

There are now twelve Post Office stations used for this service, *viz.*, Wick, Cullercoats, Grimsby, North Foreland, Niton, Land's End, Fishguard, Seaforth, Port Patrick, Devizes, Valentia, and Malin Head—the last two being operated, on behalf of the Post Office, by the Irish Free State Government. All of these, with the exception of Devizes, are spark stations, varying in power from $1\frac{1}{2}$ to 10 kw., fitted with the 600- and 300 - metre waves, and keeping watch on 600 metres, which is the wave used by ships for sending out the distress call, and, usually, also for sending traffic. The Devizes station is fitted for valve transmission for long-range working with ships which are installed with C.W. sets. Last year these stations were in communication with ships on about 150,000 occasions, resulting in a traffic of over three million words.

It will be noticed by a glance at the map that these stations are distributed round the coast so as to ensure, as far as possible, that distress signals made by ships using even very small power will not be missed. In 1921 distress calls from seventy-two ships were dealt with, and it is clearly laid down that the primary duty of these stations is to be ready at all times for this work of assisting in the safety of life at sea. All distress signals received are reported at once to all the authorities concerned, and no complaint of the action, or want of action, of a coast station in this most important matter has ever been received.

The charges for wireless telegrams to and from ships are normally at the rate of 11d. a word (6d. for the station, 4d. for the ship, and 1d. for

the inland telegraph), outgoing telegrams being handed in at any telegraph office. In the case of short-distance voyages smaller charges are made. These stations also broadcast to ships, without charge, information regarding dangers to navigation, such as gales, derelicts, mines, etc. At a coast station the staff usually consists of an overseer in charge, and eight or nine operators,

so that there are always two operators on duty, one on wireless watch, the other on the land line and attending to the needs of the station generally.

D.F. Stations

At the Niton Station, direction-finding apparatus is fitted experimentally, and there are D.F. stations at Berwick and Flamborough which are worked by the Admiralty on behalf of the Post Office. The naval D.F. station at Lizard also works commercially. For each bearing given by a D.F. station a charge of 5s. is made.

Ships' Operators

As regards the operation of ships' sets, it is laid down that only men who have obtained Certificates of Proficiency from the Post Office are allowed to carry out the duties of a wireless operator. Candidates are trained at privately-owned schools, the examination for certificates being conducted by Post Office examiners at the schools, or at the G.P.O., London. Some 12,000 candidates have obtained Certificates of Proficiency, of which about 300 were issued last year.

The Department exercises general supervision over all British ships' operators, a record being kept of the career of each individual so far as it



Fig. 2. Showing the situation of the various British Post Office wireless stations.