

reported, but it is possible that a channel was still open along the continental coast. On November 17th there was close packed ice as far as could be seen; this pack persisted for the rest of the month, after which the record ceases. After the last outward-bound vessel had passed through the Strait the radio stations at Cape Hopes Advance and Resolution Island were closed; observations were last taken from Cape Hopes Advance on October 5th and from Resolution Island on October 9th, on which dates no ice was reported.

We were consulted by the Canadian Government with regard to their intention to close during the winter the radio stations at Cape Hopes Advance and Resolution Island. We replied that these stations should not be closed until the last insured vessel had passed through the Strait, and it will be seen from the preceding paragraph that they were so kept open, although they were closed before October 15th, the end of the insurable period. It is obvious that, if there is a desire, as there undoubtedly is, to secure an extension of the season beyond October 15th or a reduction of the supplementary charge of 25 per cent. between October 8th and October 15th, it is desirable that the two stations should remain open for a period rather longer than the existing season in order that additional data regarding ice and fog conditions over this longer period may be collected.

6. Records of the number of hours of fog and of days on which fog occurred during the months of July, August and September have again been kept by the radio stations. In the case of Churchill and of Nottingham Island figures are also available for the months of October and November. In 1933 Resolution Island experienced in August 133 hours on 12 days and in September 59 hours on 6 days. Cape Hopes Advance had in August 138 hours on 12 days and in September 64 hours on 6 days. Nottingham Island, which in August reported 82 hours on 9 days, had in September 68 hours on 7 days, in October 22 hours on 3 days and in November no fog. Churchill experienced in August 66 hours on 4 days, in September 28 hours on 3 days, and in October and November no fog.

7. As we have already indicated, we took oral evidence from Captain Barraclough of the "Rio Claro"—a vessel equipped with a gyro compass. This was Captain Barraclough's second voyage to Churchill; his account did not differ in essentials from the accounts which we had received in respect of the two previous seasons from other masters. Before entering the Strait, he was in touch by wireless with Captain Balcom of the "N.B. McLean" and with the radio station at Resolution Island. In view of the bergs and growlers drifting about the entrance he was advised by Captain Balcom not to attempt to enter until the fog lifted and

there was some visibility. When the fog lifted Captain Barraclough proceeded through the Strait, keeping in touch with the radio stations at Resolution Island, Cape Hopes Advance and Nottingham Island, and stopping when fog came on. On his return voyage through the Strait, Captain Barraclough again had the benefit of advice from the "N.B. McLean" and, following that advice, he left the bergs and growlers, which were still in the Strait, for the most part to the south.

In conclusion, Captain Barraclough said that, in his opinion, the voyage to Churchill by way of the Hudson Bay route was to be preferred to the voyage to Montreal by way of the St. Lawrence.

8. We have given prominence to the evidence of Captain Barraclough because it shows that the aids to navigation, supplied by the Canadian Government, are now well established and acting efficiently. We attach especial importance to his action in getting into touch by wireless, before entering the Strait, with Captain Balcom of the "N.B. McLean" and with the radio station at Resolution Island, and we think that all masters would do well to follow his example. It is clear from his report to his owners that Captain A. Taylor also recognises the debt which masters, using the route, owe to the captains of the Canadian Government vessels and to the staffs of the radio stations. The reliance to be placed on these auxiliaries to navigation is considerably enhanced by the fact that those who work them have now the experience of three seasons behind them.

9. It was suggested by Captain Barraclough in his evidence and by Captain Taylor of the "Thomas Walton" in the report which he submitted to his owners that the fitting of a searchlight would be a considerable convenience on clear dark nights.

10. Captain Barraclough in his evidence to us stated that "unwatched" lights were, in his opinion, very unreliable. Captain Balcom of the "N.B. McLean", however, in a report which he has made to the Canadian Department of Marine on this subject, states that, since 1932, he has found the "unwatched" lights quite dependable. These lights are serviced on the arrival of the "N.B. McLean" in Hudson Strait before August 10th and it has not, so far, been necessary to re-light any of them during the open season of navigation. The masters of the "Vesuvio", the "Thomas Walton" and the "Pennyworth" have suggested that there should be a more prominent light on Coats Island.

11. The Canadian Government have taken further steps to make the route additionally safe. The proposal, to which we referred in