

The extension of the Cook Strait Airways, Ltd., service to the West Coast of the South Island necessitated the provision of aeradio stations at Greymouth and Hokitika, and more recently at Westport. A station was also established at Jackson's Bay, the terminal of the service operated by Air Travel, Ltd.

The extension of the original service operated by Union Airways to include Auckland and New Plymouth, Napier and Gisborne, and later Auckland and Gisborne, has involved the provision of additional stations, with the result that aeradio stations are now in operation at the following places: Auckland (Mangere Aerodrome), Tauranga, Gisborne, Napier, New Plymouth (Bell Block Aerodrome), Palmerston North (Milson Aerodrome), Wellington (Wellington-Radio), Blenheim, Nelson, Christchurch (Harewood Aerodrome), Westport, Greymouth, Hokitika, Jackson's Bay, Dunedin (Taieri Aerodrome).

A commencement has recently been made in the installation of the direction-finding and approach-beacon equipment. At present an experimental direction-finding service is being operated at Wellington, and an approach beacon is in the process of being installed at Dunedin.

In order to provide the required radio communication facilities and navigational aids for the projected trans-Tasman air service, a new radio station is being provided at East Head, Tamaki, near Auckland, which is to be known as the "Musick Memorial Station," in memory of Captain Musick and the crew of the Pan-American flying boat "Samoa Clipper" who perished while pioneering the trans-Pacific air service between America and New Zealand. Temporary buildings are now in course of erection, and the station will be available for the inception of the air service to Australia.

In addition to the provision of the network of stations on the mainland, the Government approved of an expedition being sent to investigate and report on the establishment of an aeradio station on Raoul Island, in the Kermadec Group. The expedition left in June, 1937, and work is now in hand for the permanent settlement of the island for this and ancillary purposes.

In advising on the establishment of the above-mentioned stations, the Aeradio Committee—operating under the Air Department—has had available the full facilities of the Departments represented on the Committee, and this opportunity is taken of expressing appreciation of the whole-hearted co-operation of those Departments.

METEOROLOGICAL SERVICES.

The Meteorological Office in New Zealand is under the control of the Department of Scientific and Industrial Research, but works in very close co-operation with the Air Department.

Since the commencement of regular services at the beginning of 1936 by Cook Strait Airways and Union Airways there has been a very rapid expansion in the meteorological organization for aviation.

From the outset, special forecasts and route reports were supplied for all schedule flights, and this involved arranging for a wide network of reports at 6 a.m. and noon each day, in addition to the existing reports at 9 a.m. and 3 p.m.

During 1937, aviation meteorological stations were established at Hobsonville and Wigram Aerodromes. That at Auckland was concerned principally with preparations for trans-ocean services, while the function of the Christchurch station is chiefly the instruction in meteorology of Air Force trainees. A forecasting service for local flying activities is also provided by both stations. A scheme was also introduced during 1937 for the broadcast of regular meteorological reports for aviation through Station 2YA of the National Broadcasting Service. These latter issues are made from the Meteorological Office in Wellington at 6.50 a.m., 10 a.m., and 1 p.m. each day (10 a.m. and 1 p.m. only on Sundays). They include a general summary of the existing weather conditions throughout the country and detailed reports—including visibility, amount and height of low cloud, and wind—from some seventeen of the principal aerodromes along the main air routes. With the 10 a.m. report a forecast is given for the remainder of the day, and at 1 p.m. a forecast covering the succeeding twenty-four hours. Considerable use of these reports is made by the itinerant flyer and the club pilot.

Mention has already been made of the special reports supplied for regular commercial flights. These are telephoned to the aerodrome of departure, and at the present time twenty-two individual forecasts and reports are being issued regularly each day from Wellington. There is also an irregular demand for similar reports from private pilots and the R.N.Z.A.F. These reports, and the form on which they are taken down for the pilot's use, follow exactly the practice which has been laid down internationally.

During the year active preparations have been made for the impending trans-Tasman and trans-Pacific air services, for which reports from a network of stations will be required at 6 p.m. and midnight. When the trans-Tasman service commences, the Meteorological Offices at Wellington and Auckland will be staffed during twenty-four hours each day. The meteorological station at Hobsonville Aerodrome has been moved into Auckland and is now accommodated in the Trans-Tasman Terminal Building. Very close co-operation will be required between the meteorological stations at Auckland and Sydney, and detailed plans for this purpose, based on the scheme developed during the trans-Atlantic flights, were agreed upon at the Conference held in Melbourne in December last.

SECTION V.—AIR PHOTOGRAPHY.

During the year under review only one private concern, New Zealand Aerial Mapping, Ltd., was engaged in aerial survey and photographic work, most of which was performed for local bodies. The total area photographed amounted to 1,516 square miles, the flying-time involved being 188 hours.

The Royal New Zealand Air Force has also carried out some photographic work for Government Departments. Arrangements have now been made for specially qualified staff and suitable equipment to be available for this purpose.