1940 a decoy aerodrome was created a few miles away at Panshanger, and film set designers were employed to create dummy hangars, aeroplanes, cars and even smoking chimneys. It was so effective that pilots heading for Hatfield were occasionally fooled into landing at Panshanger.

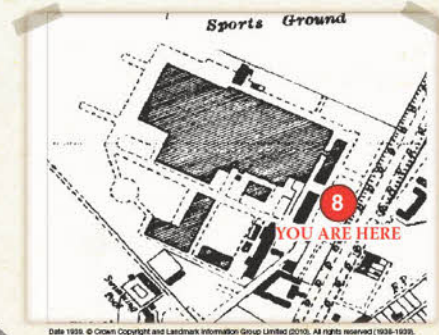
On 3 October 1940 tragedy struck when a German Junkers 88 bomber flew low across the aerodrome and dropped four bombs that hit the 94 Shop. This was one of the first buildings on the site and was used for the production of the DH 94 Moth Minor. In 1940 it was a sheet metal workshop and housed the de Havilland Aeronautical Technical School. The bombs killed twenty-one people and injured over a hundred more. A Bofors gun battery protecting the site hit the Junkers and it eventually came down near Hertingfordbury. The four airmen survived and became Prisoners of War.

Recent History

The Administration Block is a Grade II listed building. James M Monro & Son of Glasgow designed it in art deco style. When the aerodrome site closed in the early 1990s, it was abandoned. Following sensitive restoration, and with the enthusiastic support of Goodman and Hertfordshire Police Authority, it re-opened as Hatfield Police Station in 2008. The new Station also incorporates the old 1930s canteen. In its heyday this building was a hub of social activity. There was an impressive sprung dance floor – now fully restored



The de Havilland site, 1938. Courtesy of BAE systems



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The Gatehouse

Other than the Administration Block and Flight Test Hangar (see Board 10), the gatehouse is the only other surviving structure from the early days of the de Havilland Aerodrome. It is a fine example of 1930s art deco design. It stands next to what was the main entrance to the aerodrome, and is a lasting monument to the beginning and end of the aviation and rocket industry at Hatfield.

In 1960 Hawker Siddeley Aviation merged with the de Havilland Aircraft Company and de Havilland Propellers. Three years later the de Havilland name was dropped for good. A subsidiary company, Hawker Siddeley Dynamics, continued the rocket development programme on the site. In 1977 the British government nationalised the aircraft industry and Hawker Siddeley Aviation and Dynamics became part of the new state-owned British Aerospace. The creation of BAe ensured that Hatfield remained a major centre of British aircraft design and production. BAe was fully privatised in 1985 and only a few years later aircraft production at Hatfield ceased, and the Dynamics site was wound down. The aerodrome finally closed in 1993 bringing to an end 63 remarkable years of aviation history.

Street Names

The redevelopment of the site in the 2000s obliterated nearly all of the old industrial landscape, but the heritage of the site has been preserved in the new street names. Some are named after the aeroplanes associated with de Havilland: Mosquito Way, Chipmunk Chase, Oxford Place, Comet Way, Dragon Road, Tiger Moth Way, Queen Bee Court, Flamingo Close, Gipsy Moth Avenue, Frobisher Way, and Nimrod Drive. Of the thousands who passed by the gatehouse over the decades, a few of the many memorable figures have also been commemorated in the street and place names.

Bishop Square: Ronald Eric Bishop (1903-1989), chief designer of the Mosquito and Comet jet airliner.

Clarkson Court: Richard Clarkson (1904-1996), chief aerodynamics engineer. See the commemorative plaque near the footpath beside Clarkson Court.

Cunningham Avenue: John 'Cat's Eyes' Cunningham (1917-2002), RAF night fighter ace and chief test pilot.

Derry Leys: John Douglas Derry (1921-1952), first British test pilot to exceed the speed of sound.

Errington Close: George Errington (1902-1966), test pilot who died when the Trident airliner he was co-piloting during a test flight crashed.

Fillingham Way: William Patrick Fillingham (1914-2003), deputy chief test pilot.

Halford Court: Frank Halford (1894-1955), aircraft engine designer.

Hearle Way: Francis Trounson Hearle (1887-1965) friend and brother-in-law of Sir Geoffrey de Havilland, and founding member of the de Havilland Aircraft Company.

Richards Street: Anthony Richards (1928-1952), flight test observer who died along with John Derry when they crashed at the Farnborough Air Show.

Tamblin Way: W.A. Tamblin, chief aircraft designer and wing and fuselage specialist.

Waight Court: Bob Waight, chief test pilot who died in an aeroplane crash at Hatfield in 1937.

Walker Grove: Charles Clement Walker (1877-1968), a founding member of the de Havilland Aircraft Company and Chief of Aerodynamics and Stressing.



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The Comet

By the end of the Second World War, Britain was a leader in the development of jet-engine technology. The British government turned its attention to the possibilities of commercial passenger aircraft. Building on the success of its gas-turbine Goblin engine, which powered the Vampire, de Havilland developed its successor the Ghost engine. It was the engineering achievement of the Ghost, designed by Frank Halford, which made possible the DH 106 Comet, the world's first jet-airliner.



The Comet 2. Courtesy of the de Havilland Aircraft Heritage Centre



The Flight Test Hangar in 1953. Clubhouse, squash courts and bussons in the background. Courtesy of BAE Systems

The Hangar

Developing the Comet required a huge new building to test and maintain it. The main structure of the flight test hangar was built in just thirteen weeks between 1952 and 1953, with the control tower, offices, and a dedicated fire station completed by 1954. Measuring 200 by 330 feet, it was at the time the largest aluminium building in the world. The doors have a clearance of 45 feet. It was finally listed as a Grade II historic building in 1998.

Comet Development

Although it was publicly known in 1946 that de Havilland were working on a jet airliner, over the next three years the Company kept purposefully quiet. It came as something of a surprise to its American competitors when the first test flight of the Comet took place on 27 July 1949, with John Cunningham at the controls. The British Overseas Airways Corporation (BOAC) took delivery of the first aeroplanes in 1951. On 2 May 1952, after further testing, Comets carried the first set of paying jet airliner passengers on BOAC's new service from London Heathrow Airport to Johannesburg. Meanwhile development began on the Comet 2.



DH 121 Trident 1c 1953-64 (not a 16 (1965))
Courtesy of the de Havilland Aircraft Heritage Centre

Three Comets crashed in the first year of commercial operation. Further crashes halted manufacture in 1954 while the government launched an unprecedented enquiry into Comet safety. The Company disclosed all data and the results of the investigation were a huge step forward for airline safety worldwide. In 1955 de Havilland started taking orders for the Comet 4, and in October 1958 BOAC Comet 4s began the first trans-Atlantic jet passenger service from London to New York. Only a few weeks later Pan Am started its own service using Boeing 707s. Competition was growing.

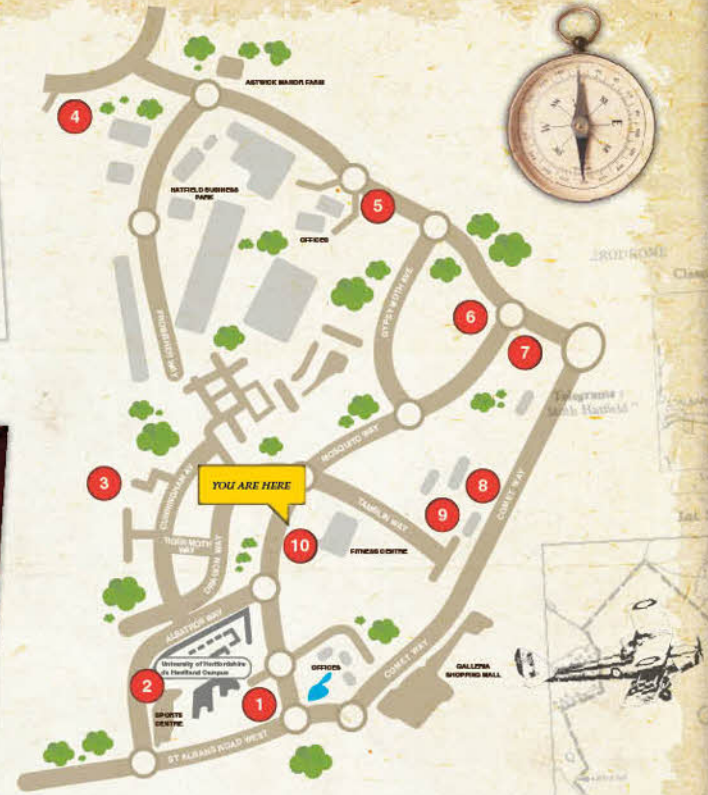
The next generation of de Havilland jet airliners, the medium-haul DH 121 Trident, went into commercial operation under the Hawker Siddeley name in 1964. It displayed numerous innovations included the first automatic flight landing system. But Boeing was beginning to dominate the market, and its 727 model, which first flew in 1963, became one of the most successful jetliners in history. The de Havilland Hatfield site remained a centre of great engineering innovation. In the 1980s the medium-sized airliner the BAe 146 was a major success, but by now the British aircraft industry was in terminal decline.

Acknowledgements:

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A de Havilland Heron in the Flight Test Hangar (1954).
One of 14 Herons purchased by Garuda Indonesian Airways.
Courtesy of BAE Systems



- 1 Beginnings and the Beacon
- 2 The Early Years
- 3 The Runway
- 4 Astwick Manor
- 5 Rocket Development
- 6 Community
- 7 Design innovation
- 8 Administration Block and the Bombing
- 9 The Gatehouse
- 10 The Comet

Trail maps are available from the de Havilland Campus reception.



ALUMINIUM
THE BIGGEST HANGAR WITH AN UNSUPPORTED SPAN IN THE WORLD.





This view has kindly been provided by Goodman Business Parks. It is on their website at www.hatfieldbusinesspark.co.uk which is updated from time to time - note that plots are still available, on one of which can be seen the hedge that formerly surrounded the sports field. Astwick Manor is to the left of the Royal Mail building near the top of the picture. The undeveloped area on the left is Ellenbrook Fields, which has been opened to the public by Goodman; see the [Ellenbrook Fields](#) section of their website.