

SECTION IV.—AERADIO SERVICES

While it is recognized that the wartime arrangements were of an interim nature, it has not yet been possible to develop and implement a complete peacetime organization. At present, therefore, the operation of the ground facilities is shared by the Post and Telegraph Department and the Royal New Zealand Air Force, and most of the construction and maintenance work continues to be performed by the Post Office. The Aeradio Committee has continued its function of co-ordinating the various interests concerned, and has also effected a collaboration, where necessary, with the Island Territories Department in regard to radio facilities required for air services in Rarotonga and Western Samoa. Within the structure of the existing organization certain improvements and extensions to radio facilities have been planned and carried out. These are referred to under separate headings below :—

RECONSTRUCTION OF EXISTING RADIO STATIONS

To meet the greater demands being placed on aeradio services, it has been necessary to extend the building accommodation and the plant facilities at the civil aerodromes throughout the country. The first station to be reconstructed was that of Taieri, and during the present year New Plymouth aeradio was similarly reconstructed. Plans are at present well advanced for the reconstruction of an additional seven stations.

NAVIGATIONAL AIDS FOR INTERNAL AIR ROUTES

After considerable study, it was decided in June last to proceed with a limited programme for the equipment of New Zealand's internal air routes for radio navigation by means of medium-frequency radio ranges. This is a standard and well-tried system used extensively in other countries, and while it is recognized that post-war developments may eventually supersede it, it is nevertheless considered a highly desirable acquisition for use in the immediate future. Equipment for three stations has been purchased from the United States, and arrangements for an initial installation at Christchurch are well advanced. Similar installations near Wellington and at New Plymouth will complete the initial construction programme. It is anticipated that this chain of three stations, together with an existing similar installation at Whenuapai, will provide a definite advance in the provision of radio-navigational facilities for civil airlines in New Zealand.

DIRECTION-FINDING SERVICES

Pending the availability of more modern systems of air navigation, the fourteen medium-frequency direction-finders installed throughout New Zealand continue to fulfil a useful function. By collaboration between the Post and Telegraph Department and the Royal New Zealand Air Force, they have been maintained at a high standard of accuracy. In view of past difficulties due to site irregularities with the high-frequency direction-finders at Musick Aeradio, Auckland, an additional installation has been made at Waiuku. This location has been chosen in order to obtain high soil conductivity, which should permit of more stable operation and more reliable results than have been available from Musick Aeradio.

The Royal New Zealand Navy has now relinquished the use of their high-frequency and medium-frequency direction-finders at Waipapakauri. These installations have been handed over to this Department, and their availability will permit of a more continuous service and greater reliability for direction-finding in connection with overseas aircraft near the northern portion of New Zealand. The naval high-frequency direction-finder at Awarua has similarly