

HM Airship R100



HM Airship R100 was a privately designed and built rigid airship, part of a competition to develop new techniques for a projected larger commercial airship for use on British Empire routes. The other airship, the R101, was built by the Air Ministry. Both projects were funded by the British Government.

First flight

On December 16, 1929, the R100 made its maiden flight from the Royal Naval Air Station in Howden, Yorkshire, where it had been built by a subsidiary of Vickers-Armstrong. It initially flew to York and then continued on to Cardington, Bedfordshire, where the Government Airship Establishment was located. On January 16, 1930, the R100 achieved a speed of 81 mph (130 km/h), making it the fastest airship in the world.

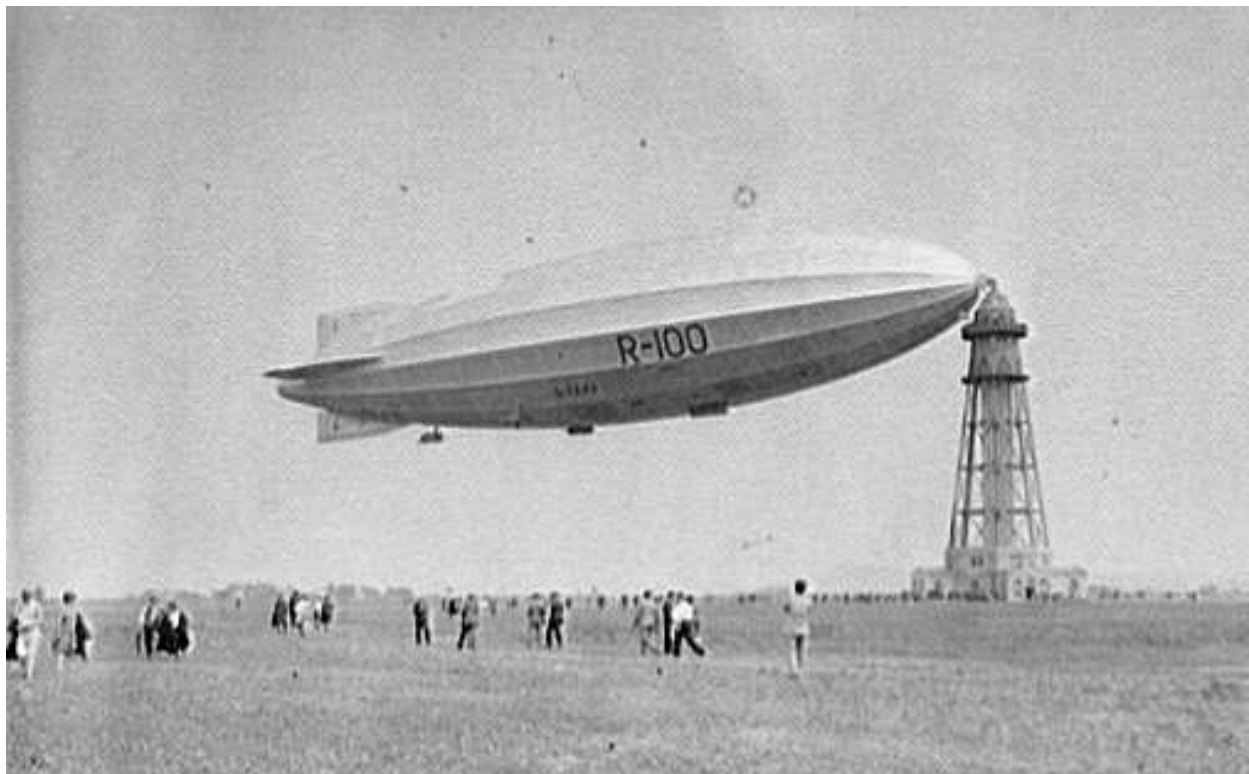


The R100 at the mooring mast in Bedfordshire

Transatlantic Voyage to Canada

Originally the R100's contract required a demonstration flight to India. However, the decision to use gasoline engines, rather than the diesel engines originally specified prompted a change in destination to Canada as it was reasoned that a gasoline-powered flight to the tropics was deemed to be too dangerous.

Once the R100 was formally handed over to the Air Ministry, a number of modifications were made in preparation for her transatlantic flight. During her last flight the tail fairing had collapsed due to aerodynamic pressures and her pointed tail was modified to a more rounded form, shortening her length by 15 ft (4.6 m).



The English airship R100 on mooring mast in St Hubert, Quebec

The R100 departed for Canada on July 29, 1930, arriving in Saint-Hubert, Quebec 78 hours later, having flown 3,300 mi (5,300 km) at an average speed of 42 mph (68 km/h). The airship stayed in Montreal for 12 days and over 100,000 people visited the airship daily. She also made a 24-hour passenger flight to Ottawa, Toronto, and Niagara Falls. The airship departed for Cardington on August 13, completing the flight in less than 58 hours.



*The R100 over Jacques Cartier Bridge Montreal - August 1930
Photo: Bibliothèque et Archives Nationales du Québec*



The R100 over Toronto's skyline, as seen from the harbor.



British Airship R100, over Toronto, Canada

The end of the British airships

The R100 represented the best that conventional airship technology in Britain had to offer at the time. The R101, on the other hand, suffered in comparison due to the many groundbreaking yet problematic innovations, specially the weight of the diesel engines. In terms of lifting efficiency, both airships were inferior to the smaller LZ 127 *Graf Zeppelin*.

After the R101 crashed and burned in France, on October 5, 1930 while flying to India, the Air Ministry ordered R100 grounded. The airship was deflated and stored for a year while three options were evaluated: a complete redesign of the R100 and continuation of tests for the eventual construction of the R102; static testing of R100 and retention of about 300 staff to keep the program alive; or retention of staff and the scrapping of the airship. In November 1931, it was decided to sell R100 for scrap. The entire framework of the ship was flattened and sold for less than £600.