Questions and Answers

A.R.B. (Auckland).: What improvements can I make to my aerial, which is attached to a tree 28ft. high and to the chimney of my house. The aerial passes over the roof and the lead-in comes from a point close to the chimney.

A.: If the aerial is attached to a distant tree it should be fixed on a halyard passing through a pulley, and one end should be weighted, so that the swaying of the tree is taken upon the halyard rather than putting a strain on the aerial, which, by the way, should not run over your roof. The lead-in should come in from a point on the tree side of the chimney, well away from the actual roof. A better plan would be to raise the wire some 10ft. from your roof and then take your lead-in from the point already indicated.

2. The aerial has a joint in it, although it is soldered. Does this make any difference to its efficiency?

A.: A soldered joint makes very little difference provided it is a good one.

3. Is it satisfactory for the earth terminal to be tied round the water pipe, or should it be soldered?

A.: No. It should be clamped on, or, if possible, soldered. Merely tieing it round does not ensure greatest efficiency.

L.A.H. (Berhampore): I have a one-valve set, and am thinking of adding a one-valve amplifier. What B battery voltage should I need to get good speaker reception of the local station?

A.: 90 volts at least, although you can get passable reception from 45 volts.

2. What B voltage would I need if I added a two-valve amplifier instead?

A.: The 90 volts would do admirably.

3. Would a two-valve amplifier increase the selectivity of the set?—No.

J.S. (Karori): Which aerial do you advise of the two I sketch out?

A.: Unless you can raise the end of "B" to clear the sun-porch by more than 18 inches "A" is much to be preferred However, what is to stop your erecting a short mast on the corner of the house, and thus clearing the sun-porch by a reasonable margin?

A.: Dxing on my set is unbearable owing to static. Is there any way in which I can overcome this?

A.: If it is static you can overcome it to a certain extent by incorporating a tone control, which will deaden a certain amount. However, it is possibly power noise, and if you are using an a.c. set some of this may be coming in through the mains. Take off the aerial and see if the noise persists. If it does, it can be cured; if not, there is very little you can do.

3. By taking out the two power valves, and using phones, would conditions be better for dxing?

A.: Quite possibly they would. However, if the noise is very bad on the speaker you can rest assured it will be fairly bad through the phones.

W.C.T. (Te Kuiti): How is a short-wave converter connected to an a.c. model TRF set and to a super het.?

A.: We are not conversant with the technical features of the particular circuit, but presume it to be the same as any other converter. There is undoubtedly a "B plus" outlet, which must be connected, irrespective of the set to a suitable "B plus" tapping, usually on the power pack side of the output transformer. If there are filament connections they must be connected to suitable voltage source, usually one of the valves in the set. The aerial is connected with the aerial terminal on the converter and the output terminal is connected with the aerial terminal of the set. The earth is usually common to both. This connection is irrespective of whether the connection is then made to a t.r.f. or super het.

PUSH-PULL (Wellington): Can I use ordinary transformers for the Radiogram Five?

A.: Yes; use the two lowest ratio transformers you have by connecting resistances across them as is shown in the "Radio Guide." You may not get the best results by doing this.

2. What would be the value of the resistances?

A.: Across the secondary of the input transformer about 300,000 ohms. Across the primary of the output transformer about 100,000 ohms.

3. Has there been any improvement to this set?

A.: The a.c. Radiogram is more or less out of date, though the battery set is quite in order.

MUG (Khandallah): I cannot bring in 2YA at great strength, and 2ZW is distorted. 2YA spreads all over the dial, yet the set is selective enough on distant stations, separating KFI from 4YA.

A.: You would have helped us had you told us the model of your set. However, we presume it is MB30, which is one of the newer sets and if it is this we assume that the condensers of the band-pass filters are out of step. This would cause the symptoms of which you speak. As you suggest, it is a case for a check-up by a radiotrician. Your best plan would be to call up one of the local servicemen who would give you an approximate price for a call. Probably there is nothing radically wrong with your set.

2. What is the meaning of a "supersonic circuit"?

A.: A supersonic frequency is a frequency which is just above the audible range, a supersonic circuit one employing a frequency which is just above the audible range—a type of superheterodyne.

3. What is the best type of insulators for aerials—the heavy or the light?

A.: The heavy win every time.

IGNORAMUS (Temuka): I find that on the higher wavelengths the setting of the r.f. condenser is very critical, and if the grid wire is removed from the condenser, only weak results are to be had. Below 280 metres, removing the connection seems to improve matters. Do these facts show any defects in the screen-grid coils or condensers?

A.: It is questionable. With the grid condenser removed, you cannot tune in the incoming signals, and the r.f. valve is acting as an aperiodic stage. This would explain the results being weaker, but as to why they should improve on certain

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Information Coupon

(To be used with all requests for information.)

Name of set .....

Model .....

Name .....

Address .....

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Nom de plume .....

To be kept in subsequent inquiries

Date .....

Please Note:—
(1) Be specific and brief, tabulating, if possible.
(2) Write legibly and on one side of the paper
(3) We do not design circuits
(3) We do not design circuits.
(4) Limit three questions, unless 1/- is enclosed.