29 F.—1.

# RADIO-TELEGRAMS EXCHANGED BETWEEN NEW ZEALAND OFFICES AND THE T.S. "TAMAHINE."

The charge for radio-telegrams exchanged between New Zealand offices and the t.s. "Tamabine" while the vessel is engaged in the Wellington-Picton passenger service was reduced on the 4th November from 6d. a word to  $2\frac{1}{2}$ d. a word with a minimum of 1s. 3d., equal to a message of six words. This charge is the same as that for messages exchanged between New Zealand offices and the vessels engaged in the Wellington-Lyttelton steamer express service.

## CHRISTMAS AND NEW YEAR GREETINGS TELEGRAMS FOR TRANSMISSION BY WIRELESS.

A reduction was made this year in the charge for Christmas and New Year Greetings telegrams transmitted by wireless to islands in the Southern Pacific. During the period 14th December to 6th January, inclusive, such messages could be exchanged between New Zealand and the following places at the rate of 2s. 6d. for ten words and 3d. for each additional word:—

Samoa.	Cook Islands.	Tonga.	Chatham Islands.
Apia. Aleipata. Fagamalo. Fakaofo. Salailua. Tuasivi	Rarotonga. Aitutaki. Atiu. Mangaia. Mauke. Niue.	Nukualofa. Haapai. Niuafoou. Niuatobutabu. Vavau.	Chatham Islands.

In addition, the charge for Christmas and New Year Greetings telegrams to the following New Zealand wireless offices was reduced to 6d. a message: Kawau Island, Puysegur Point, Portland Island, Stephens Island, Milford Sound, and Glade House.

#### RADIO-BEACON SIGNALS.

Radio-beacon signals are now transmitted on request from the Stephens Island and Portland Island lighthouse radio stations.

#### AIRCRAFT RADIO COMMUNICATION.

On the institution of the air service inaugurated by the Union Airways of New Zealand, Ltd., in January last, the Department was requested to provide temporary radio-telegraph facilities at certain aerodromes for communication with the company's aircraft pending the provision of permanent equipment at those stations. Arrangements were made for the provision and operation by the Department of stations at Palmerston North and Dunedin (the terminals of the air service concerned), and at Wellington, Blenheim, and Christchurch. It was necessary to install specially the required equipment at Palmerston North and Blenheim, but at the other places concerned the Department had facilities already available. No difficulty has been experienced in carrying out the service which at present is limited to messages on the business of the controlling company.

### FREQUENCY MEASURING EQUIPMENT.

As an adjunct to the administrative function of the Department in its capacity of statutory authority for the control of all radio communications in New Zealand, it has been necessary to provide equipment of great accuracy for the continuous checking of the operating frequencies of New Zealand radio stations. Accordingly, a primary frequency standard was established at Wellington and was brought into use during the year. This is high-precision equipment and provides New Zealand with a standard of frequency measurement which permits proper observance of the obligations of this Administration under the International Telecommunication Convention in the matter of maintaining its radio stations on their correct frequencies with the consequent avoidance of interference with other services conducted on neighbouring waves. The benefit of this apparatus has already been felt not only in the observation of broadcasting stations, but also in connection with the Department's own services.

### EMERGENCY RADIO STATIONS.

The emergency radio stations maintained by the Department throughout the Dominion were brought into use several times during the year, notably on the occasions of the unprecedented and widespread dislocation of telegraph and telephone lines by storms in February last, when the value of the services was clearly exemplified. Almost all the main lines throughout the North Island were interrupted, and the radio apparatus at the various centres was promptly brought into use, no less than four channels being operated in this service at Wellington alone. A considerable amount of urgent and important traffic was handled over the temporary radio channels pending the restoration of the land line service.

Until recently the power for the transmitters and receivers at the departmental emergency stations was derived exclusively from batteries. Power-supply units have now been provided to permit the power to be obtained from the public electricity supply when such is available. This will ensure greater stability and improved power-output in such circumstances and will enable the batteries to be conserved for use only in the event of the dislocation of the electricity supply.