



AIRSHIPS



A CRUISE OF R 100

Visit to Canada Postponed

TO stand on Boar's Hill and see the spires of Oxford rising from the plain below; to gaze out of the window of the train speeding north from Calcutta and catch the first glimpse of the snow-clad crest of Kanchanjunga towering above the Himalayan foothills—these are sights which make an impression on a man. But an experience worthy to be ranked with those sights is to drive through Hitchin and Shefford to Cardington, and as the car tops the last hill to sight an airship moored to the tower, with the sinking sun gleaming on the silver fabric. First, the curve of the monster's back shows between the rows of trees, and then the whole imposing bulk of the ship comes into view. Wednesday evening, May 21, was just perfect for giving full effect to the grandeur and beauty of R 100. The only factor which was not aesthetically perfect was the mooring tower. Its 200 ft. of stately height was dwarfed by the length and girth of the airship; and it seemed an indignity for the giant to be tied by the nose to such a stump. It reminded one of a large St. Bernard dog, not muzzled, but under the control of a very small child.

The engines were all ticking over as I approached, and as each propeller runs clockwise, the two screws of each car run in opposite directions, which gives a curious effect to the eye. These were all new engines, Condors 3B, installed since the last flight, and this was to be their first trial run. As a matter of fact, they all behaved perfectly. Then all the engines were stopped except the forward one in the port wing car. When the weights which hold the tail down were cast off, the passenger hatch rose two or three feet clear of the embarking platform, and one or two of the crew who were late in going on board had to perform a mild gymnastic feat. But that is nothing to an airship hand. While waiting for the start, members of the crew thronged down on to the engine cars and stood on the top, disdainful to hold on to anything, with the utmost *sang froid*. The 24 passengers had gone on board before.

The most important passenger was Mr. Montague, Under Secretary of State for Air. Other passengers were Sir Dennistoun Burney, Sir Harry Brittain (who did not seem in the least apprehensive of engine failure), Sqdn.-Ldr. Shearer, the Canadian Liaison Officer at the Air Ministry, and Group-Capt. A. V. Bettington, C.M.G., the officer commanding the Henlow Depot, whose men have done yeomen service in providing ground handling parties. The crew numbered five officers and 36 ratings, under the command of Sqdn.-Ldr. R. S. Booth, A.F.C., the captain of the ship. The total number of souls on board was 65.

The most important person not on board was Maj. G. H. Scott, C.B.E., A.F.C., the officer in charge of flying and training. He had decided to leave the captain of the airship in sole command for this flight. As he stood on the ground, looking up at the ship, he remarked to the representative of FLIGHT, "I have not watched a British airship in the air since 1921, when I saw R 36 flying." The fact that he felt able to stay on the ground shows the confidence which he now entertains for the officers and crew of the R 100.

The special objects of the flight were three. One was to test the new engines. The second was to practise the wireless reception on the ship of complete weather charts from the meteorological office at Cardington. This had been tried before with a ship at the Royal Aircraft Works, but there had been no previous transmission of maps to a ship in flight. The third was to test the short wave wireless reception, as R 100 was to receive messages from Malta and Baghdad. In all three respects the results of the flight were quite satisfactory.

The general orders given to the captain were to make for the Wash and spend the night cruising in the North Sea. On the following (Thursday) morning he was to come inland

and pass over Hull, York, Leeds, Sheffield, Manchester, and Liverpool, returning to Cardington about 5 p.m. on Thursday, the 22nd.

At 2 minutes past 7 p.m. the nose of the airship was slipped from the head of the tower and rose clear. For a second or two it rose faster than the tail, but no reports were received of teacups slopping over. Water ballast was promptly discharged from near the tail, and the ship immediately righted herself. It was noticed that the fabric rippled in the slipstream of the propellers. Twice she cruised round the station, and then headed off for London. Mr. Montague, it seems, had expressed a wish to fly over his constituency of West Islington, and his desire was gratified. Londoners got a beautiful view of the airship in the pink-tinged evening light. Sqdn.-Ldr. Booth dipped the nose of the ship over Buckingham Palace, desiring to salute the King. He saw a group of people in the Palace grounds, and supposed that they were the Royal party. As a matter of fact, the King and Queen were at that moment going to the opera at Covent Garden, but the captain did not know this. From the ground, however, it is not easy to say when an airship is exactly over any particular point, and Londoners were convinced that the ship dipped her nose exactly over the Opera House. On leaving London she travelled over Southend, which by that time was lighted up and looked very fine from the air. Dinner was then served, and the passengers lost interest in the views, for the dinner was a good one. At 10 p.m. most of the passengers went to bed. Mr. Montague said that he slept better on board than he usually sleeps, and did not wake till 6.45 next morning. The passengers slept in sleeping bags on the bunks, and found them comfortable. The only complaint was that the radiators were not turned on, and had they not taken plenty of thick clothes with them they would have felt the cold before they went to bed. Truth to tell, it was not very warm on the ground on Wednesday and Thursday. The explanation given was that one of the A.C. auxiliary engines was wanted for the cooking range and the other for the wireless. The captain explained afterwards that it was more important to have his wireless in action than to keep the passengers warm. This is very true, and the captain could not have done otherwise than he did. At the same time, if a passenger airship is to win popularity it must provide for the comfort as well as the safety of its passengers, and the provision of power to work the radiators is a point which calls for attention.

During the night, tests were carried out to tell the direction and strength of the wind by dropping calcium flares, which worked very well. The airship beat up to the north, flying sometimes 40 to 50 miles out to sea. Mostly, the ship kept at a height of 2,000 ft., with an occasional maximum of 3,400. The usual speed was about 54 knots, but for three hours the ship was kept at 70 m.p.h., and once she was sent up to full speed of 80 m.p.h. for 10 min. During most of the cruise the fuel consumption was being tested. A certain combination of engines was chosen, and the ship was run on them for a period of three hours. Then another combination would be tried. The actual weights taken on board at the start were 22½ tons fuel and 15 tons water ballast. For the Atlantic flight it is proposed to take 36 tons of fuel.

The weather kept clear till 2 or 3 a.m., and then it grew misty. During the night the ship cruised up as far as Flamborough Head, and then turned and worked southwards down the coast again. At 7 a.m., when Mr. Montague and Sir Harry Brittain woke up, they found themselves between Southwold and Lowestoft. During the night, Sqdn.-Ldr. Booth slept in the captain's quarters. He got up three times during the night to satisfy his own curiosity, but found that all was well and that he need not have disturbed himself.