

Short-wave Jottings

MR. SELLENS writes:—My short-wave listening has been much less than usual the last month or so, but have had several interesting transmissions.

KGO on Short-wave.

ON Saturday, February 2, I was up earlier than usual and tuned in on about 23 metres at 6 a.m. "Roses of Picardy," a cornet solo, at R8; very clear and steady. The call following was "California Home Life, Station KGO."

A house was then described which was for sale at Berkeley; the owner was referred to by initials. Musical items followed. A talk was then heard on how to choose pictures for the home. This was interesting and instructive. The "California Home Life" broadcast concluded at 6.30 a.m., when a programme by the National Broadcast Co. was announced. They were still going strong when I had to close down at 7.30 a.m. Nothing was said in reference to the short-wave station. I take it that they were broadcasting on dual wavelengths. Probably this was mentioned at the start and conclusion, which was not heard. I have not heard them since that date.

ANOTHER interesting stranger on the short waves is DHC, Nauen, Germany, working duplex telephony with VK2ME, Sydney. I have heard these stations several times early in the evening. The German comes in at splendid strength, clear and steady. Usually their speaker has a very limited knowledge of English, making his talk difficult to follow. This evening, Friday, February 15, a fresh man who could make himself understood was announcing. In concluding, he said he would like to be in Sydney and wished the Australian speaker a good week-end.

WITH me the Americans have been a failure on Saturday afternoons, KDKA closing before reaching decent volume and 2XAD not audible. The latter station is better in the morning as a rule. On Sundays, 2XAF is quite good during the latter part of their transmission. KDKA carries on till later and gets better.

PCJ and 5SW are much better in the morning now. The last few days 5SW, after the striking of Big Ben, have given the latest bulletin of the King's health. The talks following have been from 75 to 100 per cent. readable at R7-8.

Apparently the Friday morning's transmission from PCJ is special for British India, Egypt and South Africa, and these countries are called at intervals with names of listeners who have sent reports similar to the special New Zealand and Australian transmission on Saturdays.

I have not heard TLO, Nairobi, the last few mornings. They are either too weak for me or ceased transmitting on about 33 metres.

BSR has been heard once recently, on about 40 metres; strength was R9. Now talk with long pauses as though

it were intended for the listener to copy down all that was said, which could be done easily if the language were understood.

RFM continues to come in well, but not quite as strong as a while back.

The Java station, late ANE, has been heard calling Kootwijk several times during the latter part of the evening.

On Short Waves

Some Peculiar "Freaks"

ONE of the most fascinating things about short-wave work is that you occasionally stumble on something which seems to be contrary to all the rules, and gives you a most interesting time before you get to the bottom of it, says a writer in an exchange. Even if you never quite fathom the reason for the particular snag you have struck, you generally glean some useful practical information which will probably come in very handy in the future.

Now, one of these peculiar little difficulties which causes great bewilderment when it is experienced for the first time is a form of hand-capacity effect of a very strange nature. Ordinary hand-capacity effects, of course, are fairly simple to understand, and not very difficult to reduce to almost harmless proportions.

They generally appear at two points: (a) on the tuning condenser, where a slight change in tuning occurs when the hand is placed on or removed from the dial, and (b) on the reaction condenser, where it may happen that on getting the set on the verge of oscillation and then taking the hand away it will either break into oscillation or subside to a point considerably below the most sensitive "just on the edge" state, so that signals disappear altogether.

Simple Remedies.

SIMPLE remedies, such as taking care to put the moving vanes to the "earth" side of the filament, the use of a good vernier dial so designed that the fingers do not approach very near to the body of the condenser, the choice of a good circuit, and so on, will do a great deal to keep these troubles down, but it is far otherwise with another form of hand-capacity effect, which is so freakish as to be quite startling the first time you experience it.

What happens when this is present is that you discover that there is quite a bad capacity effect between your hand and any earthed part of the circuit! For example, if you adjust reaction so that the set is just oscillating and then touch the earth terminal oscillation ceases, while as the hand approaches the terminal, or any other earthed point, such as the L.T. leads, the earthed side of the tuning condenser, and so on, there is a noticeable change in tuning.

There appear to be two main causes for this peculiar state of affairs, the first being the use of too long an earth lead, which is most likely to cause trouble on the shorter wave-band (20-35 metres). Where you suspect this is the trouble, therefore, try a "capacity" earth, consisting of a few yards of wire lying on the floor, and any other type of alternative earth (gas or water pipe, etc.) which may be available.

Try, also, connecting the earth to various different points instead of to the "E" terminal, e.g., to the negative of the L.T. battery to the moving vanes of the tuning condenser, or to the negative terminal of the detector valve socket. (Connect to only one of these points at a time, of course.)

The other possible cause is the presence of H.F. currents in the 'phones, and where this is the trouble you will generally find that if you adjust the set to the very verge of oscillation and then grip the 'phone cords tightly in the fingers it will immediately oscillate strongly.

This is a rather more difficult trouble to get rid of, but one or more of the following dodges will usually effect a cure:—

Put a condenser of .001 mfd. across the 'phone terminals, try a different H.F. choke (a No. 50 plug-in coil is usually quite good), reverse the leads to I.S. and O.S. of the L.F. transformer if one is used (not desirable if it can be avoided), bind the 'phone cords round with No. 24 or 22 D.C.C. wire for about a foot of their length and connect one end of the binding wire to earth.

Interpreting Morse Transmissions

Warning to Listeners

IT is contrary to the New Zealand Government radio regulations for any radio listener to divulge the context of any morse or radio telephone messages they may chance to pick up, which are not intended for general information. The secretary of the London G.P.O. has thought fit to issue the following warning:—The Postmaster-General's attention has been called to the publication, in the London press, of several letters from correspondents concerning their interception of trans-Atlantic telephony, and he directs me to point out that the deliberate interception of such messages is contrary to condition (1) of wireless receiving licenses (and a corresponding condition in experimental licenses) which reads as follows:—

1. The licensee shall not allow the station to be used for any purpose other than that of receiving in the premises occupied by the licensee broadcast programmes and messages sent for general reception and messages sent from an experimental sta-

tion in connection with experiments carried out by the licensee.

If a licensee in the course of his wireless reception happens to intercept a private message, he is specifically forbidden to divulge it or allow it to be divulged to any unauthorised person. The relative condition of the license reads as follows:—

4. The licensee shall not divulge or allow to be divulged to any person (other than a duly authorised officer of His Majesty's Government or a competent legal tribunal) or make any use whatsoever of any message received by means of the station other than broadcast matter sent out for general reception, and messages sent from an experimental station in connection with experiments carried out by the licensee.

As it seems possible that there may be some misapprehension in regard to the interception or divulging of private messages which are being transmitted by wireless telegraph or wireless telephone services, the Postmaster-General wishes to draw attention to the license conditions quoted above.

Broadcast Innovation

No Transmitting Valves

A GERMAN firm, with their technical manager, and their engineers, and using fundamental patents of numbers of eminent research workers, have now developed a transmitter solely employing generators instead of the expensive valves for broadcast wavelengths right down to 250 metres; and work is going ahead, I am told (states a writer in London "Popular Wireless"), to adapt the new type of transmitter for the shortwave band down to 15 metres.

The first of these transmitters has been installed in Munich, and will shortly take over full time work. The transmitter has had rather a bad time of it, and during one period the Munich listeners had the rather dubious honour of suffering from the new transmitter in its crudest experimental stages. This was as early as 1925 at the All German Traffic Exhibition.

Since then it has been completely redesigned and rebuilt, and is now even better than the existing type of valve transmitter quite apart from being much cheaper in operation, as there are no expensive valves to renew.

I hear that a further transmitter of the same type will be erected in Leipzig during the coming year.

When I viewed the new transmitter in Munich, the original inventors of all the more important improvements and alterations were there, and I got first-hand technical details, which I could not attempt to put down on paper—they were far too formidable.

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