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HAWKE'S BAY EARTHQUAKE, FEBRUARY, 1931.

The most disastrous earthquake in the history of New Zealand occurred in the Hawke's Bay District on the 3rd February, 1931, at 10.47 a.m. Departmental buildings and plant were seriously damaged, and post and telegraph services interrupted.

Telegraph and telephone communication was lost within the whole of the area bounded approximately by Dannevirke in the south, Gisborne in the north, and Taupo in the north-west, the principal offices concerned being Napier and Hastings. Rail communication was interrupted temporarily, but, fortunately, it was possible at all times to maintain road communication south of Napier. The road between Napier and Wairoa was obliterated in a number of places, but Wairoa was able to maintain communication through Gisborne.

The Napier Chief Post-office building, a three-storied structure which was completed last year at a cost of £52,745, withstood the earthquake shocks, but was gutted by the fire which followed and swept the business area of the town; the Port Ahuriri Post-office building was badly damaged and then destroyed by fire; at Hastings the clock-tower of the post-office building collapsed and damaged the old portion of the building to such an extent that it required to be demolished; the clock-tower of the Wairoa building collapsed, causing the collapse of a portion of the roof and of the front wall of the building; and a number of other post-office buildings, notably the Waipukurau building, were damaged more or less seriously.

The first reports of the disaster reached Wellington by wireless messages from the s.s. "North-umberland" and "Taranaki" anchored off Napier, the "Taranaki" immediately following her transmission by giving general information as to the position so far as it could be seen from the roadstead in a message received at Wellington Radio at 11.10 a.m. Later these reports were supplemented by information furnished by H.M.S. "Veronica," lying at the wharf at Port Ahuriri. Immediately the Department made effective use of its telegraph and telephone system in organizing the despatch to the area of doctors and nurses.

RESTORATION OF COMMUNICATIONS.

Radio Communication.—Amateur radio stations rendered valuable service in supplementing means of communication as soon as possible after the earthquake. Efforts were at once made by the Department's Wellington radio station to establish communication with amateur radio stations at Napier and Hastings. The first indication of success in this connection was at 3.45 p.m., when a message from the Postmaster, Hastings, transmitted by a Hastings amateur station was picked up by a Wellington amateur station. Efforts to gain further contact with the Hastings amateur at that time were unsuccessful, but soon after 5 p.m. the Hastings station was heard working with a Gisborne amateur station, by whose assistance contact was arranged. By 7 p.m. Wellington-Radio succeeded in establishing communication with the Hastings amateur radio station already referred to, and important messages were exchanged until land-line connections were restored.

At about 4 p.m. on the 3rd another amateur station at Wellington reported having established contact with a Napier amateur station. The Department assumed control of both stations, placing departmental officers in charge, and the two stations exchanged a large number of urgent messages until the Wellington station was released at 4.20 p.m. on the 4th February. The Napier station continued as an auxiliary official station until the 6th February, working direct with Wellington-Radio.

In addition to those amateurs already referred to who participated in the establishment of direct channels to Wellington, considerable assistance was rendered by other amateur radio stations at Gisborne, Wairoa, Auckland, Rotorua, and Wellington.

Short-wave transmitting and receiving equipment were hurried to the spot by representatives of radio firms and readily made available for departmental use as required. Short-wave equipment was installed early on the 4th February at the Hastings Street School as an official radio-station under the call sign "ZLN." Although on account of the prompt restoration of line circuits this station was not used to any extent, it provided a sense of security against the total loss of communication.

Telegraph and Telephone Lines.—Tests made at Wellington immediately after the earthquake showed that telegraph and telephone lines were interrupted north of Dannevirke and south of Taupo. Steps were at once taken by the engineering branch to organize the work of restoration. As a result a party was despatched from Dannevirke at noon direct for Takapau, to work northwards. Shortly afterwards a second party left Dannevirke to clear the section between Dannevirke and Takapau. A third party, consisting of two gangs, left Palmerston North for Waipukurau direct with tentative instructions to divide their forces and work north and south from Waipukurau. These parties were preceded by an Engineer and an Overseer with the object of ascertaining the nature of the damage and organizing the work of the several parties to the best advantage. In the meantime the local line staffs at Napier, Hastings, and Waipukurau, which were isolated from headquarters, commenced to do all in their power to restore the lines, particularly on the south side; and a party had also left Rotorua with instructions to restore communication on the Taupo-Napier route.

In the absence of specific information as to the extent of the dislocation, and in anticipation of more serious developments, a party of engineers, specially chosen by reason of their qualifications in certain phases of telegraph, telephone, and radio engineering, was at once organized at Wellington and despatched by motor transport with emergency materials.

The work of line-restoration was considerably complicated owing to the recurrence of contacts with successive tremors. In some cases the lines were broken by falling buildings; and many poles were shaken loose and angle poles straightened up. In a number of instances all the wires for many spans were twisted together, resembling a wire rope.