

During the year New Zealand has given the Pacific route 68·19 per cent. of the ordinary business to Australia, as against 75·66 per cent. last year.

963 Press telegrams were sent via Pacific and 1,542 via Eastern, compared with 1,124 and 1,608 respectively last year.

The number of cables sent as "deferred" during the year shows an increase of approximately 93 per cent. over the previous year's figures.

The Pacific Cable Board's auxiliary schooner "Strathcona" was wrecked on the Minerva Reef during a voyage from Auckland to Fanning Island. All on board were saved, but a bag of mails was lost.

There has been a very large increase in the number of week-end messages sent, the total number being 28,387, an increase of 212 per cent. To a great extent this increase is accounted for by the number of such messages sent to members of the Expeditionary Forces, with reference to which special arrangements have been made and special facilities afforded. Owing to the exigencies of the war the week-end cable service was occasionally suspended. Arrangements were made, however, to accept messages to be telegraphed to Montreal and posted from that city to the United Kingdom.

WIRELESS TELEGRAPHY.

The two high-power stations at Awanui and Awarua have continued to work satisfactorily, also the low-power stations at Wellington and Chatham Islands. The low-power station at Auckland was closed on the 8th May, 1915, but not dismantled.

Ships continue to exercise care not to disclose their whereabouts, and, owing to the restriction placed since the outbreak of war upon business of an unimportant nature, a considerable decline in the volume of wireless traffic has resulted.

Twenty-four ship-stations are registered in New Zealand. Observations are being made at Chatham Islands and Awarua of atmospheric electrical disturbances which prevail in greater or less degree at all times. These are despatched to the British Association for the Advancement of Science.

Wireless communication on long waves between Awanui and Apia, Samoa, a distance of 1,550 knots, established shortly after the seizure of the Samoan group by the New Zealand Expeditionary Force on behalf of the Imperial Government on the outbreak of war, continues to be satisfactorily maintained.

Recently the wireless station at Awarua served a useful purpose that is unusual in these waters. The chronometers of the "Aurora" had not been checked since that vessel's departure for the southern seas. The vessel was returning damaged, and required correct time to check the chronometers. Arrangements were made by which at the three consecutive hours of 11 a.m., noon, and 1 p.m. the Observatory clock at Wellington was connected direct to a land-line circuit to the Awarua wireless-station. The length of this circuit was approximately 650 miles. The ship was on the lookout for a wireless signal, which was despatched by preconcerted arrangement practically simultaneously with its receipt over the land circuit. The result was found to be highly satisfactory.

The native trees that have been planted on the 30-acre site of the Wellington radio-station on Mount Wakefield are doing well, and giving promise that in a few years they will relieve the denuded aspect that prevails at present.

TELEPHONE EXCHANGES.

The expansion of the telephone-exchange system continued steadily throughout the year. Ten new exchanges were opened, and the number of subscribers increased by 3,542 and connections by 4,715. The total number of exchanges is 259, of which 62 are central exchanges—*i.e.*, self-contained—and 197 sub-exchanges.

The total number of connections of all kinds amounts to 58,976, of which 44,836 are direct-paying connections and 8,668 extensions, and 5,472 bureau and service connections. The increase in the connections during the year amounted to 8·69 per cent.

The telephone-exchange system includes 3,437 miles of line and 128,525 miles of wire.

The total revenue received was £287,547, an apparent decrease on last year's figures; but, as was explained in the returns, on account of the alteration in due date of subscriptions, receipts fell into the previous year which would in ordinary course have been collected during the currency of the year just closed. The necessary alignment will be completed during the present year, and in future the figures will not be affected.

The conversion of earth-working exchanges to metallic circuit is steadily proceeding, and 19 exchanges have been changed to the latter system during the year. Of the existing exchanges, 195 are on the metallic-circuit system, 57 on the single-line system, and 7 are in course of conversion from single line to metallic.

The party-line connection has become exceedingly popular. There are now 2,541 party-line circuits, with a total of 8,505 subscribers, an increase in this particular branch of exchange work of 478 lines and 1,810 circuits.

The work of laying the telephone-cables underground is still proceeding, and during the year four and a half miles of ducts, fifteen miles of pipes, and sixteen miles of armoured cable were thus laid. Toll circuits are now available for telephone communication between Wellington and Napier, and Napier and Gisborne.

The proportion of exchange connections of all kinds to the population of the Dominion on the 31st March, 1916, was slightly over 5 per cent. The percentages in each of the four principal centres are as follows: Wellington, 9·54; Auckland, 6·55; Christchurch, 6·28; Dunedin, 6·91.

The number of telephone connections at the ten principal telephone exchanges on the 31st March, 1916, was as follows: Auckland, 7,563; Wellington, 7,140; Christchurch, 5,547; Dunedin, 4,725; Gisborne, 1,557; Wanganui, 1,533; Napier, 1,454; Hastings, 1,420; Invercargill, 1,408; Palmerston North, 1,213.