NEW ZEALAND SUBMARINE CABLES.

COOK STRAIT CABLES.

The three inter-Island submarine cables which the Department now has in commission across Cook Strait—namely, the new-type single-core coaxial telephone cable, which was laid in 1936, the four-core telephone cable, which was laid in 1926, and one old-type single-core telegraph cable—have remained in good working-condition during the year. A twelve-channel carrier telephone system is on order to provide for the establishment of twelve additional telephone channels over the coaxial cable to meet expected traffic developments in the immediate future. When this new system has been installed the cable will be equipped to its full capacity.

RADIO SERVICES.

RADIO-TELEPHONE SERVICE FOR SMALL SHIPS.

A radio-telephone service to and from small ships has been inaugurated on behalf of the Marine Department. The service commenced from Wellington Radio on the 16th March, 1941. The necessary equipment will shortly be installed at Musick Point and Awarua to enable the service to be extended to those stations.

It is expected that wide use will be made of the new service and that eventually all small ships trading on the New Zealand coast will be equipped for radio-telephone communication with the shore.

INSPECTION OF RADIO EQUIPMENT ON SHIPS.

During the year, departmental Radio Inspectors made sixty-nine inspections of radio equipment installed on ships trading in New Zealand waters.

RADIO BEACON AND COMMUNICATION SYSTEMS.

Radio beacon and communication systems were installed on behalf of the Marine Department at the Mokohinau and Cuvier Islands lighthouses.

RADIO EMERGENCY REGULATIONS 1940.

With a view to establishing more effective control of certain wireless equipment, particularly diathermy apparatus, regulations entitled the Radio Emergency Regulations 1940 were issued in November. The new regulations make it obligatory for all persons who have diathermy apparatus under their control to obtain a license from the Department. Enemy aliens are not permitted to have diathermy apparatus in their possession.

All assembled or partly-assembled privately-owned wireless transmitters, valves capable of an anode dissipation exceeding 10 watts, piezo-electric quartz plates, and piezo-electric tourmaline plates cut to oscillate at a given frequency have, with certain exceptions, been taken into custody. Such apparatus cannot now be purchased without a permit issued by the Department.

TRANSMISSION OF PRESS NEWS FOR NEW ZEALAND EXPEDITIONARY FORCE.

To enable New Zealand troops in the Middle East to keep in touch with current events in the Dominion, special transmissions of Press news are made daily from Wellington Radio for reception in the Middle East.

RADIO BROADCASTING.

ELIMINATION OF RADIO INTERFERENCE.

The number of complaints of radio interference received from listeners during the year was 2,080, a decrease of 646 on the figure for the previous year.

RADIO LICENSES.

The number of radio-receiving licenses continues to increase. At the 31st March the total for the Dominion was 355,480, an increase of 9,770, or 2·8 per cent., over the number in force a year ago. Radio-dealers' licenses in force at the 31st March numbered 1,020.

ALIEN EMERGENCY REGULATIONS 1940.

Under the Alien Emergency Regulations 1940, the Department has sealed all receiving-apparatus in the hands of enemy aliens after steps had been taken to ensure that it was capable of reception only on the normal broadcasting frequencies—viz., between 550 and 1,500 kilocycles per second.

TELEPHONE-EXCHANGE SERVICES.

TELEPHONE DEVELOPMENT.

Notwithstanding wartime conditions, telephone development continued at a satisfactory rate. During the year 16,788 new subscribers were connected and, after allowing for relinquishments, there was a net gain of 6,814 subscribers. The year ended with a total of 171,965 subscribers' main telephone stations, which is equal to an increase of $4\cdot 1$ per cent. over the number of connections at the end of the previous year. Again the number of toll calls reached a new record, the number handled being 16,092,301, an increase of 380,630, or almost $2\cdot 5$ per cent., over last year's figures,