

by radio to provide an efficient life-saving organization. In addition to the direction finding station already established, three radiophone stations were installed at light-houses and at a life-saving station, thus providing a network of communication assuring instant assistance in case of disaster.

Due provision has been made for the safe navigation of the large volume of shipping which will shortly find its way through the Hudson strait and bay. The Department has completed the establishment of four direction finding stations in that area, enabling radio-equipped vessels to navigate the strait and bay in all kinds of weather.

For the benefit of navigators to whom accurate time within a split second is necessary, if reasonable accuracy is to be attained in computing observations on celestial bodies, three Canadian stations, two on the west coast and one on the east coast, transmit time signals twice daily at advertised hours. This service will be augmented shortly by the inclusion of the long distance station at Louisburg, N.S., which will be linked to the observatory at Saint John, N.B., and will transmit time signals on a long wavelength.

Numerous fishermen have fitted their vessels with receiving sets and for their benefit the Department has inaugurated a special broadcasting service embodying such information as weather forecasts, storm warnings, market prices of fish, etc. Three stations are used for this purpose, augmented by a broadcasting service undertaken by the fishery patrol steamer *Arras*, which accompanies the fishing fleet to the Grand Banks during the summer season.

A transoceanic commercial radio beam service is carried on by the Drummondville, Quebec, station, which maintains communication with Great Britain, Australia and the United States.

To ensure the safety of the lives of the passengers and crew, all passenger steamers and certain freighters plying to and from Canadian ports must carry radio equipment manned by competent operators in possession of a certificate of proficiency in radiotelegraphy. The Department maintains a complete radio inspection service to enforce this regulation, and members of the inspection staff located at various ports through the Dominion are responsible for checking the efficiency of radio equipment on ships and for seeing that only competent operators are carried. Examinations for certificates of proficiency in radiotelegraphy are conducted by the Radio Branch and approximately 1,500 such certificates have been granted to date. Table 68 shows the name and situation of the Government-owned radiotelegraph stations in Canada and Newfoundland. In former editions of the Year Book licensed private commercial stations were also listed, but their increasing number renders this impossible. A list of those in operation in 1926 appears on pp. 657-658 of the 1926 Year Book, while an official list of the radio stations of Canada is published by the Department of Marine at 25 cents per copy.

Table 69 gives the number of messages and words handled and the cost of maintenance for the Government stations of the east coast, the west coast, the Great Lakes, and Hudson bay and Hudson strait. For the year 1928-29, the total number of messages was 456,239, as compared with 404,144 in 1927-28 and 402,023 in 1926-27, and of words handled 8,942,945, as compared with 7,695,757 in 1927-28 and 7,347,794 in 1926-27.