

powerful station and a wider service range.

The figures are based on the percentage of equivalent full-time licenses. Obviously it would be impracticable to arrive at a reliable average based on part-time licenses. The figures up to August 31, 1929, are as follow:—

Equivalent full-time licenses: Auckland 14,166, Wellington 17,635, Christchurch 7692, Dunedin 3565. Percentage of full-time licenses to population of respective postal districts to which licenses are allocated: Auckland 3.3, Wellington 3.7, Christchurch 3.4, Dunedin 1.7.

"On these figures, obviously, Canterbury cannot reasonably be said to be apathetic in its attitude toward radio, as may be judged from the bulk figures," concluded Mr. Harris.

## A Secret Radio Station

### Operated by Rum-runners

PROBABLY one of the most original uses to which radio has yet been put was its recent adoption as a means of communication between various secret haunts of a bootlegging gang in America. A transmitting station for controlling, both by sea and land, the activities of the smugglers was installed near New Jersey. The transmitter, which operated on short wave, was used for sending messages which were, of course, in code.

The syndicate controlling the smuggling operations possessed six racing

motor cruisers, armed with machine-guns for use against the coastguard cutters, which incessantly patrol the shores, constantly on the lookout for rum-runners. Besides these six cruisers, numerous small motor craft were used by the bootleggers to ferry their illicit cargoes between the larger boats and the shore. They also maintained a fleet of motor-lorries, with specially-designed bodies to disguise their real purpose.

Operations proceeded perfectly for more than a year, and during that period immense profits, totalling over £2,000,000, were netted by the gang. Early in October, however, a listener who lived near the smugglers' headquarters became suspicious as to the origin of the coded messages which he was able to receive, chiefly after midnight. Finally, he reported the mysterious transmissions to the police, and supplied them with enough of the messages to enable them to decipher the code in use. Thus the police discovered that certain prohibition agents had turned traitor, and were working hand-in-glove with the rum-runners, thus enabling the latter to ply their nefarious trade with impunity.

After weeks of listening and planning, squads of police officers were detailed to make simultaneous surprise raids on every rendezvous. These proved completely successful. Thirty-two liquor depots were seized, including the central offices of the ring in New York, and 36 smugglers were finally taken prisoner after many a desperate struggle.

A special squad of officers was instructed to rush the gang's secret radio station, and prevent the operators there from dispatching any warning messages to their cruisers, which at the time were outside the three-mile limit awaiting orders. This was successfully accomplished, and a police operator, by sending out orders in the gang's code, succeeded in trapping one of the rum-running vessels into territorial waters, where it was seized by two patrol cutters. The crew of the vessel, after

making a futile attempt to outdistance the speedy patrol cutters, put up a desperate fight, but were finally overpowered and disarmed.

Near the radio station the police seized the gang's headquarters, which were located in an elaborately-furnished and innocuous-looking country residence.

All its approaches, however, were guarded by machine-gun emplacements, while its basement led into tunnelled chambers where liquor was stored. Large quantities of arms and ammunition were found, but owing to the surprise nature of the raids, no resistance was offered.

Thus one of the most extensive and well-organised rum-running gangs were operating in America was successfully broken up. It is rather curious that the very initiative and resourcefulness of the syndicate should have been the cause of their downfall; for it is certain that had they not employed radio as a means of communication, they would probably have still been operating.

### A New Australian

A LOW-POWER Australian station which has recently risen into prominence is 3DB, Melbourne, 255 metres (1175 k.c.). The other evening "Switch" had 3DB louder than 3LO and 3AR, Melbourne. This was about midnight, and 3DB quickly increased in volume from thence onward. It was about four times as loud as 3UZ, Melbourne, another low-power station, which formerly came in with good loudspeaker volume. Apparently there is some unknown reason why these low-power stations sometimes reach Wellington with such volume. Possibly there is some relationship between distance and wave-length. These small-powered stations are on a wave-length below 300 metres (1000 k.c.).

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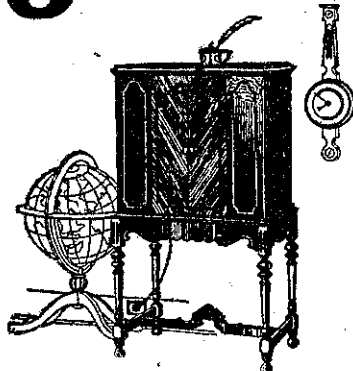
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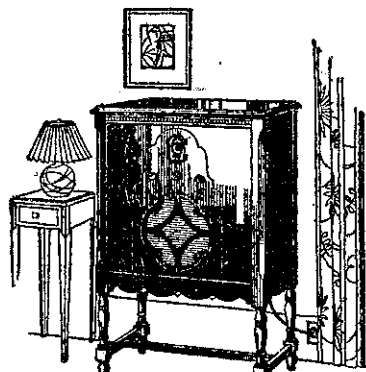
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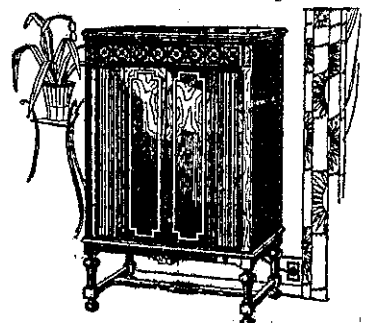
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