

Mrs. Ninnis has been with the station since its inception.

The directors have other economies under investigation, including a reduction of hours, as to which an announcement will be made later.

Letters of Protest

SEVERAL LETTERS of comment on the situation have reached us, and are published below as expressions of listeners' views. We have not space for all. We are given to understand that similar letters have been refused publication by the daily press. It is the policy of the "Record" to give full expression to listeners' views, consistent with space limitations.

A Plea For Help.

MOST of Wellington's music-lovers read with anxiety, Station 2ZW's recent statement. If the situation is that the Broadcasting Board has refused to grant 2ZW any portion of the fees collected for licenses, how does the Board think quality broadcasting is going to carry on? 2ZW has the best programmes on the air in Wellington. Radio listeners who read this letter will agree with me when I say that at 7 o'clock, when 2ZW comes on the air, most of us switch over to 2ZW and stay there until the programme is completed. We pay big license fees. Surely the station to which we always listen should receive some portion of this money, especially when the station directors state that unless they get some portion of the fees they cannot carry on. Many of us will not pay license fees unless we have the privilege of choosing what station to listen to. Most of us prefer 2ZW.—"License Fee Paid."

2ZW Station.

AS one of the many members of the public, I enter an emphatic protest in respect to the Broadcasting Board not according some financial support to the above station for the purpose of carrying on. Had it not been for the splendid programmes accorded by 2ZW during the past twelve months I am positive that the great bulk of listeners in, in Wellington district in any case, would have been up in arms against the most indif-

Radio Serviceman's Course

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Write for our special course now and be in time for the next examination. Complete syllabus coverage. Results assured.

JOHNSON'S WIRELESS AND RADIO SCHOOL,
St. George Buildings, 8-10 Brandon St., Wellington.

Trade Jottings

"PE" Series of Valves

A NEW series of four-volt valves, the "PE" series, has been introduced by Philips. These feature such modern developments as the metal-clad principle of element screening and the inclusion of a variable-mu type "Selectode." An improved penthode with the advantage of high sensitivity is a further feature of the series. It should be realised that four-volt valves differ very materially from the 2.5 volt types, apart from their different filament rating, and while results from them are remarkable they must be handled with the knowledge of their peculiarities. Circuits are being evolved at the moment by Philips so that every advantage can be taken of the outstanding performance of which the new valves are capable when properly applied, and it must be understood that their application is necessarily more critical than the 2.5 volt types because of the increased efficiency which is possible.

For example, the E452 T is a metal-clad type of screen-grid valve, the

slope of which reaches the unusual figure of 8 mA/V. Greater amplification is possible, and while the stability is enhanced by the metal-clad feature it must be intelligently used to secure the greater amplification of which it is capable.

The metal-clad feature, which is common to both the E452 T screen-grid and E445 variable mu type "Selectode," enables efficient screening which eliminates the possibility of stray fields acting on the elements. The inter-electrode capacity has thus been materially reduced permitting high gain and stable operation.

For the benefit of readers we are listing herewith the characteristics of the valves comprising this new series, which includes the two metal-clad valves mentioned together with the E442S, screen grid; E424, detector and amplifier; E443N, special penthode; E406, normal power type; and the 1561, full-wave rectifier.

Characteristics of the "P.E." Series

	E445	E452T	E442S	E424	E443N	E406	1561
Use	V. Mu	Sc. Grid	Sc. Grid	Det. Amp.	Penthode	Power	F.W. Rect
Fil. Voltage	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Fil. Current	1.1	1.1	1	1.0	1.0	1.0	1.0
Plate Voltage	200	200	200	200	250	250	—
Screen Voltage	100	100	80	—	250	—	—
Plate Current (m.a.)	5	3	3	5.5	48	48	A.C. Volts per Pl. 500 Volts
Screen Current (m.a.)	1.75	.5	1	—	9	—	D.C. Output current 125 m.a.
Grid Bias (volts)	2-40	2	3	6	39	24	—
Impedance (ohms)	250,000	300,000	200,000	7,000	22,000	1,000	—
Mutual Conductance	1.2	3	1	3.5	2.7	6	—
Amplification Factor	300	1000	200	24	60	6	—

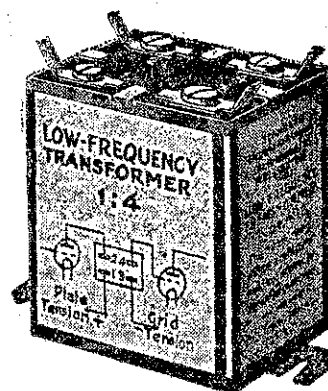
ferent service rendered by 2YA. The practice in my home for months past has been to listen-in to the dinner-hour music between 6 and 7 p.m. given by 2YA. and then to switch over to 2ZW, where usually the programme is so good that there is no occasion to try other stations. On Friday evenings, when 2ZW is not on the air, the news and lecture session given by 2YA is a weariness to the flesh. It is admitted that probably the news session is desirable from the point of view of listeners-in in the country, but it certainly is not very palatable to town listeners-in. That is all the more reason why 2ZW should be encouraged. There is ampl. revenue to provide an alternative service, and the Board should view the matter in a general way. I trust that better counsels will prevail and that 2ZW will not close down.—"Long Suffering" (Wellington).

MR. DENIS SHEARD, an Australian tenor of repute who has delighted 2YA and 1YA audiences, has joined up with J. C. Williamson Ltd. During his tour of the South Island he will be appearing before the microphones of 3YA and 4YA.

World Radio News

AMERICAN scientists paid their highest compliment to television on December 2, when, rather than view an eclipse of the sun, they witnessed a "mechanical duplication" of the phenomenon transmitted from the Jenkins television studio in New York. The spectacle was witnessed on an 8ft. television screen in the American Museum of Natural History while the actual eclipse was taking place, a running commentary being supplied by the famous ex-member of the Federal Radio Commission, Mr. O. H. Caldwell.

WITH an increase of 4000 during the past year, American amateur transmitters have now reached the enormous number of 22,730, according to the annual report of the Radio Division of the U.S. Department of Commerce. A specially significant feature, in view of the increased number of transmitters, is the comparative rarity of "wave-length wobbling." Amateurs appear to have realised that their future success and popularity depend upon their strict adherence to the regulations. Because of their recognition of this fact, American amateurs are permitted to operate their own wave-length-checking service, and, to a certain extent, are allowed freedom from official supervision.



Low-Frequency Transformers

Audio Low-Frequency Transformers, like most things, vary, not only in their capacity for work but in their ability to keep on doing it day after day, week after week, without showing signs of wear or distress. Fundamentally, most Transformers, at any rate, are the same: It is in construction... in the workmanship and quality of materials used... that the great advantage lies.

Standard Low-Frequency Transformers are world-famed for their efficiency, plus sturdiness of construction. In fact, it is on these inherent qualities that their reputation has been built... that their popularity—evidenced by an absolute record of sales—has been won and increasingly maintained. Ask any Radio Dealer about them.

Standard
Telephones and Cables (Asia) Limited

Head Office: G.P.O. Box 633, Wellington.

Auckland: G.P.O. Box 1897.

South Island: L. B. Scott, Ltd., Christchurch.

A.18.57

Jottings

WHEN adjusting the capacity of a compression type condenser in a wave-trap, use a long-handled screw-driver or chisel-edged skewer, so that the hand is well removed from the coil.

ONE disadvantage of a large coupling condenser is that it is rather liable to cause grid choking.

IN R.C. coupling the value of the anode resistance is not the only important one, for the size of the coupling condenser and the resistance of the grid leak both have an important bearing upon the quality.

A USEFUL safeguard against threefold howl in a short-wave set is the provision of a .5-megohm resistance across the secondary or the audio transformer.

ONE of the great advantages of R.C. coupling is its compactness. Resistances can be placed side by side without fear of interaction such as would arise with transformers.