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In order to make power available for the operation of the new 2 kW. station at Timaru, Stations 3YA Christchurch and 4YA Dunedin have been operating on their auxiliary power supplies for one hour each day, from Mondays to Fridays. By reducing the power output from the two transmitters in this way a total amount of power equivalent to that used by the Timaru station has been made available in the South Island. In the same way the Service intends making power available for operating the proposed new stations in the North Island.

## CHANGES IN FREQUENCY AND CALL-SIGNS OF STATIONS

On 1st September, 1948, the operating frequencies of most of the broadcasting-stations in the country were changed. This was the outcome of a conference, attended by the Chief Engineer of the Service, which took place in Melbourne earlier in the year. A re-arrangement of frequencies in Australia and New Zealand was necessary as a matter of urgency to reduce mutual interference between stations and to make possible the planned development and expansion of broadcasting in both countries. The new frequencies were chosen to give the optimum coverage possible for the radiated power and service requirements of each station. At the same time the call-signs of New Zealand stations were altered to conform to a system by which the type of station could be readily identified from the sign.

## SHORT-WAVE SERVICE

The regular Short-wave Service for overseas listeners was inaugurated on Dominion Day, the 27th September. The transmitters have a radiated power of 7.5 kW., and the frequencies of transmissions are 9.54, 11.78, and 15.28 megacycles. The transmissions have been directed by beam aerial to Australia and the Western Pacific. Satisfactory reports on reception have been received from these areas, but reception in the Eastern Pacific has not been good. To improve the service an additional set of aerials directed to the mid and eastern Pacific areas will be erected. Work on this project will go forward as soon as the present development programme has reached the stage at which staff can be released to design and direct the new aerial system.

The allocation of frequencies to various short-wave broadcasting services was decided at the International High-frequency Broadcasting Conference which opened late in 1948 at Mexico City. The Service was represented at this Conference.

## RECORDING DIVISION

The recording facilities at the main centres are being extended. Recording-studios at Christchurch and Dunedin are under construction, and suitable studios have been planned for Auckland. Twelve disk-recording machines are being manufactured in the Service workshops, two of which will be used in a second mobile recording-van now being assembled for service in the South Island. A high-grade magnetic-tape recording-machine has been received from England and is undergoing extensive tests to prove its acceptability for regular service.

During the year two portable magnetic-tape recorders were modified for the use of the rugby commentator travelling with the "All Blacks" in South Africa. Recordings will be sent back immediately after each match for broadcasting in this country.

## SAMOA

The Service continued to operate Station 2AP Apia, Western Samoa, for the Administration, and a Senior Technician of the Service supervises the technical work. A feature of the installation is a high-frequency transmitter-studio link using frequency modulation in place of the usual land-line. This unit has been most successful and its performance superior to that of land-lines. It was designed and built by the Service, and its success has encouraged further development work on the production of similar units for use in this country.