

During the whaling season just ended a considerable volume of traffic was exchanged between Radio-Awarua and the whaling-ships in the Antarctic. Owing to the great distance of these ships from Radio-Awarua—the nearest coast station—it was necessary in past years to resort to high-power working in order to clear traffic for the vessels. This year, however, all traffic was handled on short waves.

Battery-charging Plant.—By the installation at Radio-Awarua of an electric-power rectifier, the accumulators can now be charged from the hydro-electric-power supply. Previously the method of charging these cells was by means of a generator driven by an internal-combustion engine.

Provision of Note-filter.—A special note-filter was installed during February to improve reception from the British high-power station at Rugby. The filter is proving very efficient.

WELLINGTON.

Demolition of Mast.—A gale of exceptional severity which raged in Wellington on the 12th May, 1926, caused the demolition of the aerial tower at Radio-Wellington. The tower was of the self-supporting type, 165 ft. in height, and was constructed of galvanized angle-steel. Examination of the mast after the fall showed that the collapse had been due to the shearing-off of the bolts by which the tower had been secured to the concrete base. Within a few minutes after the crash a temporary antenna was improvised and the normal watch for distress-signals was re-established. The following day a 60 ft. steel mast and a new antenna were erected, and the normal traffic service was resumed.

AWANUI.

Routine maintenance only was carried out at this station, which continued to handle efficiently a large volume of traffic between New Zealand and the Pacific islands.

Opportunity was taken during the year to conduct experiments in low-power short-wave working with Radio-Apia (Samoa), and the result of these experiments has been of considerable value in connection with the projected short-wave service between Radio-Wellington and the Pacific islands.

CHATHAM ISLANDS.

A party of workmen was despatched to Chatham Islands on the 22nd February, 1927, to undertake the repainting and overhaul of the steel tower.

In consequence of the collapse of the steel tower at Wellington Radio-station, it is deemed desirable to provide stays for the Chatham Islands tower, which is also of the self-supporting type, 150 ft. in height. This is being done in conjunction with the repainting and overhaul of the tower.

WIRELESS TELEGRAPH AND TELEPHONE COMMUNICATION BETWEEN AUCKLAND HARBOUR AND TIRITIRI.

By arrangement with the Auckland Harbour Board, wireless telegraph and telephone communication was established in October, 1926, between King's Wharf, Auckland, and Tiritiri Island, in the Hauraki Gulf. Each station has a power of 10 watts and operates on a wave-length of 200 metres. The stations are owned and operated by the Auckland Harbour Board.

PROPOSED SHORT-WAVE SERVICE BETWEEN NEW ZEALAND AND THE PACIFIC ISLANDS.

Apparatus for experimental short-wave transmission is now being installed at Radio-Wellington with a view to providing direct short-wave communication with the Pacific Islands in which New Zealand is interested, thus obviating the relaying of traffic by Radio-Apia.

Experiments with improvised apparatus have for some time been carried out between Awanui (New Zealand) and Apia (Samoa), with very satisfactory results. During the course of these experiments it has been clearly demonstrated that short-wave working with low power is frequently practicable when atmospheric interference renders high-power long-wave working an impossibility.

If the results of further experiments which are to be conducted shortly are as satisfactory as is anticipated, and certain difficulties confronting simultaneous commercial- and short-wave communication, &c., can be successfully overcome, it is probable that short-wave signalling will be utilized by New Zealand coast stations to a much greater extent than in the past.

OPENING OF RADIO-STATIONS IN PACIFIC ISLANDS.

Inter-Island radio communication in the Pacific islands was extended during the year by the erection of radio-stations at Aleipata (VMCN), Fagamalo (VMCP), Tuasivi (VMCQ), and Salailua (VMCZ) in the Samoan Group, and at Fakaofu (VMCY) in the Tokelau or Union Group. The stations are fitted with low-power valve transmitters, and communication is with Apia only. Telegrams from New Zealand are accepted at the rate of 1s. 2d. per word.

VALUE OF RADIO-TELEGRAPHY TO SHIPS IN DISTRESS.

The wreck of the s.s. "Manaia" on the 10th June, 1926, exemplified in a marked degree the value of wireless installations on coastal ships. The "Manaia" carrying sixty passengers from Tauranga to Auckland, struck Slipper Island at 11.30 p.m. and was held fast on the rocks. Immediately the