

RADIO APPARATUS FOR RECEIVING TIME-SIGNALS.

It has been decided to waive the ordinary radio license fee in the case of radio apparatus installed at observatories for the purpose of receiving time-signals. The concession is contingent upon the assurance of the Government Astronomer that such installations will be used exclusively for the reception of time-signals.

RADIO BROADCASTING CO. OF NEW ZEALAND, LTD.: TELEGRAMS AT PRESS RATES.

With a view to assisting the development of broadcasting, the Radio Broadcasting Co. is now permitted to receive at press rates telegrams containing news of general public interest for broadcasting from the company's recognized stations.

PRIVATE BROADCASTING-STATIONS.

Two low-power private wireless broadcasting-stations were opened during the year. One, at Christchurch (3ZC), opened on the 6th December, operates on a wave-length of 250 metres, and the other, at Dunedin (4ZM), opened on the 16th October, operates on a wave-length of 300 metres. These stations, in conjunction with the several other private broadcasting-stations, usually operate when the Broadcasting Co.'s stations are silent.

SALE OF RADIO APPARATUS.

In connection with the record required to be kept by radio-dealers of the sale of radio apparatus, it was decided that from the 17th November, 1927, it would be sufficient if sales of the following items were recorded: (1) Assembled sets; (2) telephone-receivers; (3) loud-speakers (all types).

ELIMINATION OF INTERFERENCE WITH BROADCAST RECEPTION.

The matter of the detection and elimination of interference with radio reception is one which, with the growth of interest in broadcast listening, is receiving a good deal of attention in many countries.

With the ever-increasing use of electric power for commercial and domestic purposes there is a corresponding increase in the number of potential sources of radio interference. Occasional power-leakages and irregularities due to faults on electric lines and apparatus are unavoidable; but, fortunately, in most cases remedial measures are available which can minimize or entirely eliminate such troubles. Compared with certain other countries having a greater electrical development, New Zealand is comparatively free from serious disturbances of this nature.

Although the Department is receiving the hearty co-operation of power-distributing authorities and large commercial concerns employing electrical machinery, the localization and removal of interference over such widespread territory is not always a simple problem. Radio listeners may, however, rest assured that every reported case of serious interference is investigated by departmental officers.

Although interference from radiating receivers has considerably diminished as a result of the improved broadcasting service and the increased interest taken by listeners in the careful manipulation of their sets, much remains to be accomplished before it can be said that this universal trouble has been entirely eliminated. The duty of an administration in this connection lies primarily in keeping the channels clear for good reception from the local or district station. A vast improvement on these lines has been effected, particularly in and around the principal centres, since the four stations of the Radio Broadcasting Co. have been operating at full power.

A study has been made of the most effective methods employed by other countries in their campaigns against radio interference, and suitable apparatus is being assembled for use in this country.

Conversion of Ship Stations to Valve Operation.—The transmitting-sets on the Wellington-Lyttelton ferry-steamers "Maori," and "Wahine" were converted in October, 1927, from spark to valve operation. The installation of the valve sets, which was effected by the owners in the interest of broadcast reception, has eliminated the interference previously caused to radio reception from this source.

It is anticipated that the action taken in respect of the "Maori" and "Wahine" will be the forerunner of similar conversions in the near future. The regulations drawn up by the International Radio Telegraph Convention of Washington prescribe definite measures for the elimination of interference from commercial stations, both ship and coast. These regulations are briefly as follow:—

- (a) No new spark installations are to be made on land stations, and existing land stations are to be modernized as soon as possible.
- (b) From the 1st January, 1930, no new spark installations may be made on ships or aircraft unless of low power (less than 300 watts primary input).
- (c) From the 1st January, 1930, no spark transmitters shall operate above 800 metres except as provided for existing land stations referred to in (d).
- (d) From the 1st January, 1935, all land-station spark operation shall cease.
- (e) From the 1st January, 1940, all spark operation of whatever character, except at the low-power stations referred to in (b), must cease.