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Bay on the 3rd February. The multiplex sets at Napier were completely destroyed by fire, and a relief set was installed in a temporary telegraph office giving a direct multiplex circuit to Wellington. Two of the four channels were automatically repeated at Wellington into a Wellington-Auckland circuit, thus permitting the simultaneous transmission to both Wellington and Auckland of eighty words a minute in each direction.

SUPPLY OF CURRENT FOR TELEGRAPH PURPOSES.

The policy of introducing the universal-battery telegraph system into the larger telegraph offices, and thereby effecting improved operation and substantial economies in maintenance, has been furthered during the year by the installation of the system at Napier and at Nelson.

Investigation has been made with promising results into the practicability of using rectifiers instead of batteries for supplying current for telegraph operation. Two rectifying units constructed to the Department's specification were purchased, and extended trials have indicated a very satisfactory and economical performance. The temporary office at Napier is now being wholly supplied by current from rectifiers with entirely satisfactory results.

TRANS-TASMAN FLIGHT OF AEROPLANE "SOUTHERN CROSS JUNIOR."

At 3 a.m., New Zealand time, on the 7th January, 1931, Mr. Guy Menzies, of Sydney, left Sydney as the sole occupant of the aeroplane "Southern Cross Junior" on a flight from Australia to New Zealand. The enterprise was undertaken without previous notification; and, upon the receipt of late advice from Australia, offices on the West Coast were instructed to keep a lookout for the aeroplane. At 3.20 p.m. on the same day the Chief Postmaster at Greymouth advised that the aeroplane had landed in a swamp at Herepo, near Ross, the report of the landing coming in the first place from the Postmistress at Harihari. This is the first occasion upon which a solo flight from Australia to New Zealand has been undertaken, and the safe arrival of the aeroplane was a matter of great interest and gratification on both sides of the Tasman.

CHESS MATCHES BY TELEGRAPH: CHARGE FOR HIRE OF CIRCUIT.

From the 1st December, 1930, the Department has made a charge for the hire of telegraph circuits for the purpose of conducting chess matches by telegraph. This charge is assessed at the rate of 1d. per mile of telegraph circuit utilized on each occasion, with a minimum charge of 15s. for each occasion. The length of circuit involved is based on the toll-line distance between the respective offices.

CARRIER-CURRENT TELEPHONE SYSTEMS.

The long-distance telephone network was considerably improved and extended during the year by the installation of the following additional carrier-current systems:—

Auckland-Whangarei One single-channel system. Auckland-Tauranga Auckland-Napier ٠. . . ٠. Two single-channel systems. Napier-Gisborne . . One additional single-channel system. Napier – Palmerston North . . New Plymouth - Wanganui One single-channel system. . . Wellington-Napier . . Wellington - Palmerston North ... Wellington - New Plymouth ... One additional single-channel system. . . One single-channel system. . . Wellington-Blenheim ... Nelson-Blenheim One additional single-channel system. Seddon-Christchurch One single-channel system. Christchurch-Greymouth Dunedin-Invercargill ...

The Auckland-Whangarei carrier system has been installed for the purpose of increasing the efficiency of the toll services between Auckland and stations situated north of Whangarei and Dargaville. The arrangement is a temporary expedient until arrangements can be completed for the extension of the system north of Whangarei.

The Auckland-Tauranga circuit improves the efficiency of the telephone trunk-line between those two places, and, in addition, results in a more efficient long-distance service to other stations in the Bay of Plenty—e.g., Opotiki and Whakatane. Incidentally, the superimposing of this system has rendered the original circuit available for providing one additional outlet between Auckland and Paeroa and one between Paeroa and Tauranga.