

Avro Avian 594 IIIA 'G-EBZM'

The Museum has object and archive collections relating to the famous aircraft manufacturer A. V. Roe (popularly known as Avro). The company was founded in Manchester in 1910. The object collection includes aircraft, parts and models. The archives include the personal papers of Avro designer Roy Chadwick, aircraft manuals, log books, photographs, paintings, drawings and trade literature.

By the late 1920s, flying clubs and private enthusiasts wanted to buy new purpose-built civilian aeroplanes instead of military surplus aircraft. Many manufacturers began designing aeroplanes for this new market. Leading the field was de Havilland and its Moth aircraft. Avro decided to compete with de Havilland. The company's Chief Designer, Roy Chadwick, came up with the Avian. Avro entered the prototype in the Daily Mail's Light Aeroplane Trials at Lympe, Kent, in 1926. The Avian was eliminated from these trials and the design was modified as a result. The Avian 594 then went into production at Newton Heath.



G-EBZM on display in the Air and Space Hall.

The Avian IIIA registered as 'G-EBZM' was built in 1928. It was delivered to Merseyside Aero and Sports Limited in February 1929 and based at the Hooton Park Airfield, near Ellesmere Port. In 1932 Giro Aviation bought 'G-EBZM' for making leisure flights from Southport beach. In 1938, following a collision with telegraph wires, it was dismantled and placed in storage. In 1962 the Northern Aircraft Preservation Society, now known as The Aeroplane Collection, acquired it from the Manchester Airport Fire Service. The aeroplane was partly restored, firstly as a travelling exhibit, and later for display at the Torbay Aircraft Museum. In December 1982 it was loaned to the new Greater Manchester Air and Space Museum (as its current location was formerly known) for restoration and display.

Roy Chadwick (1893-1947)

Roy Chadwick was born in Farnworth, Lancashire. He served as an apprentice draughtsman at the engineering firm British Westinghouse in Trafford Park, Manchester. During this period he studied at the Manchester College of Technology and was an avid model maker. He joined the Manchester Aero Club and, through its activities, visited the Avro factory at Brownsfield Mill in Ancoats. In 1911 he went to work for Avro as a draughtsman and became Alliott Roe's personal assistant. Chadwick showed a great talent for design and his career progressed rapidly. He designed the fuselage and undercarriage for the famous Avro 504 which became the standard training aircraft used by the Royal Air Force.

In 1919 Chadwick was appointed Chief Designer and was involved in the design of every subsequent Avro aircraft until his death. In addition to the Avian, he designed the 621 Tutor, which replaced the 504 as the standard RAF trainer. In 1939 Avro, by then part of the Hawker Siddeley Group, opened a new works at Chadderton and Chadwick moved his design team there. At Chadderton production began on the twin-engined Anson and the Manchester bomber, the forerunner of the famous Lancaster. Chadwick modified the Manchester design to include four Rolls-Royce Merlin engines instead of two. During the Second World War, he also worked on designs for civil airliners capable of crossing the Atlantic, and conceived a civilian version of the Lancaster bomber, called the Lancastrian. He also produced early designs for the Shackleton and the Vulcan nuclear bomber. Chadwick was tragically killed when his Avro Tudor airliner crashed at Woodford in 1947.

Lady Mary Heath (1896-1939)

The Irish aviator Lady Heath flew 'G-EBZM' at the French Light Aircraft Trials at Orly in September 1928 and took fourth place. She was born Sophie Mary Peirce in Knockaderry, County Limerick. During the First World War she served as a driver in the Royal Flying Corps and later the Women's Royal Air Force. She then moved to England and began a career in athletics, becoming one of the founder members of the Women's Amateur Athletic Association in 1922. She campaigned for women to be allowed to compete in track and field events at the Olympic Games.

Sophie was the first person to learn to fly at the London Aeroplane Club. She qualified for a private pilot's licence in 1925. At that time women were banned from making commercial flights. Sophie successfully campaigned against the ban, with the support of Lady Astor MP, and became the first woman to hold a commercial pilot's licence in 1926. Sophie married the Staffordshire industrialist Sir James Heath in 1927 and adopted the name Lady Mary. A year later she became the first person to fly a light aircraft from Cape Town, South Africa, to London. She made the 10,000-mile solo flight in an Avro Avian. Lady Heath later promoted Avro aircraft, particularly the Avian.

Lady Heath achieved world renown as a pilot and became the first president of the Women's Aeronautical Federation. She set a number of international altitude records for light aircraft. She also travelled extensively in Europe and the United States. During a trip to the US in 1929, she became the first woman to hold an aircraft mechanic's licence. Unfortunately it was during this trip that she was involved in a serious crash at Cleveland. Her injuries effectively ended her flying career. Tragically, in May 1939, she died from a head injury after falling from a tramcar in London.

For more information:

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| <i>Read</i> | Holmes, Harry. <i>Avro: the History of an Aircraft Company</i> . Shrewsbury, UK: Airlife Publishing, 1994.
Naughton, Lindie. <i>Lady Icarus: The Life of Irish Aviator Lady Mary Heath</i> . Dublin, Eire: Ashfield Press, 2004.
Penrose, Harald. <i>Architect of Wings: Biography of Roy Chadwick</i> . Shrewsbury, UK: Airlife Publishing, 1985. |
| <i>Study</i> | The Roy Chadwick papers in the Collections Centre. |
| <i>Visit</i> | The Avro Avian IIIA 'G-EBZM' in the Air and Space Hall. |