

## RADIO-TELEGRAPH AND RADIO-TELEPHONE SERVICES.

### WELLINGTON - RADIO.

The completion of the additions to the transmitting building undertaken last year has permitted a much improved layout of the equipment at Wellington-Radio. A start has now been made with the erection of the six steel towers which are to replace the temporary wooden masts erected to support the new aerial system. When this work is completed the existing tower will be dismantled.

Further transmitting-equipment installed during the year included a 1 kW. short-wave transmitter for use in the broadcasting of synoptic weather reports primarily for the aeradio service. Another 1 kW. transmitter is now being installed to provide facilities for transmitting on an alternative frequency for the overseas radio-telephone service.

### AWARUA - RADIO.

During the year a low-power short-wave radio-telegraph transmitter was installed to provide for an additional operating channel in the ship-shore service, while a 60 watt short-wave transmitter to provide improved emergency and local point-to-point services is now in course of construction.

In order to assist in the navigation of aircraft in the projected trans-Tasman air service, the installation of direction-finding equipment is being undertaken at Awarua. This will work in conjunction with similar equipment being installed at the Musick Point station near Auckland. An additional short-wave transmitter is also to be provided for intercommunication with the Musick Point station in connection with the direction-finding service.

### APIA - RADIO.

On account of the station's favourable position in the Pacific for the collection and dissemination of meteorological reports, a 1 kW. short-wave transmitter is being installed at the Apia-Radio station primarily for the transmission of weather information to trans-oceanic aircraft.

Two high-tension rectifier units have been supplied to Apia-Radio to enable the radio equipment to be operated directly from the public hydro electric power-supply.

### EMERGENCY RADIO SERVICE.

With a view to increasing the efficiency of the emergency radio-telegraph service established for the purpose of maintaining communication between centres in the event of the failure of the land lines, improved transmitting-equipment is being provided at a number of stations. Nine 10 watt transmitters are being distributed among smaller centres, while the more important stations are being equipped with 60 watt transmitters.

New emergency radio stations will shortly be provided at Wairoa and Opoitiki.

### TRANS-TASMAN AIR SERVICE : ESTABLISHMENT OF NEW RADIO STATION AT EAST TAMAKI.

In order to provide adequate radio navigational aids for the proposed trans-Tasman air service, a radio station is to be opened at East Tamaki Head, near Auckland. As a national memorial to the late Captain Musick and his crew, who perished in the disaster which overtook Pan-American Airways flying-boat "Samoa Clipper" in January, 1938, while returning to New Zealand after the inaugural flight of the Auckland-Honolulu air mail-service, the site of the new station will be known as Musick Point and the station will be named the Musick Memorial Station.

A building embodying suitable architectural features is being planned, but as it probably will not be completed by the time of the inauguration of the air service arrangements are being made for temporary accommodation.

The station will contain a 1 kW. medium-wave (600-900 metre) transmitter and two 1 kW. shortwave transmitters. Duplication of the latter is being provided in order that there will be no interruption of the watch for aircraft signals during the period the station may be engaged in exchanging meteorological or other service data with the Australian terminal station. The equipment is on order, and is expected to be available in ample time for the opening of the air service.

Short-wave direction-finding equipment will also be provided at the Musick Point station and, in addition, at Awarua-Radio, and a point-to-point short-wave telegraph channel will be operated between these two stations.

To avoid the maintenance of two radio stations in the Auckland District, the services of Auckland-Radio will be transferred from the Chief Post-office building, Auckland, to the Musick Point station.

### AERADIO SERVICES.

The necessity of providing additional aeradio stations consequent upon the extension of the commercial air services has tested the resources of the Department as regards both technical and operating personnel.

The decision regarding the establishment of aeradio stations rests with the Air Department acting on the advice of the Aeradio Committee, but after the provision of a station has been authorized the work of installing the equipment and the staffing and operating of the station devolve upon the Post and Telegraph Department.

During the year aeradio stations were opened at Gisborne, Napier, Harewood (Christchurch), Tauranga, and Westport, increasing to fifteen the number of stations operated by the Department.