

It will be seen that the Department has been given wide powers to control the operation of interfering equipment, but these powers are exercised only in extreme cases, and only after every possible effort has been made to induce the owner or user to take the required remedial action. Although complaints from listeners regarding interference number from two to three thousand per annum, it has been necessary to invoke the aid of the regulations in very few cases, and in not one case has the Department's requisition been the subject of appeal.

In addition to pursuing the elimination of interference from equipment in service, the Department is actively co-operating with dealers with a view to ensuring, as far as possible, that electrical equipment sold in the future is of a type which will not interfere with the reception of radio programmes. Radio Inspectors have visited the establishments of dealers throughout the Dominion and have given such advice as may be necessary concerning the measures to adopt in relation to equipment already in stock, and also regarding the importation of equipment which will comply with the regulations. As a result, there is good reason to hope that interference arising from the use of undesirable types of apparatus will progressively diminish, and that with the ready availability of filters suitable for the various types of equipment in use—a matter which has also been fostered by the Department—a marked improvement should be effected in what is admittedly an annoying factor in broadcast reception.

Unfortunately there are a few instances involving important installations, chiefly of a medical character, in which some difficulty is being experienced in adequately reducing the high-frequency emanations which cause the interference with radio reception. The Department is, however, carrying out exhaustive experiments in this connection, and will continue to do so until a satisfactory solution is reached. In a number of instances means have been devised of reducing the interference from this type of equipment, but, as has been stated, one or two cases constitute difficult problems. Listeners can be assured, however, that the Department is fully cognizant of the position and is doing its utmost to effect a remedy.

TELEPHONE - EXCHANGE SERVICES.

DEVELOPMENT OF TELEPHONE-EXCHANGE SYSTEMS.

A definite indication that financial conditions in the Dominion have improved is gained from the fact that the number of new telephone-exchange connections made during the year exceeded the relinquishments by 2,237, as against an excess of relinquishments over new connections of 775 for the previous year. The result of the year's operations in this respect is extremely gratifying.

The total number of departmental telephone-stations at the end of the year was 155,407. If to this number is added the private-line telephones connected with toll stations and non-departmental exchanges (3,763), the number of telephones in service on the 31st March, 1935, was 159,170, representing an increase of 2.6 per cent. compared with those in service on the 31st March, 1934.

The following is a brief summary of the more important operations during the year in regard to the development and maintenance of telephone-exchange systems in the Dominion :—

- The laying of 1½ miles of underground cable ducts.
- The laying or erecting of 17 miles of lead-covered cable containing 2,016 miles of wire for subscribers' circuits.
- The erection of 95 miles of pole line and 1,412 miles of open aerial wire for telephone-exchange subscribers' circuits.
- The installation of 6 public call offices and 4 pay stations.
- The replacement by high-grade transmitters of some 19,000 more or less unsatisfactory transmitters on subscribers' telephones in automatic telephone-exchange areas throughout the Dominion.
- The installation of branching multiple switchboard exchange equipment at Taumarunui and Ashburton, and the removal of the former exchange to the new building.
- The removal of the Waitakaruru telephone exchange to the new building.
- The installation of standard main distributing frame equipment at the Waipu and Roxburgh telephone exchanges.
- The replacement of the exchange switching equipment at Kerikeri, Kawhia, Wakefield, Otorohanga, and Te Akau.
- The extension of the switching equipment at the Wellsford telephone exchange.
- The rearrangement of the telephone-exchange switching equipment at Tuakau.
- The centralization at the Wellesley Street (Auckland) automatic telephone exchange of the testing previously undertaken at the Ponsonby, Devonport, and Mount Eden exchanges.
- The installation of repeat call-test sets in the Onehunga, Wellesley Street, Remuera, Takapuna, Devonport, Ponsonby, Lower Hutt, and Miramar telephone exchanges.
- The installation in the Wellesley Street (Auckland) automatic telephone exchange for battery-charging purposes of a 100-ampere motor generator set and a 100-ampere motor generator booster.
- The installation of P.B.X. hunting facilities in the Miramar automatic telephone exchange.
- The replating of the C.E.M.F. cells of the telephone-exchange battery at Wanganui, and the replacement of the positive plates in the 48-volt battery in the Palmerston North automatic telephone exchange.
- The installation at the Takapuna automatic exchange of a new secondary battery of twenty-six 200-ampere-hour cells with pasted plates throughout.
- The reconstruction or partial reconstruction of open aerial systems at thirty-five exchanges.