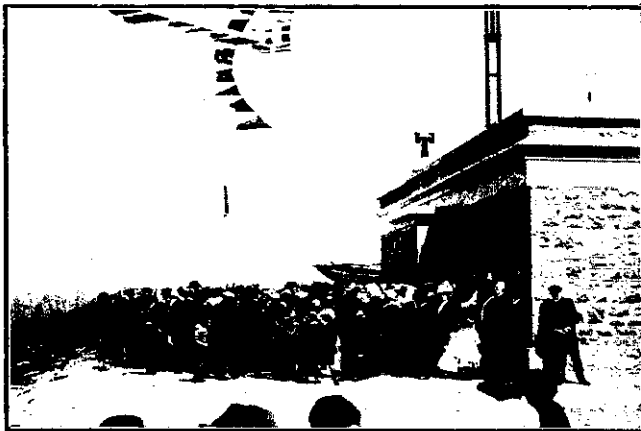


THE NEW WIRELESS STATION ON THE OPENING DAY, WITH A 70-MILE GALE BLOWING AT THE TIME. S. C. Smith, photo.

EVERY part of the Empire is to be brought within call by a ring of wireless stations to be established round the British Empire. Under an arrangement made by the Imperial Government stations are to be built in England, Egypt, the East African

independently with the erection of a station in connection with the Imperial chain. In this way, New Zealand will be in constant communication with Australia per medium of its two high-power stations, and Australia in turn will communicate direct with the Imperial station at Singapore. Other installations in



S. C. Smith, photo. A GENERAL VIEW AT THE OPENING OF THE NEW WIRELESS STATION.

Protectorate, South Africa, India, and Singapore. The chain of stations will connect the United Kingdom with Australia (via India), and with South Africa in the first instance. The Australian and New Zealand Governments stood out of the agreement, but are both proceeding

various parts of the Dominion have been carried out, or are in process of completion, designed mainly for coastal trade and short range message sending, but the Imperial aspect, the station that gives immediate connection with the outside world, marks the important chapter in

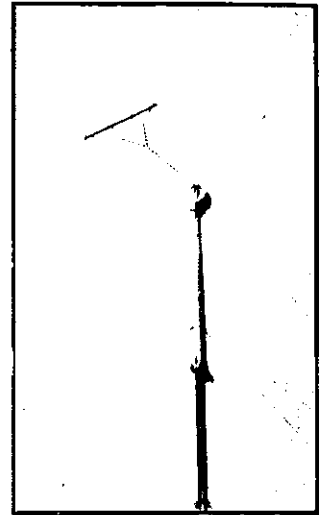


S. C. Smith, photo. THE INTERIOR OF THE WIRELESS ROOM AT THE NEW STATION SHOWING THE OPERATOR AT WORK.

the development of wireless telegraphy at this end of the world.

Radio-telegraphy has a very rapid history. Only in 1896 Marconi took his discovery to England, and in 1903 the science had reached such a stage of development that the Government felt justified in coming to terms with him. Three years later an international conference was held in Berlin to bring about rules and regulations to systematise the work throughout the world. Its report was presented to the House of Commons in 1907, and it was thought that certain clauses might be injurious to British and Imperial interests. A committee appointed to inquire whether Great Britain would be justified in becoming one of the signatories reported that British interests had been fully considered, and recommended that Great Britain should sign the convention. The opinion is held that there will be much discovery in perfecting the system of radio-telegraphy in years to come, such as controlling the problem of direction, to enable two stations to communicate without interference by other stations, and without imparting their messages to outside apparatus. The time is likely to come when secrecy will be perfected, which would be an immense advantage to commerce and an enormous advantage in time of war.

The 2½-kilowatt radio station, perched up on the Tinakori Hills, was formally opened by his Excellency the Governor last week in the presence of a number of Parliamentarians, departmental officers, and citizens. The site selected is on a commanding elevation, and gives the desired free aspect all round, with no possible chance of the interruption of the air-waves by hills. That was the trouble with the experimental station erected on the Wellington Post Office, and messages sent at a certain angle from the west, say by a steamer coming from Sydney,



A BREEZY JOB.

The photo shows a man who was hoisted to the top of the lofty mast in order to fasten the hanting which was blown from the aerials. A local paper describes the flutter of the lines of flags in the gale as sounding from a short distance, like the roar of many motors.

were often unheard owing to this cause. But Mount Etako dominates the whole girdle; sea and shore, harbour and city,



THE OFFICIAL PARTY AT THE OPENING CEREMONY.

In the front row, reading from the left are:—Mr H. G. Ell, Hon. R. H. Rhodes (Postmaster-General), his Excellency the Governor, Sir J. G. Ward, his Worship the Mayor S. C. Smith, photo. (Mr. D. McLaren).

are spread out like a relief map. Away to the south the gleaming blue of Cook Strait meets the horizon, and the air waves speed away unimpeded. Two masts, each 150 feet high and separated by 300 feet, support the spread of four aerials, which at the middle are connected by vertical wires with a small strong building of stone. The masts are stoutly secured by numerous wire-hawsers, and the walls of the building are twenty inches thick. This was deemed advisable, because of the fierce gales that sweep over the hills. The anemometer registered 70 miles an hour on the opening day, but one day in the previous week it climbed to the hurricane force of 130 miles. Power for the dynamo is derived from the city, and the electric current is sent through a battery, comprising sixty storage-cells, whence the current emerges greatly intensified. When messages are sent the power applied is over 2,000 volts. The apparatus is disposed in several rooms.

The guaranteed range of the station is 300 miles by day and 600 miles by night. This, however, is only the minimum. Exhaustive tests were made by the department's experts. Conversation in every direction was carried on over a distance greatly exceeding the stipulation. For instance, on the westward the Pennant Hills station at Sydney, during a twenty minutes' conversation, without interruption, said that the signals were