

Laboratory Jottings

Report Upon the "Ultimate" Receiver

THROUGH the courtesy of H. Nimmo and Sons, Ltd., Wellington, we have had an opportunity of testing the "Ultimate" long and short-wave receiver, and have been convinced that, for New Zealand conditions, this is an ideal set. It employs two stages of screen grid, grid-leak detector, first stage audio, and second stage audio with two E406 in push-pull. The circuit has been specially designed for Philips valves, which are used throughout. Plug-in coils are provided to cover two bands of short-wave and broadcast.

The internal design of the set speaks very highly for the designer. It is neat, attractive and well finished. The tuning dial reaction and a balancing condenser are to be found on the front panel, while on the inside we have a rejector tone control and an aerial balancing condenser. These are to be set in position once only, when the set is installed, and need not be altered for subsequent use.

The sensitivity of the set is quite equal to our standard receiver with three stages of screen grid. The use of regeneration brings in many stations which are just normally on the borderline of audibility. During the afternoon upon which we installed the set we were surprised to bring in Auckland at quite fair strength. This is quite a feat for our particular location, and the set proved that this was quite an ordinary performance for it. It gave us all the New Zealand "A" class stations during the afternoon (Auckland and Dunedin, of course, were weak until about 6 o'clock), and after about 8 o'clock at night, the Australian stations came in at great strength. We had quite a big collection of them for the few days the set was in our possession. The Japs. could be brought in quite easily, and the use of regeneration certainly facilitates DX hunting.

The selectivity of the set was all that was to be desired. By a careful adjustment of the rejector, we could separate 2FC and 3LO from Wellington. This, we might remark, is quite a feat, for it is usual to have a fairly strong background on these stations, but the "Ulti-

mate" kept this down to a minimum; in fact, with a short aerial, we could get a dead spot between Wellington and 2FC, Sydney, a most unusual state of affairs. The rejector did not to any great extent reduce volume. It certainly did on Wellington, but this was a most desirable feature.

The tone of the set is good. The E406's have a distinct tone, and produce very pleasing results when used in combination with the Jensen moving coil speaker provided with the set. There is an absence of boominess which is characteristic of some types of sets. The tone is always pleasing.

Owing to the absence of a separate volume control, detuning on 2YA was necessary, and strangely enough this did not alter fidelity. Upon all other stations, regeneration proved itself to be an excellent control.

For the test upon shortwave we handed the set over to Mr. F. W. Sellens, of Northland, who is one of the best-known shortwave listeners in New Zealand. Mr. Sellens says:

"I was surprised at the volume at which I could receive the stations. W3XAL, New Jersey, and Saigon, China, were at quite good speaker strength, with about three feet of wire for an aerial, while with a proper aerial these stations were too loud for an ordinary-sized room, even with very little reaction."

This fact we desired to endorse ourselves. Saigon and W3XAL provided real entertainment. There was no question of novelty, the music came in clear and strong, and coming from such a distance, it was really enjoyable. The announcer in Boundbrook, New Jersey, sounded more like one in Christchurch. Mr. Sellens continues:—

"Other stations heard at good volume were:—RV15, St. Lucia; W9XF, Chicago; W8XK, Pittsburg; Zeesen, Germany; W2XAF, Schenectady; VK2ME, Sydney; GBP, England; G5SW, England; 12RO, Rome; 7LO, Nairobi; W1X-AZ, Springfield, Mass.; HRB, Honduras. A number of amateurs and unidentified duplex telephone stations.

"In addition to the above, several were audible, but the noise level was too high. This is not a long list of stations, but a few that were on the air during the limited period I had the receiver.

"Although there are three tuned circuits, two stages of screen-grid frequency tuning is very simple, being controlled by a vernier dial operating ganged con-

densers. Any operator without previous experience, could, with the 'Ultimate,' enjoy programmes from the principal shortwave stations in all parts of the world. After a little practice in tuning, it will be possible to bring in many of the weaker stations. It is not possible to give the volume of the stations heard with the 'R' system, as this is designed for phone reception, R9 only being the speaker volume. The 'Ultimate' is not constructed for other than loudspeaker reception. If the signal is receivable this receiver will amplify it sufficiently to give loudspeaker results."

Lecture from 2YA

On Unemployment Board

ON March 25 at 7.40 p.m. Mr. P. T. Small, producers' representative on the Unemployment Board, will speak from 2YA on the operations of the Board, more particularly on its effect on the farming community and the need for getting men away from towns. He will also outline the salient features of the 4A and 4B schemes lately adopted by the Board.

Holiday Features

Easter Sunday, April 5

A SPECIAL feature of Signor Cesaroni's programme to-night will be the inclusion of some items appropriate to the season—the song "Easter Morning" by Himmel, and the celebrated "Easter Chorus" from "Cavalleria Rusticana," by Mascagni, with a company specially augmented for this occasion. Cesaroni will also be heard in Handel's fine aria, "Arm, Arm, Ye Brave," from "Judas Maccabeus," and "The Praise of God," by Beethoven; and in the duet "Send Me Thine Aid," from Gounod's "Queen of Sheba," the tenor part being taken by Mr. R. Trewern. Excerpts from "Carmen," "Mignon" and "The Tales of Hoffman" will be sung by Misses Higgins and Stirling, and a ballad by Miss Brady. Miss Reid, L.A.B., will play Chopin's "Ballade in F Minor."

Another item of special interest will be presented to-night in the form of a ten minutes' recital on the grand organ in the Town Hall by Mr. Bernard Page, city organist. To country listeners, whose usual experience of organ music is perforce limited to broadcasts of church organs and Wurlitzer organs, this fine recital on the grand organ by an acknowledged master of the instrument will be indeed a revelation.

Youngest Radio Amateur

FRANCE'S youngest wireless amateur is Mlle. Francine Pecquer, aged seven months. Her admission to the sacred ranks is explained by the fact that the "Radiophonie du Nord" Association, which controls the Lille station, discovered that it had 9999 members. To complete the ten thousand by the end of the year the father of Mlle. Pecquer hurriedly enrolled his daughter.

A New Microphone

Better Tonal Results

PERHAPS the greatest development in broadcasting equipment last year was the appearance of the directional type of microphone. It consists essentially of a specially designed condenser type microphone mounted in front of a parabolic reflector.

This device, it is claimed, has the quality of absorbing the sounds from a wide group of entertainers, and has been found particularly adaptable to the presentation of symphony orchestras. The reflector, which has a diameter of three feet, has been found rather bulky and tests are being made to reduce its size without prejudicing the tone quality.

B Class Stations

MR. H. BOOTH, secretary of the B Class Stations Association, writes under date March 18: "In your issue dated February 27 you make the following statement: 'We understand that recently a deputation representing the B class stations, when approaching the Postmaster-General in connection with their copyright problems, broached the question of being permitted to seek advertising revenue through the use of sponsored programmes.' I now wish to deny this. I was present at the deputation as secretary of the B Class Stations Association, and I emphatically deny that any mention was made at that conference to the subject of sponsored advertising."

Our information came from a source which we have always found reliable and which we still believe to be reliable. The subject mentioned may not have been the ostensible purpose of the deputation, but we are given to understand it was mentioned and that the Postmaster-General made the position quite plain, and that there was no hope that it would alter.

Overseas Interest

"Radio" Bible From America

AN excellent instance of the interest taken in New Zealand by American broadcasting station officials is afforded by a Radio Bible recently received by Mr. Fred W. Morley, of Hastings, from station KRLD, Dallas, Texas.

This is a well-bound, indexed volume carrying the following inscription in gold lettering upon its cover:—

Gift Bible from Radio Revival.
KRLD, Dallas, Texas,

to

F. W. Morley,
First New Zealand listener
to request a "Radio" Bible.

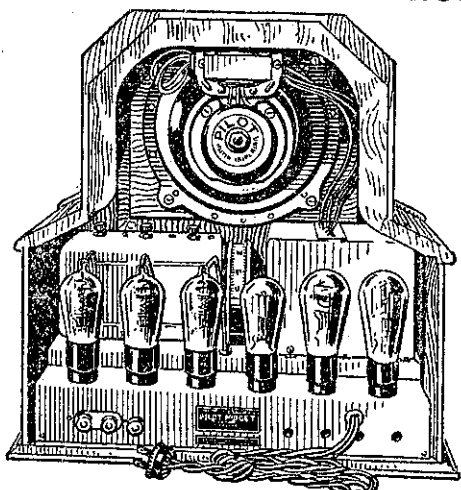
But this is not all. On the station envelopes, one of which enclosed a covering letter accompanying the Bible, is a drawing of the latter showing clearly the inscription reproduced above. DX-ers are certainly doing their share of "putting New Zealand on 'be map.'"

"PILOT"—the Latest and Best

The "PILOT" Electric Midget

FEATURES—

- Results same as "Full Console."
- 2-244 Screen-grid Stages—Powerful "Pick-up" and Keen Selectivity.
- 1-224 Screen-grid Power Detector—Freedom from Distortion.
- 1-227 First Audio Stage and 1-245 Power Audio Output Stage, operating on Electrodynamic Speaker of Special Pilot design—Makes Tone Pure and Full.
- 1-280 Rectifier—Wonderful Power.
- Full Shielding Throughout.
- Two-toned "Class" Walnut Case.



(Back view of set)

Price £27/10/-

Ready for installation

Easy Terms Arranged

Harringtons

42 Willis Street, Wellington.
142 Queen Street, Auckland.