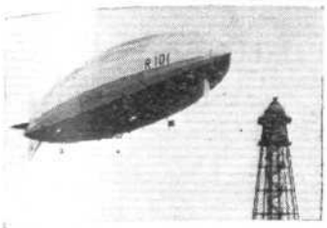
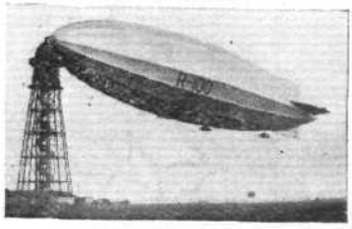


AIRSHIPS



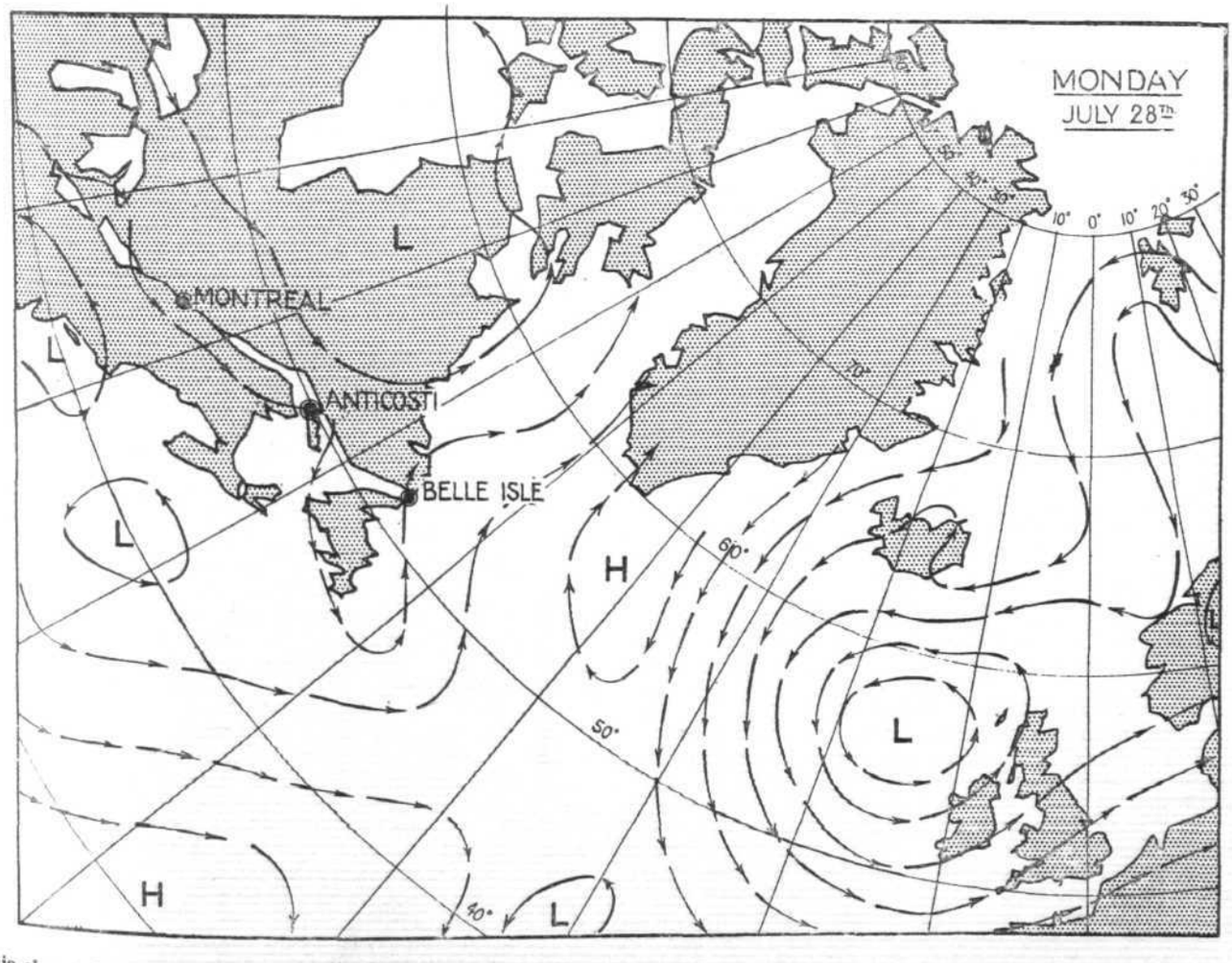
R 100 FLIES TO MONTREAL

WHEN our last issue went to press R 100 had started on her way from Cardington to St. Hubert, and had met with a disappointment through the unexpected movement of a depression off our western coasts. Since then she has arrived safely at the airship station of St. Hubert, outside Montreal, after a journey which was full of interest and not devoid of adventure. It will be convenient to start at the beginning and tell the whole story. In the main, it is a story of splendid navigation, of getting reliable information about the weather and acting on that information in such a way as to escape from unfavourable positions with the minimum loss of time and fuel, while manœuvring so as to get the best out of every favourable circumstance. We must remember that the east to west crossing of the Atlantic has only been made four times before by airships (namely, by R 34, by the *Los Angeles*, and twice by the *Graf Zeppelin*), so that there was a minimum of experience behind the captain and navigator. R 100 is a more powerful airship than any of her three predecessors, but she is of novel and experimental design. The captain was, therefore, faced with a number of problems for which there was no precedent. In order to help readers to understand the intricacies of the ever-changing weather situations, we are reproducing four weather charts, which will show the problem presented by the shifting "highs" and "lows" each day. The information about their movements was gathered by wireless information from Cardington and Canada, as well as from Greenland and from surface ships on the Atlantic. Had the wireless failed to provide this news, and had Mr. Giblett not been able to plot out the new positions, it is possible that the supplies on board the airship would not have sufficed to carry her safely to her destination. The debt to the wireless and meteorological organizations cannot be overestimated. In fact, it is an acknowledged principle that without very good meteorology and wireless, airship navigation is not a practical proposition.

The airship slipped from the tower at Cardington at 2.48 a.m. (G.M.T.). All times in this article are given in G.M.T. unless otherwise stated. She had on board 34·8 tons of fuel and 54 tons of ballast. There were 44 souls on board, six of them being official passengers. The airship also carried 1,918 lb. of food (sufficient for five days) and 500 gallons of water for drinking and washing. Each officer and passenger was allowed 30 lb. of baggage and each member of the crew 15 lb.

When the mooring cable was cast off, the heavily-laden airship appeared to sink below the level of the tower head. Her engines and elevators had to be used to make her climb. She went steadily up to 1,200 ft. and shaped course for Liverpool.

The first chart, dated Monday, July 28, makes clear the reasons why this course was chosen. It shows a depression lying off western coasts of the British Isles. This depression had been stationary there since the Saturday before, and there seemed no reason why it should not stay there for the



This chart shows the position of the weather in the Atlantic before the start of R 100. It was calculated that by steering between Scotland and Ireland the airship would find an easterly wind to the north of the "low."