RADIO-TELEGRAPH AND RADIO-TELEPHONE SERVICES.

WELLINGTON-RADIO.

In order to cope with the continually expanding services being provided by this station it has been necessary to arrange for several additional transmitters. A second high-speed automatic Morse sender has recently been installed and will greatly assist in the despatch of traffic. Improved battery-charging equipment has also been provided, and equipment is about to be installed to provide increased flexibility in the choice of waves for the overseas radio-telephone service.

An extensive rearrangement of and improvement in the transmitting-aerial system has been undertaken during the year. At present these aerials are for the most part suspended from temporary wooden poles, but arrangements are now in hand for the replacement of most of these poles by steel towers. When these are erected the existing tower, which is in an unsatisfactory condition, will be dismantled.

The amount of transmitting-equipment at this station has necessitated an extensive addition to the building, which has recently been completed. Portion of the equipment will be transferred to the new accommodation in the near future and the working-conditions will then be very much improved.

AWARUA-RADIO.

With a view to improving the short-wave point-to-point service carried out by this station arrangements are at present in hand for the provision of a new radio-telegraph transmitter of 100 watts rating.

The installation of the additional transmitters referred to in last year's report has increased appreciably the amount of power used by the station, and this has necessitated the provision of a new power-supply cable containing conductors of higher current-carrying capacity. Much improved operation of the transmitters has resulted.

The recent felling of the 400 ft. tower at Awarua-Radio aroused some public interest. This tower was erected in 1913, and in view of its corroded condition and the fact that the 2,000-metre service for which it was originally provided has been discontinued, arrangements were made for its dismantling. Special precautions were taken to direct its fall clear of buildings, &c., and the operation was carried out successfully.

Consequent upon the removal of the tower it has been necessary to provide temporary masts to carry the various aerials pending the making of permanent arrangements.

DEATH OF MARCHESE MARCONI: OBSERVANCE OF TWO MINUTES' SILENCE.

As a mark of respect to the late Marchese Marconi, who died on the 20th July, and as a tribute to his work in wireless communication, all Government radio stations in New Zealand observed a two minutes' silence to synchronize with the time of the funeral which took place at 5 p.m. G.M.T. on the 21st July.

EMERGENCY RADIO STATIONS.

The Department's emergency radio stations gave effective service in a number of instances during the year, when minor interruptions to telegraph and telephone lines occurred.

Regular tests of the emergency stations are carried out to ensure that they are always in a condition to meet immediately any emergency that might arise.

At a number of the stations improved receivers have been provided during the year, the original receivers being held for stand-by purposes.

AERADIO SERVICES.

In the near future direction-finding equipment will be installed at a number of aerodromes, and this will conduce to greater safety of the flying services in the event of poor visibility. Small radio beacons to assist in landing are also being provided.

Arrangements have been made for the installation of equipment at all main aeradio stations to provide short-wave intercommunication between aerodromes in order to relieve the present congestion on the medium-wave bands.

In July last an expedition left New Zealand for the purpose of surveying and reporting on, *inter alia*, the feasibility of establishing an aeradio and meteorological reporting station on Raoul Island in the Kermadec Group. Low-power equipment for a temporary station was taken by the expedition, and excellent results have been achieved in maintaining communication and exchanging traffic with New Zealand.

In December last a new aeradio station was opened for service at Jackson's Bay, South Westland. In addition, improved equipment has been or is being installed at several stations.

KAWAU ISLAND: CLOSING OF RADIO STATION.

Following the laying of a cable between the mainland and Kawau Island, the radio station at that place has been closed.

PRIVATE RADIO-COMMUNICATION SERVICES.

During the year several additional licenses were issued for the operation of private radio services as a means of providing communication either between points not served by the ordinary telegraph and telephone systems or in other special circumstances. The new licenses were for the erection of privately owned and operated radio stations at Great Mercury Island and at Big Bay (South Westland)