

QUESTIONS AND ANSWERS

"NEGATRON" (Wellington): Following are details of suitable coils for your short-wave receiver. 15 to 28 metres; sec. 4, reaction 4: 28 to 45 metres; sec. 8, reaction 5: 40 to 70 metres; sec. 12, reaction 7: 70 to 120 metres; sec. 22, reaction 10. Use 22 or 24 d.s.c. for the secondary windings, and 28 or 30 gauge d.s.c. for the reaction.

R.A.T. (Auckland): My set, a seven-valve all-wave 1934 model, has a short-wave band of 40 metres. I was wondering how I could increase the wavelength in this case.

A.: Sorry, but we do not understand what you want, particularly as your set covers the main short-wave bands.

"ELECTRA" (Takapuna): 11 fixed and 12 moving plates would be suitable.

"QUIZZY" (Niho Niho): Would you please give me the dimensions for an aerial tuner for a 300ft. aerial?

A.: A .0005 mfd. tuning condenser in series with a coil consisting of about 70 turns of 26 or 28 d.s.c. wound on a 2in. former would be suitable. Alternatively, you could build up the tuner described in the 1934 "Radio Guide."

Note: A wave-trap should not be necessary for your set. Also, in a good location you should be able to pick up quite a number of overseas stations at good volume.

R.M.P. (Wellington): What is the cause and remedy of a loud shriek which occurs for a few seconds just as the set is warming up?

A.: This fault is usually due to a defect in the assembly of one of the valves.

2.: What is the cause and remedy of a crackling noise when the dial is turned?

A.: The moving plates of one or more sections of the gang may be fouling the fixed. Other alternatives are that the plates may be dusty or that there is a pigtail in the gang making a poor connection.

"NEVA" (Napier): Recently the 80 rectifier in my set burnt out, and in place of it I inserted a 281 (half-wave). Would this be the cause of both the electrolytic condensers swelling at the top, and of the discharge of electrolyte from the top holes?

A.: No, using a half-wave rectifier would not overload the electrolytics in this way.

2.: The circuit has since been changed, and both condensers are now working satisfactorily. Is it safe to continue using them?

A.: Quite safe.

E.G. (Raetihi): You should not be experiencing more interference from ships in your locality. If you get in touch with your local radio inspector he will investigate the matter for you.

"NEVA" (Napier): If you have not an a.c. voltmeter on hand, then your best plan would be to take your power transformer along to a dealer, who would identify the terminals for you.

DX101A (Helensville): The value of condenser you are using in conjunction with a potentiometer to provide tone control is far too high. A condenser of

.02 mfd. capacity would be ample. This should be connected in the plate of the grid circuit of the 2A5, as shown in the "Comet Superhet Five" described in the November "Radio Times."

"OMSK" (Whakatane): The by-pass condenser used across the self-bias resistor serves two purpose. Firstly it minimises grid bias variations caused by current surges in the resistor; and secondly, as the bias resistor has a very ap-

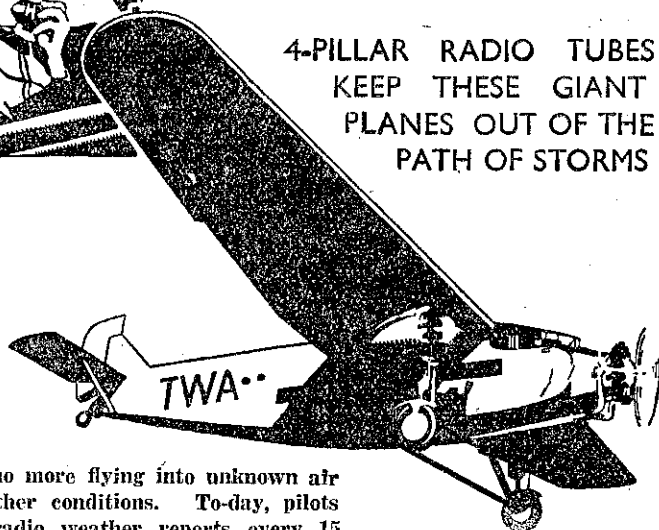
preciable impedance to all frequencies, the by-pass condenser is necessary to provide an easily negotiated path from the grid return to cathode. Hence, within limits, the higher the value of the condenser the better. For example, with the 2A5, the by-pass condenser should be at least 10mfd., while as high as 25mfd. is often used.

If the intermediate frequency of a receiver is not known, then it can be quite (Continued on page 45.)

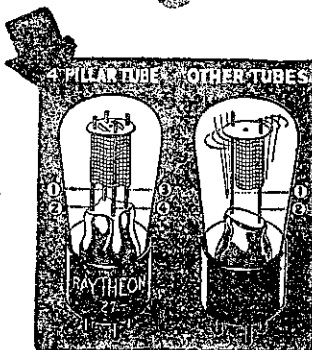


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