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**JUNE 1948
VOLUME 2 · NUMBER 7**



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THE SHORT WAVE LISTENER

A MONTHLY MAGAZINE FOR THE LISTENING AMATEUR

VOLUME 2

JUNE 1948

NUMBER 19

Conducted by the Staff of
The Short Wave Magazine.

Published on the third Thursday
in each month by The Short
Wave Magazine, Ltd., 49 Victoria
Street, London, S.W.1
(ABBey 2384).

Single copy, 1s. 3d. Annual
Subscription (12 issues) 16s.
post free.

All editorial and advertising
matter should be addressed to
The Short Wave Listener, 49
Victoria Street, London, S.W.1.

Payment at good rates is offered
for articles of short wave listener
interest.

EDITORIAL

Clubs

The keen SWL anxious to make progress with his hobby studies its literature with avidity, but often overlooks an equally important means of gaining knowledge and a certain amount of practical experience—the joining of a radio club.

This issue will tell you whether there is an active club organisation in your locality—if there is, and you are not already a member, we would strongly advise you to consider becoming one. Most clubs welcome new members irrespective of their qualifications or standard of knowledge, and many are organised to give practical assistance to the beginner. While much knowledge can be acquired by a study of the literature of short wave radio, fortified by practical experience with one's own equipment, club membership is always a great help in that discussion with other enthusiasts will often provide the quick answer to a particular problem. It is indisputable that progress is much slower when one is on one's own than when one has the advice and experience of a number of similarly-minded companions to which to turn.

Those who are keen on short wave radio represent a true cross-section of the whole community—which is one of the charms of the hobby, and the average local club often plays a very important, if unobtrusive, part in making possible social contacts and encouraging friendships for which there would otherwise be no opportunity.

It may well be that there is no club yet formed in your district; but what is certain is that there will be several SWL's (and possibly some transmitters) who would like to belong to a club if there was one. So why not pursue possibilities a bit further? A notice in the local paper will usually set the ball rolling; after which it is a matter of calling a meeting and appointing a secretary; he will be by far the most important member, for on his ability and enthusiasm (not necessarily in the technical sense), the success or failure of the whole venture will ultimately depend.

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Better Receiving Aerials

Some Notes on Crossed Dipoles,
Coupling and Directional Effects

by **THE DX SCRIBE**

(To the SWL intent on getting the most out of his receiver, the aerial is really one of the most important items in his equipment—but by the generality of listeners, the most neglected. This is largely because of so-called “high gain” receivers, which will produce loud noisy signals with a few feet of wire for an aerial. But what about directional effects and the all-important question of signal-to-noise ratio? Every receiver can be improved by a good aerial. This article by our well-known DX contributor will interest all readers.—Ed.)

It is generally realised that the average receiver gets rather a poor deal as far as aerials are concerned, but, very surprisingly, little appears to be done about it. The old tradition that a superhet goes perfectly well with “just a few feet of wire” seems to die very hard.

This is not intended to be a treatise on receiving aerials, but rather a description of some of my own efforts in this direction, and a note of particular interest to 28 mc enthusiasts.

The average transmitting amateur realises the importance of a real receiving aerial rather more than does the average listener. This is not surprising, because many listeners have never had the opportunity of coupling up their receivers to, say, a 67-foot or 136-foot length of wire slung some 40 feet up in the clear. Many transmitters are lucky enough to have such an aerial available, and most of them have, at some time or other, made the discovery that it is well worth hitching their receiver to it instead of to “that bit of wire” that curls round the shack and possibly ends on a rusty nail in the attic.

Using a Long Wire

My own experience does not include quite such a rude shock. But I resumed operations, in this post-war era, in January 1946, and I had up quite a nice receiving aerial consisting of some 30-ft of wire, mostly vertical, and all outside. My main aerial was a 67-ft. Windom, with the downlead tapped at a point some 12 ft. from the centre.

Signals on my AR77 and my own home-brewed receiver were perfectly good on the aerial provided for them, but it soon became obvious that the best directions for reception were clearly marked when the receiver was hitched to the big aerial. It was, by virtue of its length, a two-wave affair, and as it ran nearly East-West, its four main lobes shaped up roughly in the directions NW, NE, SE and SW—directions which embrace useful parts of the globe, when looked at on a Zone map.

In the spring of 1946 there was great activity in Japan and the Marianas every morning on 28 mc, and the big aerial gave a gain, on the receiver, of at least three to one over the small vertical job. The same applied to signals from W6, ZL, PY and VS9—all roughly in the favoured directions. On most other signals there was nothing to choose. This was encouraging, and showed that a Windom, coupled to a receiver in the proper fashion, had marked directional properties.

Rotary Beams

Many transmitters were, by this time, using rotary beam aerials, and they found the receiver gain even more spectacular. In short, the experienced transmitting man had no illusions at all about the performance of a “piece of wire” for reception purposes.

But the keen short wave listener might well be misled still; no high Windoms or rotary beams for him, unless he was exceptionally placed. So he plodded on with indoor aerials and all sorts of odd lengths, and took quite a time to find what he was missing.

Fixed Dipoles

Now it is admittedly hardly worth erecting a three-element rotary beam just for the purpose of listening on the 28 mc band—unless you hope to receive your transmitting licence very shortly. But it is extremely easy to put up a fixed dipole—or more than one fixed dipole—and I have recently been proving it well worth while.

In the loft above the shack I have erected two 28-mc dipoles, at right-angles to each other. One runs N-S, the other E-W. Both are 16 ft. 8 in. long, split in the middle with a small egg insulator, and brought down into the shack with flat 72-ohm line.

The interesting thing about these dipoles is that though indoor—under the roof and

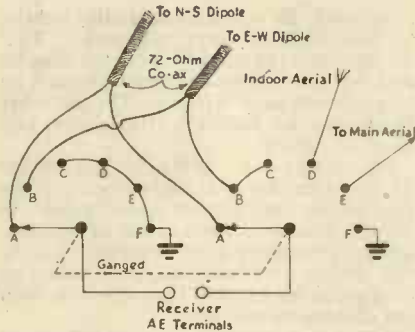


Fig. 1. Circuit arrangement for selecting aerials.

rather near the mains conduit, with the end of one perilously near the water tank—they have turned out to be marvellously useful on the receiver.

The one which runs N-S gives noticeably better signals in an East or West direction than the outside aerial. Examples of signals which definitely come up a lot on this dipole are West Indies, W4, W5, VE1, VO, VU (particularly), VK6 and the East Indies. Likewise the E-W one gives a solid improvement on signals coming from North or South, such as KL7, KH6, VR2, ZL1, ZM and South Africa. Most of the signals from other parts of the world are about the same strength on either of the dipoles as they are on the main aerial.

Improving Sig/Noise Ratio

But another huge benefit was soon noticed; and that was that certain objectionable noises on the 28 mc band were lessened very greatly by using one or other of the dipoles. Cars passing up and down the road were almost inaudible on one of them and at full strength on the other; neighbours' vacuum cleaners could usually be excluded by selecting the more favourable dipole for the purpose; and many of those mysterious but all-pervading noises that one hears on the 28 mc band were found to be present only when using the big outside aerials.

Obviously, then, the dipoles had to become a permanent fixture, and the next thing was to arrange for them to be connected to the receiver without having long leads draped all over the place. A plug and socket arrangement was tried first, but the final scheme was simply a two-bank, six-position Yaxley switch, wired as shown in Fig. 1.

The six positions give the following

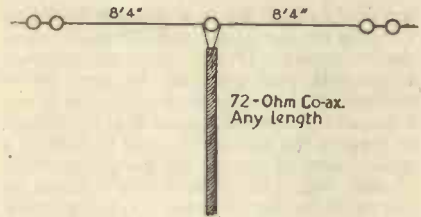


Fig. 2. Dimensions for 10-metre dipole. Main directivity would be at right angles to the line of the wire.

selection: "A", the N-S dipole; "B", the E-W dipole; "C", one arm of the latter used as an indoor aerial, tuned against earth; "D", a vertical indoor aerial; "E", the main outside aerial; and "F", an earthing position, useful for checking whether sudden noises are really coming in from outside or not.

With this little switching arrangement it has become quite a habit to swing the switch and "D-F" on an incoming signal for the best results. These may not always imply the *strongest* signal, as there is also the noise-level to contend with. But there is usually one position out of the five active ones which gives a perceptibly better signal/noise ratio than the others, sometimes to quite a spectacular extent.

The Other Bands

This, of course, only works on the 28 mc band. On the other bands positions "A" and "B" are practically useless, but the selection of the two indoor aerials and the outside one is quite useful. Not everyone (myself included) has room in the loft for 14 mc dipoles, but much can be done by folding them, or by letting the ends droop down vertically. A 14 mc dipole should, of course, be about 33 ft. 6 in. long, but if you can get a clear span of 20 ft. and let about 7 ft. droop from each end you will get perfectly good results.

Most lofts will accommodate a length of this order if it is slung diagonally, and, of course, by using both diagonals you will be able to arrive at the desired arrangement of two dipoles at right-angles.

Receiver Coupling

About the coupling to the receiver? Well, it is to be hoped that your receiver has two aerial terminals, rather than one for aerial and one for earth. You need a symmetrical arrangement if you are going to use a dipole, and the ideal is, of course, a receiver which gives you two aerial

terminals which go to a suitable coupling winding on the aerial coil for each wave-band covered. If you have an untuned aerial coil, and one side happens to be earthed to the chassis—well, unearth it! You can be allowed a good deal of latitude as regards the size of the coil; there is a critical size, of course, for matching into a 72-ohm line, but quite a fair amount of mismatch can be tolerated—judging by my own experiences, if nothing else.

The Windom feeder and the earth lead probably look, to the receiver, like about 300 ohms; and the dipoles should both look like 72 ohms. But they all work. The only thing to beware of is that arrangement whereby the aerial terminal goes through a minute condenser to the top of the first grid coil. That is all very well for a long aperiodic aerial, but a 72-ohm feeder across that won't get you far.

If your receiver is home-built, simply

give your 28 mc coil a fairly tightly-coupled link of, say, two turns. That should work admirably with the dipoles and will also be satisfactory with such an arrangement as a Windom. On the other bands you can keep the arrangement you have at present.

One more point: Bring the co-ax or flat 72-ohm line down at right-angles to the dipoles—at least for the first few feet. It doesn't matter if the centres of the two dipoles come quite close together, or if the two feeders practically hug each other, so long as the feeders don't get mixed up with the dipoles themselves.

There is a lot more I could say about receiving aerials, naturally, but I hope this has given you something to go ahead with, and perhaps when more space is available we can continue on the same subject. Possibly some readers will also have had something to say by then.

Costing Amateur Transmission

How Much do I Spend on the Gear?

by **D. J. G. LEGGE**

(This article will give those interested in amateur transmission a general idea as to the cost involved.—Ed.)

A QUESTION that exercises the minds of many short wave listeners, especially those who devote most of their listening time to the Amateur Bands, is—What does it cost to become an amateur transmitter? It is a great thrill to receive that elusive DX, but what a greater thrill to be able actually to contact him? That tiny CW signal seeping through the mush, talking to you personally from thousands of miles away!

Amateur Radio is a world-wide brotherhood and to enter its ranks is not difficult providing that you have some knowledge of radio, a great deal of interest and some spare cash. Most of us are endowed generously with the first two requirements, but not so with the latter, and it is generally the financial problem that deters many SWL's from following their hobby to its logical conclusion.

Looking through the average text book

the beginner is left with the uneasy feeling that the simple circuits are so simple that they will not be very effective and the others so complicated that they can only be built by a competent radio engineer—and he is not sure whether it will cost him one pound or one hundred.

With all this in mind it may be best to point out here and now that the simple low-power circuits will work, and anyway, you will be limited to 25 watts power for a start. Phenomenal distances are regularly covered by transmitters using very low power, but to do this successfully the operator has to be capable and experienced with the "knowhow" of amateur operating—something that can only be gained after a considerable period on the air. But under present-day conditions the beginner should be able to do plenty of interesting work with power well within his 25 watts.

It is not proposed to go into the receiver question here—all SWL's are firmly convinced that their own particular receiver is the best, whether it be a simple 0-V-1 or a multi-stage superhet, or so it would seem! And, anyway, if you can hear them all, then it's only a question of getting a transmitter that will work them all!

The Transmitter Side

Whence we come to the vital question the transmitter proper. Now, there is no

doubt that for the beginner the simple crystal oscillator is by far the best proposition. If you desire to construct a transmitter as cheaply as possible then you had better forget about 'phone operating, not allowed with the ordinary Class-A licence in any case. A good 'phone transmitter can be a costly piece of apparatus and none other than good telephony will be tolerated by your fellow amateurs or the G.P.O. Furthermore, a CW signal can be read over distances where a 'phone signal would be unintelligible, thus increasing your range for a given power and being an economic reason for using CW.

For a 'phone job you must be prepared to lay out, when the time comes, about £70 split up as follows: £25 for a good stable CW transmitter, preferably crystal controlled and having at least one buffer stage; £15 for a speech amplifier and modulator stage; two power supplies for these will be another £20. The rest of the £70 will be spread over the cost of incidentals such as log book, QSL cards and so forth. These figures are approximations only, but they will not be far out.

However, a CW transmitter can be constructed for only a fraction of this amount. You will be obliged to start up on CW regardless of whether or not you intend eventually being a 'phone man

exclusively; it is entirely possible to construct a telegraphy transmitter with the most limited funds, adding to it in easy stages and in such a way that the equipment you started with need not be discarded.

A CW transmitter is a ridiculously simple piece of apparatus. It is only necessary to build some form of RF oscillator capable of operation at some lawful frequency and of being keyed—that is, broken up into the dots and dashes of the Morse code for the conveyance of intelligence.

RF oscillators fall into two main categories: those that are self-controlled, and those that are controlled by a quartz crystal. There are many types of both but the crystal controlled oscillator is the one for the beginner. The self oscillator is capable of very good results in the hands of an experienced operator, but for the beginner it is dynamite; that is in the legal sense! It is capable of doing practically everything that is forbidden by the licence and disliked by one's fellow amateurs!

So buy a good crystal. This will cost up to forty shillings and may well be the most expensive item of all—but it is an investment that will serve many useful hours with careful treatment. With a



Yes, OM, I have managed to get rid of my background noise at last.

simple oscillator all the power output possible is needed and a cheap crystal will sooner or later prove unsatisfactory, making it impossible to retain the characteristic crystal signal consistent with full output.

Choice of Valves

In line with the policy of full output for minimum cost the obvious choice of valve is the low-voltage high output beam type of which probably the best known are the 6L6, 807 and KTW63. There are a large number of these valves among the Government surplus offered for sale and it is possible to obtain them for prices ranging from 10s. to 30s. each. Including cost of crystal and the valve and with resistances, condensers and coils it is possible to construct a transmitter on these lines for about £4. To this must be added the cost of power supply, about another £5, saying in all in the region of £10. This can be broken down still further with a little study. It is desirable but not necessary that the construction be on chassis of steel or aluminium—but they can be of wood or fibre with side runners and with care such a job can be made to look quite professional, besides

being easier to work. Variable condensers can be of the receiving type, providing they are chosen from those having adequate spacing.

In the search for economy the amateur himself can in many cases be pressed into service. The average junk box is both wide and deep with discarded apparatus which many are only too glad to part with to the beginner. So if you are on friendly terms with the local transmitters you may be able to obtain quite a lot of useful gear.

With some carefully planned buying and diligent searching of your own (and other people's) junk boxes it is possible for the cost of a simple low-power CW transmitter to be reckoned in shillings rather than pounds and the thrill of hearing your own call sign creeping into your headphones can be yours!

UNITED NATIONS STATION K2UN

At any time from about the middle of May, you may hear K2UN at the HF end of either the 14 or 28 mc 'phone bands—probably the former in view of the season of the year. K2UN is the United Nations Amateur Radio Club station and will operate with the object of furthering world accord and the cause of the United Nations through the medium of Amateur Radio.

We shall be printing some further information about K2UN, with photographs, in an early issue.

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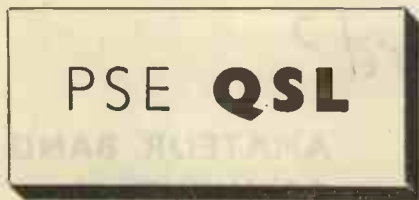
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The operators listed below have informed us that they would like SWL reports on their transmissions, in accordance with the details given. All correct reports will be confirmed by QSL card. To maintain the usefulness of this section, please make your reports as comprehensive as possible.

- CR7BB** Caixa Postale 812, Lourenco Marques, Mozambique. Reports requested on 14017 kc CW and 'phone'; operating periods irregular.
- D2GN** S.O.M.S. Le Hardy, 4 Ind. Ant. Bde, Sig. Sqdn., E.O.A.R. Operating VFO-controlled 'phone on 14 mc band 1900-2300 GMT Mondays and Wednesdays; 2200-0500 GMT on 3.5 mc on Saturdays.
- D2IH** Sigm. McLean, No. 3 Air Support Sigs. Unit, E.O.A.R.1. Reports wanted on CW and 'phone signals on 3685 kc, and VFO-controlled in 7 and 14 mc bands, operating 1901-0100 GMT daily, and 1100-2200 GMT over week-ends.
- D2JN** No. 1 Wireless Regt., Royal Signals, B.A.O.R.3. Operating VFO-controlled CW in 3.5, 7 and 14 mc bands, during periods 0400-0600, 1100-1200 and 1900-2200 GMT daily.
- G2AQB** 10 Hill Close, Chislehurst, Kent. On 14 mc CW during evenings and week-ends; will QSL all British SWL reports for one month only from this date. Overseas reports always wanted.
- G2DPX** 5 North Parade Terrace, Monmouth, Mon. Operating 'phone and CW on 1790 kc and CW on 3550 kc, during period 1900-2030 GMT most evenings.
- G2FKS** 15 Ravensbourne Park, Catford, London, S.E.6. Operating CW and 'phone on 1760, 1856, 3521, 3535 and 3713 kc, at irregular periods.
- G2FUP** 96 Woodmere Avenue, Shirley, Croydon, Surrey. Reports requested on CW working on 7012, 7040, 7160, 14024 and 14080 kc.
- G2GZ** 155 Grand Drive, Raynes Park, London, S.W.20. Operating CW on 3593, 7047 and 14094 kc, during periods 1900-2000 BST Monday-Friday, and 1000-1300, 1430-1600 and 1800-2000 BST on Sundays.
- G2HDY** 169 Huntingfield Road, Roehampton, London, S.W.15. Reports requested on 58.7-58.8 mc CW and 'phone, VFO-controlled, operating during period 1900-2300 BST daily; reports should be from over 40 miles distant and signals compared with other 58 mc stations in the London area.
- G3AHP** 16 Alfred Street, Northwich, Cheshire. Reports wanted on 7050 kc CW, and 'phone in band 7150-7200 kc. Operating periods: Tuesdays, 1930-2330 BST; Saturdays, 2230-0100 BST; Sundays, 0930-1200 and 2000-2230 BST.
- G3AMT** 14 Laburnum Grove, North End, Portsmouth, Hants. Operating CW on 7010 and 14020 kc, during period 2200-0200 BST.
- G3AUR** clo Greenacres, Lower Wyke, Bradford, Yorks. Reports requested from over 1,000 miles from London on 7000-7100 kc CW and MCW, operating during periods 0830-1200, 1400-1700, 1800-2030 and 2230-2330 BST.
- GM3AWW** Rockfort, Tainoch Drive, Milngavie, Glasgow. Operating CW on 14020 and 14060 kc, during evening and over week-ends.
- G3BTI** Broadgate, Weston, Nr. Spalding, Lincs. Reports requested on 7015 and 14030 kc CW, from any distance. Operating most evenings 2000-2359 BST.
- G3CNY** 37 Burnham Avenue, Oxley, Wolverhampton, Staffs. Operating CW on 3540, 7045 and 7080 kc, during week-ends only.
- G3CQE** 15 Arthurs Terrace, Courtney Street, Hull, Yorks. Requests reports on CW transmissions on 3510, 3530, 7060 and 14120 kc, operating 1000-2000 BST.
- G3CTN** 66 Lakewood Road, Henleaze, Bristol. Operating CW on 3524, 3552, 7010 and 14020 kc, during periods 1800-2359 GMT daily; 1200-2359 GMT on Saturdays; and 0700-2359 GMT on Sundays.
- G3CTX** 47 Leamington Road Villas, Notting Hill, London, W.11. Requests reports on 5-watt CW transmissions on 7110 kc, from any distance.
- G3DNU** R.A.F. Shinfield Park, Reading, Berks. Reports requested on VFO-controlled CW at LF ends 3.5, 7 and 14 mc bands. On 3.5 mc, reports from any distance; on 7 mc, over 500 miles; and on 14 mc, over 1000 miles. Operating periods 1200-1300 and 1800-2300 BST daily.
- G3IM** 17 Links Road, Blackpool, Lancs. Reports wanted on 1850 and 1900 kc and on 14 mc 'phone; operating 1.7 mc from 2300 BST daily, and on 14 mc on Thursdays.
- G6FU** 51 Victoria Road, Surbiton, Surrey. 100 per cent. QSL's for reports giving direction of incoming signals and sky conditions—clear, low heavy cloud, high but overcast, and so on. Operating 2000-2200 BST, CW, in band 3.5-3.6 mc.
- G6PJ** 124 Nicholson Road, Sheffield 8, Yorks. VFO-controlled CW and occasional 'phone on various frequencies in 28 mc band, operating periods 0730-0815 and 1830-2130 BST daily; 1300 BST onwards on Sundays. 100 per cent. QSL's for reports over 1,000 miles.
- KP4CI** P.O. Box 744, Ponce, Puerto Rico. Operating VFO-controlled CW and 'phone on 14, 28, 50 and 144 mc bands, 1100-1330 BST.
- PY1FX** Rua Candido Gaffree 102, Terreo Urca, Distrito Federal, Brazil. CW and 'phone operation on 3603, 7160 and 14310 kc, from 2300 BST.
- PY1GM** Rua Silva Rego 47, Casa 25, Rio de Janeiro, Brazil. Operating 'phone and CW on various frequencies in 7, 14 and 28 mc bands, 2300-0400 BST daily.
- PZ1OY** Box 547, Paramaribo, Surinam, Dutch East Indies. Reports wanted on 14004 and 28008 kc CW, operating from 1500 and 2030 GMT.
- VO1A** P.O. Box 89, St. Johns, Newfoundland. Operating 'phone on 3825, 3880, 3895, 7084 kc and in the 14 mc band, 2359-0500 BST.
- VQ3PYE** Box 568, Dar-es-Salaam, Tanganyika, East Africa. Reports wanted on 'phone and CW on 14126 and 28252 kc, operating during period 1400-1800 BST.
- VQ4FCA** Aeradio Station, Posts & Telegraphs, Mombasa, Kenya, East Africa. Operating CW mainly in band 28040-28200 kc, during periods 0800-0900 BST and 1500-2000 BST, also over week-ends.
- W1HOU** P.O. Box 281, Manchester, New Hampshire, U.S.A. Operating CW in 14000-14100 kc band, during periods 1100-1400 and 2000-2200 BST.
- W2VOL** 10 Watson Avenue, West Orange, New Jersey, U.S.A. Reports requested on 'phone operation in 14 mc band, 2000-0100 BST, and on 28 mc band, 1500-2000 BST.
- W3VXX** R.D. No. 1, Box 249, Homer, Penna., U.S.A. Operating 'phone on 28814 kc, during period 1200-2300 BST.
- W4KGI** 1302 West Hill Avenue, Valdosta, Georgia, U.S.A. Reports wanted on 7 mc and 28 mc 'phone, operating during period 1200-1900 BST.
- WSGTC** 1932 Stanley Boulevard, Port Arthur, Texas, U.S.A. Operating 'phone on 27340, 28700, 28880, 28939 and 29250 kc, Mondays to Fridays, during period 1400-1930 BST.
- W6JRA** 787 West F. Street, Cotton, California, U.S.A. Operating 'phone on 28550 kc, during period 1700-2000 BST.
- W7HTB** 10201 S.E. Holgate Street, Portland, Oregon, U.S.A. 'Phone operation on 14204, 14252 and 14296 kc, at irregular periods. 100 per cent. QSL station.

Have you heard?

Greetings once more, especially to the many new readers and listeners who have written for the first time this month. New blood is what we like to see, and there is no doubt that listening on the amateur bands is attracting many fresh adherents to the ranks of our SWL's. Many of them say, in effect, that they are kicking themselves for not having thought of it before, and they realise that they could have been enjoying a grand experience for these last two years!

Once again, I have to bring in an apology at the beginning of the story of the month's doings. It is about Calls Heard in the last issue; a small error crep' in, and the "28 mc" heading about halfway through the General Lists was omitted. This makes them all appear to be 14 mc lists, whereas the last seven or eight were actually concerned with 28 mc. Apologies to all concerned; the person responsible (if we can find him) will be condemned to listen on the 7 mc band every week-end for the next seven years!

So you don't like 3.5 mc? That SLP (or pair of SLP's) on the 80-metre band in the mornings produced only *one list* of Calls Heard. That is from C. S. S. Lyon (Liverpool) whose fine performances on the band evoked some comments last month. It seems that most readers like their DX to come easily; some of them are already saying that 28 mc is "dead"—and my answer to that is to tell them to look at the Calls Heard section. We will have to go into this matter later on; in my opinion DX that comes easily isn't DX at all, and a lot of this so-called DX is really just bread-and-butter stuff that we mustn't waste much space on in future. (Getting tough, is your Scribe!)

The 14 mc SLP

That 14 mc Period didn't strike too lucky. There was the usual smear of short-skip Europeans, all in fine fettle. Some of the lists show very little else! But, as a matter of interest, I have carried out a rough analysis of the CW lists this time. Previously it has always been the 'Phone lists that have gone through the mill, so I thought it was time the CW enthusiasts had a break.

Ignoring the Europeans, I make the number of countries heard seventeen. No one heard them all; the listener that came

AMATEUR BAND COMMENTARY

by the

DX Scribe

nearest to that, however, was N. A. Phelps (London, N.10) who scored heavily by being the only one to hear KG6, KM6 and ZL—none of them very easy to pull in at that time of day. Only one listener heard OX, and only one heard KA1 and MCI. Only one logged that YI. UD6 was logged by everyone, and most of them scored with FA, UA9, UF6, ZC1. Rarer countries spread out among all the lists were UI8, UL7, EK, VK, VS1/2, and the odd W6. It is all very illuminating, because conditions were undoubtedly bad, and short skip was very troublesome indeed—yet some quite nice examples of DX were brought out of the pot.

Those who take their DX seriously will probably agree that there is more fun in finding it under such conditions than in, say, the early mornings when the band is full of it and there is very little interference. The extreme view is taken by a German reader, Waldemar F. Kehler (Schleswig-Holstein), who says, "Set Listening Periods on 14 mc would not be necessary in the future, as on that band all could be heard that is entering the air anyhow." And I almost agree with that.

The question is this—what are we going to do with DX to make it more interesting? Have we just got to make our own difficulties, by listening on the wrong bands at the wrong times? Or will the sunspot cycle do it all for us, by gradually spoiling the DX conditions on all bands? Ideas welcomed.

Zones Still With Us

On the subject of "Zones or No Zones" we have received roughly equal numbers of votes on either side. So they stay. A. Bannister (Manchester) very sensibly remarks that the odd difficulties, such as sorting out the VE8's into Zones, are just



W
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W3KXU, 415 Maple Avenue, Pittsburgh 18, Penna., U.S.A. runs 500 watts, VFO-controlled, on 14 and 28 mc, with a Hammarlund Super-Pro receiver and a 3-element rotary beam. This is actually his QSL card.

the sort of thing that makes our hobby more interesting, anyway. And if you hear a station and don't find out his Zone for weeks or even months, you have still heard him! So the Zones stay. Incidentally, A. B. has sent us two rather nice maps of Northern Canada and we now feel qualified to open a fully equipped Advice Bureau on the subject of VE8's. Send in the call and the QTH, and the machine will ring a bell and show the Zone number.

DX of the Month

And so to the month's best catches; and let me warn you that so many readers are sending long and interesting letters these days that DX, to be mentioned here as such, will have to be super-DX. No more VK's, ZL's, KL7's, ZS's and the like—just chicken-feed! But we will still prick up our ears after a KS6, ZM6, VR4, ZK2 or a few of the chosen ones.

Here are some from M. E. Bazley (Birmingham): ZD6AC, ZM6AG, HS1SS, YA3A and HR1BA—all 14 mc CW. And D. A. Goodchild (Nottingham), who favours 28 mc 'phone, offers HI8WF, KA1ABZ, YN1EP and many other countries whose representatives were too numerous to list—five KG6's, fifteen

KP4's, twenty-five ZS's and so on. On 14 mc 'phone he heard HH2CW, KH6CT, VE8MB, among others.

The best from D. W. Waddell (Nantwich), on 14 mc CW, were C3LT, 6HH, 6YZ, 7OK, 7TY, 8YR, FM8AD, HI8WF, ZD6AC, XE1AC and XE3AF. D. W. W. thinks the proportion of 'Phone to CW lists is a little too generous in the 'phone direction. This, of course, brings up a question that has been in my mind for a long time: What is happening to the CW listeners? Are they gradually going over to 'phone or are they dropping out of it?

I should like to put in a personal plea here for more CW listening; you *must* copy CW to experience the full thrill of DX work, and if conditions begin to fall off after this year the 'phone bands will look very different after a while. No one has yet heard 40 Zones on 'Phone Only—so go to it and brush up that code. You will never regret it.

While we are talking of the Zones, just look at this month's lists. The two top scorers, M. H. Preston and N. A. Phelps, have both reached a total of 200 countries post-war—surely a magnificent piece of work. And their scores for 1948 only are 179 and 175 respectively, which means that there cannot have been much on the air this year, that has escaped their ears.

ZONES HEARD LISTING

Listener	1948		Post-war	
	Zones	Countries	Zones	Countries
'PHONE and CW				
M. H. Preston (London, S.W.12)	40	179	40	200
N. A. Phelps (London, N.10)	40	175	40	200
M. E. Bazley (Birmingham)	40	169	40	175
D. W. Bruce (Eltham)	40	168	40	187
L. Collis (Banstead)	40	162	40	175
A. Baldwin (London, E.11)	40	138	40	156
W. J. C. Pinnell (Sidcup)	40	132	40	154
C. S. S. Lyon (Liverpool)	38	149	40	174
A. W. G. Boulton (Faringdon)	38	139	40	167
R. S. Stott (Upminster)	38	137	38	137
O. A. Good (Oswestry)	38	133	39	177
L. N. Goldsbrough (Wirral)	38	126	40	168
F. N. Baskerville (Southport)	38	126	—	—
W. N. Sandeman (Rudyard)	38	124	38	129
T. W. Jones (Birmingham)	38	115	39	140
R. A. Hawley (Goostrey)	37	122	39	162
G. Curtis (South Harrow)	37	110	40	160
N. S. Beckett (Lowestoft)	37	108	38	130
G. P. Watts (Norwich)	37	107	39	152
A. H. Onslow (Hove)	37	92	39	156
D. A. Pullen (Colchester)	30	87	37	108
N. A. S. Fitch (London, E.10)	33	95	34	112
A. W. Robertson (Cranford)	30	80	35	110
'PHONE ONLY				
E. J. Logan (Hertford)	39	124	39	162
D. W. Bruce (Eltham)	38	134	38	156
B. Needham (London, W 11)	38	123	38	129
L. Collis (Banstead)	36	127	36	143
A. Bannister (Manchester)	36	124	36	134
D. Kendall (Potters Bar)	36	103	36	120
N. S. Beckett (Lowestoft)	36	99	36	116
D. L. McLean (Yeovil)	35	117	36	139
G. Braithwaite (Belfast)	35	111	35	120
A. Levi (Belfast)	35	111	35	125
R. A. Hawley (Goostrey)	35	110	37	146
E. W. B. Aldworth (Ashford)	35	110	36	127
L. N. Goldsbrough (Wirral)	35	102	36	133
O. A. Good (Oswestry)	35	106	36	125
Capt. J. B. Lievens (Suez Canal Zone)	35	97	35	105
K. R. Toms (Boreham Wood)	35	92	35	106
C. S. S. Lyon (Liverpool)	34	113	35	130
J. M. Graham (Glasgow)	34	111	—	—
T. W. W. Dearlove (Frimley Green)	34	99	34	99
W. N. Sandeman (Rudyard)	34	94	34	100
A. W. Robertson (Cranford)	34	93	35	115
D. A. Goodchild (Nottingham)	34	93	—	—
G. P. Watts (Norwich)	34	90	35	130
T. Pimblett (Bishops Stortford)	34	84	34	94
T. W. Jones (Birmingham)	34	83	36	122
A. H. Onslow (Hove)	34	79	37	147
D. W. E. Powell (Wilton)	34	79	35	95
R. S. Craig (London, S.E.1)	33	70	35	111
L. Corder (Hadleigh)	32	103	33	109
C. H. P. Verrinder (Blandford)	31	106	—	—

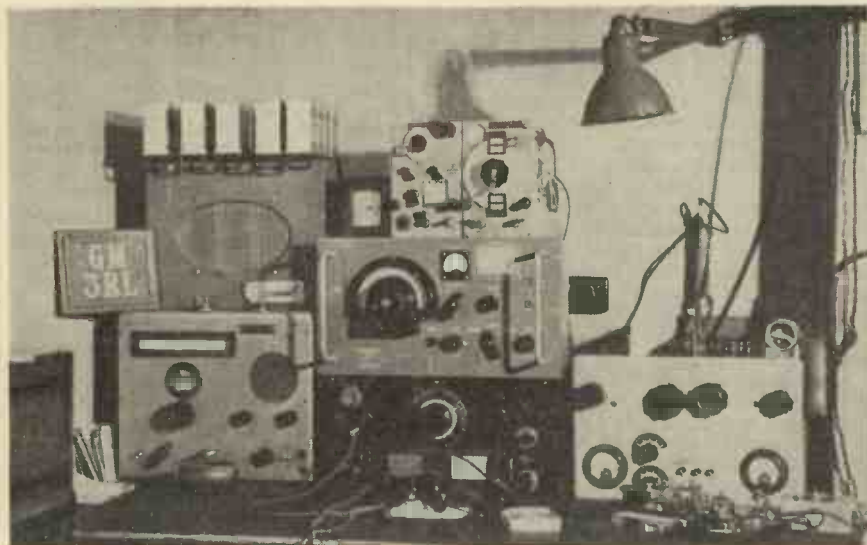
On the 'phone side, E. J. Logan has put up an outstanding performance by reaching the 39 mark, which puts him at the head of the list for a while. Will he achieve the fortieth? All this makes it quite obvious that 1948, so far, has been a magnificent year for DX, whatever we may have thought of conditions from time to time.

That DX Echo

D. W. E. Powell (Wilton) asks whether there is any known explanation for the queer hollow sound which identifies certain kinds of DX, particularly W6, W7, VE7 and KH6 (to which I would add VE8 and KL7). So far as I know, it is due to multi-path reception of signals which pass near the North Magnetic Pole on their way to us; this seems feasible when one notes that even stations like UAØKQA, some of the OX's, and occasionally ZL1's in North Island also show it, whereas the ZL3's and 4's never appear to do it. D. W. E. P. makes the useful suggestion that we start a friendly "Counties Heard" competition on the 1.7 mc band, with a view to stirring up some activity there. We rather like this; after all, 10-watt G's in the North may legitimately be called DX by listeners in, say, Surrey. It needs a receiver and an operator to get them! If any of you are interested, send in some lists of stations and their counties, heard on 1.7 mc only, and give the *time-period*.

Super-DX Again

D. W. Bruce (Eltham) reports that his best catches on 14 mc have been



The operating position at GM3RL, 46 St. Swithin Street, Aberdeen.

PK5LK, VS9ET, VR4AA, ZM6AF, VS9GT; and, on 28 mc, VQ6LX, HR1MB, HP1A and a bunch of KG6's. W. J. C. Pinnell (Sidcup) collected his 40th Zone at last with C8YR, and makes a plea for the publication of a revised country list. This is under way.

N. A. Phelps (London, N.10) shakes us up with VR9AA, CZ2AC, VQ6TF, ZP6AC, W6UNE/KW6, KM6AH, KB6AD, and FO8AA—all 14 mc, and all CW except ZP6AC and the KW6. He adds, "If people must have competitions, try 'Countries in 24 hours'—as a start, May 2, 0001-2359, heard 68 countries in 35 Zones, all on 14 mc." He appends the list. The missing Zones were 7, 19, 23, 26 and 39. What offers? Any advance on 35Z and 68C in one day? No, I thought not!

E. W. B. Aldworth (Ashford) comments on the freak conditions on the 28 mc band during the evening of April 24. ZL's and PY's were coming over at S9 as late as 2330. L. Collis (Banstead) collected FE8AB and FU8AA (28 mc CW), HR1MB, KH6KG/KW6, YN1EP and ZP6AC (28 mc 'phone), ZD1LQ (14 mc CW) and W6JIM/C3 (Formosa) on 14 mc 'phone.

Our Youngest?

J. R. Harris (Eastbourne), who lives in a

pre-fab and is not allowed by local regulations to erect a proper aerial, wonders whether he is the youngest reader we have—his age is 14. But he is already one of the "superhet boys" and sends a nice list of Calls Head. Looks as though we shall have to run a special "Teen-Age" contest—some of the top-scorers in our lists are not yet 16, I know.

D. L. McLean (Yeovil) promises only to send "super-DX" in future, and obliges with VR2AZ/VR1 (14 mc 'phone), and FF8FP, HI8WF, KG6AW/VK9, KH6KG/KW6, W0SQS/Iwojima and ZS4AW (Basutoland) on 28 mc 'phone. Nice selection there, don't you think? D. L. M. would very much like the QTH's of EQ2L, ET3AD, FF8FP, PK1RM, PK3WG and VR2AZ/VR1.

Interesting 14 mc 'phones from B. Needham (London, W.11) include VR3A, VQ8AE, ZM6AF, UI8AA, and AC4KY. The latter said he was on an expedition. B. N. and a friend of his recently "went portable" and during an hour's listening at mid-day on 28 mc, logged PK2RK, J9ACD, CE1AH, VU2DI, VP4TZ, AP2G, MD5HJ and a bunch of W's. 14 mc was full of short-skip stuff.

M. Harrison (Goring) wants something done about the "broadcast pirates" on 7 mc. Unfortunately they have a legal right to be there, and the amateur band is

being truncated still further when the new allocations come in. So when we are at the bottom of the sun-spot cycle, 14 mc will fade right out and 7 mc becomes the main DX band there will be a total of 100 kc for the world's DX and the European 'phones to share. (You, too, can have a selective receiver. . .)

D. Wilson (Rugby), a fifteen-year old newcomer, wants to know when to hear Chinese and Japanese stations. He doesn't say whether he covers 28 mc, but the J's are still to be heard there in the mornings. Best time for C's and J's on 14 mc still appears to be roughly 1500-1800, but they are getting weak and the short-skip is getting stronger.

Identification, please! I have a letter from "a schoolboy on holiday" in Sittingbourne, but he didn't sign it. This unknown listener started on April 1st and scored 24Z and 44C, using a battery 0-V-1; he also sent a nice, but anonymous, list of Calls Heard. We know his Zone and his Country but we'd like the call-sign!

Our old friend Bob Craig, who used to correspond regularly from India and then became VU2AP, is now settled in London, S.E.1. He is disgusted with bad-quality transmissions of every kind, including 150 per cent. modulated 'phones, ripples, key-clicks, creepers and those that hum like swarms of bees. And when he gets on the subject of local 'phones in the DX CW bands, he practically burns the note-paper. With all this we agree heartily; and we hear rumours that control on some of these evil-doers has started to tighten already. If this is true it is a very good thing indeed.

H. M. Graham (Harefield) wants us to publish more Calls Heard lists restricted to a particular area. We tried "Zoned" lists for 14 mc earlier on, and it was successful but somewhat complicated. The headings took up as much room as all the calls that were omitted! He wants to drop the Zones, like many others—but an equal number want them retained.

Oswestry Omnibus

An extremely fat letter from O. A. Good (Oswestry) reviews the April DX almost on a day-by-day basis. He comments on the number of Chinese stations in the middle of the month, and the nice bunch of Zone 10 stations (CP's, HC's and OA's)—all on 'phone. 'Phones from KH6 were also unusually numerous (he logged ten of them). O.A.G. has been investigating the VE8's and classifies a few as follows: VE8MI, 8MU, 8OG—Zone 1; VE8MB, 8NB, 8NW—Zone 2.

DX QTH's

AP2G	c/o Harbourmaster, Karachi, Pakistan.
AP5B	D. T. Boffin (ex-G3HS), 4 Race Course Road, Lahore, Pakistan.
AP5TM	Capt. T. M. McLuskie, 160 The Mall, Rawalpindi, Pakistan.
AR8BC	Box 1119, Beyrouth, Lebanon.
C8YR	Yu-Ruey Chi, Box 73, Lanchow, Kansu, China.
CT3AB	Ferraz, Rua de St. Maria 261, Funchal, Madeira.
CZ2AC	Rosetta Moncini, Vicolo Teatro Ristori 10, Verona, Italy. (Station operated in Monaco.)
EAS8EDZ	Apartado 11, Villa Cisneros, Rio de Oro, Spanish West Africa.
EQ1RX	Radio Workshops, Abadan, Iran.
FF8FP	Box 583, Dakar, French West Africa.
HC2OL	Box 1293, Guayaquil, Ecuador.
HI8WF	Walter Fox, Central, Boca Chica, Dominican Republic.
KA1ABZ	520 Signal Base Depot, APO 707, c/o PM, San Francisco.
KH6KG/KW6	c/o C.A.A., Wake Island, Central Pacific.
KM6AH	c/o C.A.A., Midway Island, Central Pacific.
LZ2AA	Box 123, Sofia, Bulgaria.
VP5AW	APO 861, c/o PM, Miami, Fla.
VQ4NET	N. E. Tomlinson, Box 1010, Nairobi, Kenya Colony.
W3FOJ/KL7	Box 1310 Fairbanks, Alaska.
WØOZW/KS6	c/o Naval Station, Pago Pago, Samoa.
YV5AY	Box 1247, Caracas, Venezuela.
ZD1BD	Royal Signals, Freetown, Sierra Leone, West Africa.

Super-DX from O.A.G. includes KH6KH/KB6, VR2AP ('Phone, 14115), KM6AH (CW, 14005), and VR9AA, who, he hopes, is genuine. The VR9 prefix is puzzling, as this station should apparently be a VR1—but it will all come out sooner or later, we hope. Other interesting points in the "omnibus" are a well-reasoned argument in favour of the Zone scheme and a plea for the cleaning-up of certain prefix allocations. (Unfortunately your Scribe doesn't issue prefixes! And local Governments don't even know of the Zone scheme.)

G. L. Ross-Hine (Ryde, I.O.W.) is departing for Vancouver and proposes to get himself a receiver out there and go on listening. J. B. Lievens (Suez Canal

Zone) gives us a slant on reception in his part of the world. Among other things he queries XF1A—he is XE1A using a new call that he seems to have acquired. J.B.L. says there are so many DA's on the air that they can't all be pirates—but they are, believe me, they are.

Those VE8's Again

A. Bannister (Manchester), to whom I have already alluded, sends a second letter with a long list of VE8's in Zone 2. Suffice it to say, in the interests of space, that they include all those on Nottingham, Resolution and Southampton Islands, Baker Lake, Clyde River and Cornwallis Island. He also points out that AR8 is not Syria, but Lebanon; AR1 is Syria. A.B.'s best for April were YN1AP, HP1A, TG9RV, VQ8AB, VQ8AI, CP5PU and a bunch of KA1's.

C. S. S. Lyon (Liverpool), our leading 3.5 mc exponent, mildly rebukes me for the 3.5 mc SLP's, which, as he puts it, were either two months too late or 1½ hours too late, whichever way you like to look at it. He suggests that last month's query about FT2RN must have applied to ST2RN. Interesting note on 28 mc: C.S.S.L. heard a ZL4 say that he worked VS1CO with his beam pointing South-West, and also heard MI3ZJ and MD5KW over the South Pole—April 11, this was.

A funny one from A. J. Browning (Southwick) and others is PO5LE, calling AB2FD. Any clues, please? Probably one of these commercials or service stations with queer calls.

G. Kendall (Potters Bar) contributes a little super-DX with KH6KH/KB6 (Canton Island), VR3A, ZM6AF, HR1CE, YN1EP and CP5EP. N. S. Beckett (Lowestoft) offers PK3WN (14 mc 'phone) and some very interesting DX on 7 mc, including PY, CO, XE and YN, mostly on 'phone.

Discussion Dept.

L. N. Goldsbrough (Wirral) says he derives much interest from studying the SLP lists but not the general ones. He would like the latter confined to "rarities" only—much the same as I have been calling "super-DX." His suggestion for general lists is something like this: Exclude all Europeans except countries rarely heard; keep out all W, VE, VO, TI, KP4, CO, PY, LU, YV, CX; VU, AP; ZS, CN, FA, EK, MD5; VK and ZL! (For the benefit of those innocents who think there wouldn't be much left, I say, "Have a shot!"). And L.N.G. favours the idea, if it is possible, of



Some of the SV's photographed near Athens. SV1RX is seated left front.

dealing with correspondents' "points" separately from their DX heard. This I would like to do, but it is far from easy when you have a pile of mail such as I have to cope with each month. But if readers will co-operate by not discouraging too much about their DX, but just listing it at the beginning or end of their letter, it will make things much tidier.

Calls Heard

We are preparing a pro-forma on which you may write or type your lists of Calls Heard. This, we hope, will make things much easier for everyone; it will ensure lists in standardised form as regards the name and address, types of receiver, wave-band used, 'phone or CW, and all that. And we have made them a definite size which will enforce the pruning of some of those colossal General lists! There's still plenty of room, though. You will be notified as soon as these forms have been printed, and you can then write in for a small supply.

Last-Minute Shorts

D. Heaton (Bradford) has built himself a mammoth affair with a 10-valve IF/AF amplifier unit (IF's of 1.6 mc and then 117 kc) and a three-stage converter using EF54/EF50/6J5. A. W. Robertson (Cranford) has been short of time but has logged W3FOJ/KL7, C7TY, CP5EP and the comic PO5LE. J. Bennett (Bovington Camp) is now G3DNF, so, human nature being what it is, he probably won't listen quite so much!

Several readers like N. A. Phelps' idea of a week-end contest for battery 0-V-0's only, but many of them add that they should also be operated as portables. On the whole I don't agree with that; the portable condition would not restrict the size of aerial, and might even send people out into the best locations they can find. We think an 0-V-0 "at-home" really covers what was meant.

F. W. Lindley (Barnhill, Angus) went over to CW and collected some nice ones; he sends some useful QTH's. R. A. Hawley (Goostrey) still chases MM's and also heard HZ1AC/Airborne and collected a new country with VP8AD (South Georgia).

B. J. Tyson (Sheffield) is another newcomer, and sends some Calls Heard on his Eddystone 640, which has now removed him from his former 0-V-0 category. N. A. S. Fitch (London, E.10) almost rivals the Oswestry Omnibus. His best on 28 mc were CE3AE, CR9AG, VK9GW and several KA's and J's; on 14 mc he collected HL1CE, CP1AS and 5EP, VK7HA and several less rare ones.

Set Listening Periods, May

We will try to counter the short-skip by going early-morning again this month. So here we are:

May 30, 0630-0800 GMT: 14 mc
CW and 'Phone.

May 30, 2100-2230 GMT: 1.7 mc
CW and 'Phone.

Please send your logs and letters in by the deadline, first post on June 2, addressed to "DX Scribe," *Short Wave Listener*, 49 Victoria Street, S.W.1. And if you care to help by dividing your letters into (a) DX heard and (b) Points arising from this month's article, it will be appreciated. Good Luck and Good Hunting.

MAGNETRONS!

T. V. UNITS!

'Q' UNITS!

WALKIE TALKIES!

MAGNETRONS. U.S. made. Mounted in unit, complete with magnet-spark gap and other electrical and mechanical details. Price £12/10-plus £1 for carriage and packing case.

TELEVISION UNITS. The modern trend of television construction is to build the set as separate units. Now one of the most tricky units to build is the wide band amplifier essential for good picture reception. We are able to offer, for less than the value of the valves alone, an ideal 8-valve unit which has a response curve virtually flat from 12-18 Mc/s. By fitting an oscillator valve, quite a simple job (we will give details where requested) the unit can become the perfect picture receiver. Signals with a field strength as low as 20 microvolts can be received quite well. The unit is fitted with a detector and amplifier valve, and this can act as video amplifier or A.F. Amplifier.

We are pleased to be able to offer these units complete with valves and in perfect order at 55/- each, plus 2/6 postage and packing. If you intend building a T.V. receiver, we suggest that you order by return.

RADIO UNIT 'Q.' Here is your opportunity to purchase for 12/6 equipment which must have cost at least £25. This is not quite a complete receiver, so we call it RADIO UNIT 'Q'.

It contains amongst other things a strong chassis, 18 in. x 6 in. x 3 1/2 in., fitted with 13 Amphenol type Valve Holders. Among the parts mounted on the chassis are relays, 1 mfd and 2 mfd can type condensers. Ceramic variable condensers, small transformers and chokes, grid caps and Pre plugs, etc. Three banks of Mica condensers (approximately 36). Also eight Paxolin panels, 6 in. x 2 1/2 in., with feet containing approximately 60 assorted resistors and 25 assorted tubular condensers. The special bargain price of this unit is only 12/6 plus 3/6 carriage. The supply is limited, so time is precious, don't delay, order immediately.

AC-348. We have converted a number of BC.348 (£100 class communications receivers). Fitting on A.C. power pack in place of the dynamotor and carrying out necessary wiring alterations. The price of these "ready to work" receivers is £22/10/- plus 17/6 for wooden packing case, insurance and carriage.

RECEIVER/TRANSMITTER No. 18. This is a combined Receiver/Transmitter of the Walkie-Talkie type. Frequency coverage 6-9 Mc/s complete with six valves, and in case which is fitted up for batteries (not included). PRICE £4/10/-, carriage 10/- extra.

DATA BOOKS. Copies from official publications, giving circuit diagrams, component values and useful notes: BC.342 — BC.348 — BC.312 — BC.221 — R.208 — R.103a — R.107 — M.C.R.1 — R.1155 — W/8.22 — RT.18 — W/819 — R.1116A — all at 2/3 each, also Walkie-Talkie 58, 3/6. "Demobbed" valves, 2/6. LIST free on application with stamp. 20c BARGAINS described.

Save 2/6 each month simply by being on our mailing list, and, remember, we are open until 5 p.m. Saturdays.

**W. D. SALES, 4 Electron House
Windmill Hill, Ruislip Manor, Middx.**

CALLS HEARD

Please arrange all logs strictly in the form given here. Note, in particular, that the prefixes must be in alphabetical order, and that the number but not the prefix must be repeated with each call sign (e.g., W1AZ, 1BCR, 1CQL, 2DY, 2EF, etc.). The call signs, after the number, must also be in alphabetical order. Where listening has been on more than one band, a separate list should be sent for each band, under the appropriate heading. In other words, study the layout of the lists below, and make yours exactly like them.

SET LISTENING PERIODS

14 mc

April 25, 1400-1600 GMT

A. R. Walder, 22 Lincoln Road, N. Harrow, Middlesex.

PHONE: CT1AY, EA3ZP, HA4AB, MB9AB, 9AG, OK1FC, YR5KY.

CW: EK1GJ, GC2ASO, HA5EX, HB9HQ, OH3OG, OK1BM, 1FH, 1LM, 1MP, OX3RG, UA3AF, 3AS, 3CA, 3KAB, 4KPC, 4SB, 9KCA, UC2BB, UD6AG, 6BM, VE1GT, W8DQT, ØFWW, ØGDS, ZC1AL. (Rx: HRO.)

L. N. Goldsbrough, 246 Chester Road, Whitby, Wirral, Cheshire.

PHONE: CN8BV, FT4AB.
CW: EK1GW, FA8H, 8JO, UA9KCA, UD6AH, UF6KAB, U18AE, WØHMS, ØIEO, ZC1AL. (Rx: Battery 1-V-2.)

D. Garrard, 17 Hill House Road, Ipswich, Suffolk.

CN8AB, 8ME, CT1AY, 1SQ, EA3ZT, 7BA, HA4AB, MB9AB, 9AG, OX3GE, VO1AB, 2AB, 2M. (Rx: BC-342-N.)

D. Heaton, 1 Jer Lane, Horton Bank Top, Bradford, Yorkshire.

PHONE: C4AP, CN8BF, 8BV, 8MI, 8MZ, FA3GZ, 3JY, 8BE, 8CC, 8CF, 8IH, FT4AB, HA4AB, OQ5CA, OX3GE, W2STW, YR5KY. (Rx: Home-Built 10-Valve Double Superhet.)

A. Baldwin, 28 Wallwood Road, Leytonstone, London, E.11.

CW: FA8JO, MB9BA, OX3RG, PK1JS, UA1AJ, 3KAB, 3KAE, 3LA, 3SI, 4KPC, 9KCA, UB5AB, 5AGU, 5KAA, 5KBA, UC2BB, UD6AS, U18AE, UF6KAB, UL7BS, VE1DJ, 3BC, VO2R, W1EAX, 1FXE, 2GSN, 4JFZ, ØFWW, Y12FDF, ZB1AY, ZC1AL.

PHONE: OX3GE, UA3KAE, VE1CX, VK3IG. (Rx: "Ham-bander" with Home-built Preselector.)

K. R. Toms, 42 Hillside Avenue, Boreham Wood, Herts.

PHONE: CN8BB, 8BV, 8MI, 8MZ, FA8CF, OX3GE. (Rx: Philips P.C.R.)

C. S. S. Lyon, 15 Ullet Road, Liverpool, 17.

PHONE: CN8BV, FA8CF.
CW: UA4HB, 4HC, 4KPC, 6KSA, 6LK, 9CA, 9KCA, UD6AC, 6AG, 6AH, 6BM, UF6KAB, UL7BS, VK2TH, 3APA, VS2BX (?), W6AM, 6PFD, ØFFV, ØUOX. (Rx: 0-V-1.)

K. Parvin, 33 Thayer Street, London, W.1.

PHONE: AR8AB, CN8BB, 8MI, 8MZ, FA3GZ, 3JY, 8CF, FT4AB, IIAEW (Sardinia), OX3GE, UA3KAE, VE1RA, W2SPW. (Rx: R11164.)

D. W. Bruce, 39 Dunkery Road, Eltham, London, S.E.9.

PHONE: CN8BV, 8MI, 8MZ, FA8CF, 8IH, OX3GE, ØY8LA, VO1AB.

CW: KA1AP, MC1A, UA1AJ, 1KEC, 1NZ, 3HI, 4HB, 6KSA, 9KCA, UB5KBA, UC2BB, UD6AG, 6BM, VO1B. (Rx: 0-V-2.)

W. J. C. Pinnell, 40 Melville Road, Sidcup, Kent.

PHONE: CN8BU, 8BV, 8MI, 8MU, 8MZ, FA3GZ, 3JY, 8CF, 8IH, FT4AB, OQ5CA.

CW: FA8JO, UA1KEC, 9CA, 9KCA, UD6AG, UF6KAB. (Rx: V55R.)

N. A. Phelps, 17 Leaside Mansions, London, N.10.

CW: EK1GW, FA8JO, HA4EA, KG6CV, KM6AH, LF2Z, LX2RP, OK2BX/2, UA1AJ, 1KEC, 3AF, 3AM, 3AS, 3HI, 3KAB, 3KAE, 4HB, 4KPC, 6KSA, 6LK, 9KCA, 9KBA, UB5AB, 5AG, 5KAA, 5KBA, UC2BB, UD6AG, 6AH, 6BM, UF6KAB, U18AE, UL7BS, UQ2AE, 2KAA, VE1CO, 2WV, 7GT, VK4AP, VS1CR, 2BL, 2BX, 9GT, W1PRR, 21YW, 2PJB, 2PTI, 3BES, 3WQ, 4LAH, 6AM, 6MUF, 6SN, 6WXO, 6VFR, 8KYI, ØDAE, ØFFV, ØFWJ, ØHOY, ØGDH, ØUOX, YQ5U, YT7GB, YU7KX, ZB1AQ, ZC1AL, ZL1IT. (Rx: 1-V-2.)

G. P. Watts, 62 Belmore Road, Thorpe, Norwich, Norfolk.

CW: FA8JO, UA1AJ, 1AR, 3AS, 3CA, 3ED, 3HI, 3KAE, 4HB, UA9KCA, UB5AB, 5KBA, UD6AH, U18AE, UL7BS, UQ2KAA, W4OGY, ØFWW, ØHMS, ZC1AL. (Rx: Hallcrafters S.20.)

3.5 mc

April 25, 0600-0700 GMT

C. S. S. Lyon, 15 Ullet Road, Liverpool, 17.

PHONE: F3AJ, 3DI, 8TM, 8YZ, 9AJ, 9AV, 9DL, 9HQ, 9NJ, HB9FE, ON4XB, OZ3J, PAØKN, W1AAH, 2EGM, 2OOG.
CW: OK1HA, 1HD, 1PI, OZ2BX, SM6MJ, 7LT. (Rx: 0-V-1.)

GENERAL

14 mc

M. Forrest, Queen Manor Farm, Laverstock, Salisbury, Wilts. *

PHONE: AR8BC, CN8BA, 8BY, 8MI, EK1DI, FT4AI, KH6BM, 6CT, 6GF, 6GS, 6IJ, KL7FO, OX3BD, VE8AW, 8MB, 8MI, ZL1CD, 2BT, 2GX, 3ID. (Rx: Eddystone "504.")

D. Kendall, 40 Aberdale Gardens, Potters Bar, Middlesex.

PHONE: AR8BC, 8BM, C1CH, 7TY, CP5EP, HZ1AC/Portable Airborne, 1AW, KH6AW, 6CT, 6GF, 6IJ, 6KH/KB6, 6RU, KL7FO, LU4CN, 4DD, 5DJF, 6AJ, OA4AV, 4M, PY1ACQ, 1FR, 1HW, 2JU, 4AV, 6CO, 7QG, ST2RH, TG9AD, UB5KAG, VE4GE, 7FC, 7HC, 7TM, 7VO, 8MB, 8MI, 8MU, VK2AGU, 2AGW, 2ALO, 2AMR, 4ATJ, 2AW, 2BK, 2BT, 2NG, 2NO, 2PA, 2PC, 2WV, 3AJB, 3APA, 3BH, 3IG, 3JD, 3SZ, 3VO, 3XP, 4KH, 4MW, 6PW, VO2BN, 2BP, 4V, VP2AG, 9F, VR3A, W1NYG/KP4, W3FQJ/KL7, XE1AC, 1BC, 1CQ, 1CX, 1HB, 2KV, YN1EP, YV3AM, 5AB, 5ABT, 5AE, ZL1CB, 2BG, 2BT, ZM6AF. (Rx: R.115A.)

H. M. Graham, 28 Park Lane, Harefield, Middlesex.

PHONE: AR8BM, C1CH, CT2AB, EQ2L, MD5JM, ST2GE, SV1GY, UA1BE, 1KBB, VE7MQ (Vancouver), VP2AG, 6IS, 9F, ZC6NT, 6SQ.

J. R. Harris, 26 Iden Street, Hampden Park, Eastbourne, Sussex.

PHONE: C4AP, CM9AA, CN8AB, 8AM, 8BA, 8BB, 8BV,

CALLS HEARD—(contd.)

8MI, 8MZ, CX2AE, 2CO, EA9AI, EK1DI, FA8CF, 3FB, 3GZ, 8CC, 9KJ, 8WH, KH6CT, LU4AD, 4DD, 5DJF, 6AJ, 7BU, MIB, MDIH, 5AA, 5AK, 5HJ, 5JM, 5KW, 5PS, OA4M, OQ5CF, OX3BE, 3BD, 3GE, 3GF, PY1ACQ, 1AMF, 1KZ, 2JU, 4FA, 7AD, ST2FU, TG9AD, TRIP, UA1BE, 3AF, 3AT, VK3GU, 3UK, 3WX, 4VD, VP9F, 9Q, VQ2JC, 4ASC, 4NFH, XE1AC, 1BC, 1CQ, 1HB, YV5AE, 5AY, ZB1AH, 2A, ZC6JM, 6NT, 6SQ, 6SX, ZS3F. (Rx: R.1116.)

P. N. Pitt, 85 Bryanston Road, Bitterne, Southampton.

'PHONE: CE2CC, CO7CX, 8MP, CX2CO, EK1AD, LV1EB, MF2AA, PY1KZ, 4IK, 5U4RX, TI4JG, VO2AT, 6J, VP1BB, 2AG, 4TAY, 9L, W6GEN, 6MLY, YV5AB.

CW: CN8AS, CM2AZ, 2BH, EK1FP, FT4AN, KP4FQ, MD5KW, OX3RF, PY1MHL, UA1KEC, UBS5B, U8AA, VE7HC, VK6PW, W6HZT, YV5AE, ZB1AQ, ZL4AW. (Rx: 0-V-0.)

D. Wilson, 29 Alwyn Road, Old Bliton, near Rugby.

EA9AI, HC2OL, KH6IJ, LU5AE, 5OJF, PY2CO, 4IK, TG9AG, 9RF, UA3AF, 2KX, VK4UL, VQ2JC, 4AZA, 4FSH, XE1AC, YV1AU, 5AK, 5AV, ZB2A, ZL1JV, 2BT, ZS3F. (Rx: B2.)

T. H. O'Dell, 203 Hawes Lane, West Wickham, Kent.

'PHONE: CN8BA, 8M, 8VZ, FA2MB, 3FB, 8H, LU6AJ, 7DX, MD5TF, OX3BD, PY6AO, 7AD, VO2AT, VP7IJ, VV5AY, ZC6NT, 6SQ. (Rx: Home-built 7-Valve Superhet.)

A. W. Robertson, 149 Firs Drive, Cranford, Middlesex.

'PHONE: AR8AB, C1CH, 7TY, CP5EP, ET3AE, HK3FO, J5AAD, 9ABL, KG6AI, OQ5CF, 5CI, TI4JG, VP4PO, 6IS, 9F, VQ2JC, 3HG, 4NSH, W3FOJ/KL7, YR5KY, ZE2JR, ZS3F, 5FD.

CW: TF3EA, VS9AN. (Rx: 0-V-1.)

D. L. McLean, 9 Cedar Grove, Yeovil, Somerset.

'PHONE: EA9AI, KG6AI, KH6AW, 6GS, 6IU, OA4CV, OX3BD, 3GF, PK3WG, TG9AD, VESAS, 5LM, 6AL, 6PP, 7ADJ, 7EF, 7MQ, 7TM, 7VP, 7ZM, 8MB, 8MI, 8MU, VK2ABD, 2AGU, 2AGW, 2AB, 2AH, 2AHU, 2ALL, 2ALO, 2BM, 2BT, 2BZ, 2OQ, 2QP, 2D, 2WD, 3AJD, 3BH, 3JC, 3FD, 3FA, 3WX, 3XP, 4JU, 4VF, VP2AG, 5AF, VQ2JC, VR2AZ/VR1, VS1BA, W3FOJ/KL7, XE1AC, 1BC, 1CQ, 1HB, 1TE, 2GZ, 2IY, 3AF, YS3PL, ZL2AO, 2BT, ZS3F. (Rx: RCA AR88LF.)

G. Braithwaite, 15 Ayr Street, Belfast, N.I.

'PHONE: AR8AB, C1CH, EA9AI, KG6AI, 6IJ, KH6AW, 6BM, 6GF, 6GS, KL7FQ, 7UM, ST2GE, 2RN, VE6FK, 7HC, 7MQ, 7VO, 7VP, 7WV, 7ZL, 7ZM, 8MU, 8NB, VK2AGU, 3BH, 3YM, 3JC, 3JT, 3KN, 3WX, 3YH, VQ4NSH, VS1AN, 1BA, 7ER, VU2EY, W6YOT/C6, ZL2BT, 2CV. (Rx: V55R.)

F. N. Baskerville, 17 Scarisbrick Street, Southport, Lancs.

CW: C6YZ, 7OK, CR4AH, 6AI, 7AD, 7BC, 7MB, J4KLT, 9ACD, KG6DG, 6HG, KL7DF, 7FM, 7GG, 7KV, 7NK, 7NZ, 7OF, 7OK, 7ZE, KM6AH, 6AI, KZ5AP, 5BS, PK5AR, VE8AM, 8OT, VQ8AB, 8AP, VR2AB, 5PL, VS1CR, 2CB, 7NK, 7WN, 9AF, 9GT, ZD8B, ZM6AF. (Rx: Home-built 7-valve S.H.)

B. J. Tyson, 139 Westwick Road, Sheffield 8.

'PHONE: CN8MI, CO2DQ, 2MA, CX2CO, EA3ZT, ET3AE, LU2ER, 5ME, MD5JM, 5OV, M13AB, OX3BD, UA3AW, VP9F, YV5AB, ZB2A, ZC6AW. (Rx: Eddystone 640.)

L. Collis, 6 Brighton Road, Banstead, Surrey.

Asia & Africa (Central and Southern).

'PHONE: AR8AB, 8BC, C1CH, 1HK, 1MG, 7TY, J3WGT, 5AAD, 9ABL, 9ABW, 9ACC, KA1AI, KG6AI, M13ZJ, PK3WG, VQ2JC, 4NSH, VS1BA, 7GR, VUZAV, 2CA, 2EY, QJ3JM/C3 (Pormosa), W6IWU/KG6, ZC6JJ, 6JM, 6JP, 6SQ, ZS3F.

CW: AP4A, CIMG, 2HK, 6YZ, 7OK, 8YR, CR6AI, 6AN, 7MB, ET3J, J2AHI, 3AAD, KG6DG, M13ZJ, UA1KEC, 9CA, 9CC, 9CI, 9KCA, 9KOA, OSF, UD6AG, 6AH, 6BM, UFK6A, 6KAC, UG6AB, UH8AA, 8KAA, U8AA, 8AE, 8KFO, UJ8AE, UL7BS, VQ2DH, 3HG, 3HP, 4HG, 4RAW, 4SGC, 8AF, VS1CR, 2BX, 2CB, 6AC, 9AF, 9AN, 9GT, VU2GI, W6MCF/C1, XZ2EM, ZC6AO, 6GE, ZD1LO, ZE1JO, ZS2A, 2X, 5DZ, 5YF, 6BV, 6CT, 6EW, 6GL, 6J, 6OI, 6OW. (Rx: Eddystone 640.)

O. A. Good, 1 Western Drive, Oswestry, Shropshire.

'PHONE: C1CH, 1HK, 1HY, 1MG, 7TY, W6YOT/C6, CP5EA, 5EP, ET3AF, HC1JW, 2KJ, 2OL, HLIAB, J9ABL, 9BW, 9ABY, 9ACC, 9ATT, KH6KH/KB6, KG6AI, W7JEF/KG6, W6IWU/KG6, KH6AW, 6CT, 6GD, 6GF, 6GH, 6GS, 6IJ, 6JO, 6KA, 6LS, KL7FQ, 7UM, W2SAV/KL7, 3FOJ/KL7, PK3WG, TG9RF, VE8BC, 8MB, 8MI, 8MU, VK6DD, 6PW, 7AZ, VR2AP, XE1AC, 1BV, 1HB, 2AV, ZE2JV, ZL1CD, 2BT, 2GX, 3CV, 3LC, 4GK, ZS3D, 3F. (Rx: Mod. R1155 2RF.)

A. J. Browning, 49 Old Shoreham Road, Southwick, Sussex.

'PHONE: C7QR, CE2CC, CO7VP, 8MP, EA3MB, 3ZT, ET3AE, 1LBR, LU4DJ, 6AJ, MDIH, POSLE, PY1ACQ, UA1BE, UBSKAG, VK3HF, 3KD, VO4Q, VP2AG, YV1AU, 5AY, ZB1AH, 1S, ZC6JP, 6NT, 6SQ. (Rx: Hambrader.)

W. McBer, Kirkwall, Orkney Islands.

C7TY, CE4BP, CX2CO, HH2X, LU2AS, 4DJ, OX3GE, PY4IK, 6CO, UA3KAE, UBSBG, 5KAQ, VE2AGU, 2XG, VP2AG, 2GB, VQ2JC, VS1BA, 7GR, VU2CA, 2VA, YS1JR, YV5AB, 5AK. (Rx: R107.)

O. R. F. Mason, 13 Chestnut Grove, Southend-on-Sea.

'PHONE: C7TU, CE3AY, CX4CS, ET3AE, 3AF, KH6GS, LU3EB, 4CN, 5AD, 6AJ, 7BU, 7DX, 9MC, PY1ACQ, 4IK, VK2JK, 3LN, 4MN, VO2BP, VP4TAL, 9F, YV5AV, ZC6SQ. (Rx: R1155 Modified.)

D. A. Goodchild, 54 Florence Road, Nottingham.

'PHONE: C1HK, 7TY, CE2CC, CN8BB, 8MZ, CO2MG, 7CX, 7VP, 8MP, CX2AC, 2AX, 2CO, EK1AD, FA3FB, 3GZ, HH2CV, KA1AI, KH6CT, LU1AJ, 1JC, 2AG, 2FM, 3BE, 2CN, 4DD, 5AD, 5DJ, 5HG, 6AJ, 6HA, 7FW, MDIH, 5AK, 5HJ, 5JM, 5PS, OA4AI, 4CH, OX3BD, 3BE, 3GE, 3GF, PY1ACQ, 1AMF, 1DH, 1PK, 4AS, 4CB, 6CO, 7DA, 7VG, TRIP, VE8MB, VK2AGU, 2AGW, 2AHJ, 2ALL, 2BT, 2BZ, 2HJ, 2NY, 2QP, 2TC, 2WD, 2XG, 3JD, 3XD, 4KH, 4VD, VP2GB, 4TR, 4TZ, 9F, W3FOJ/KL7, YV1AD, 3AL, 5AK, ZC1AZ, 6JP, 6JW, 6NT, 6SQ. (Rx: Hambrader plus Radiovision Preselector.)

A. Ross, 40 Chiltern View, Letchworth, Herts.

C7TY, CN8AW, 8BA, 8BF, 8BV, 8MI, 8MZ, EA9AI, FA2FB, 3FB, 3GZ, 3JY, 8WH, 9KG, MDIH, 5AK, 5JM, 5KW, 5PS, OX3BE, 3BG, 3GE, 3GF, 3UC, PY1ASC, 1ASQ, 2IG, 4IK, 6CO, 7AY, 7DM, 7VB, 7VG, SV1GY, 1KE, 1MP, 1RX, U3KPE, UA1BE, 3KAE, UBSKAG, VK2AGW, 2XB, 2XG, 2XV, 3JT, VO2BP, 4V, 6F, 6M, VP9F, VQ4NSH, XE1AC, ZB2A, ZC6JM, 6JP, 6LA, 6NB, 6NT, 6SQ. (Rx: 0-V-1.)

F. W. Lindley, 22 Panmure Terrace, Barnhill, Angus.

CW: AP2G, 4A, CO6AJ, EP3H, FT4AN, IGUHA, J5AAD, KA1AK, 1KFA, KH6CD, 6IJ, 6MI, 6MW, 6NZ, KL7CB, 7GG, 7KV, 7NP, 7OK, 7PB, KM6AH, KSA4I, LZ2AA, OX3JR, TG9JK, TRIP, UA8AA, 8KHA, 9CC, 9KOA, OKFA, U8AA, 8KAA, UJ8AE, UL7BS, VE8AW, 8MI, 8OT, 8OW, VO6J, VS2BX, 9GT, W2SAV/KL7, Y12FDY, YU7AF. (Rx: 1-V-2.)

D. W. Waddell, 25 Hillfield Place,
Nantwich, Cheshire.

'PHONE: C7Y, CE2C,
3EE, CK1VD, 2CO, EK1DI,
EQ2L, HK6WF, HK1FU, 3AO,
KA1AI, HK6GS, MD2B, OA4AI,
VEGFK, 6PP, 8MI, 8NW, VK2BH,
2BT, 2BP, 2NO, 3AGV, 3BH, 3LN,
3TA, 3YH, 4VD, 5DQ, 5QR,
VP2AG, 9F, XE1AC, 3AF,
YV1AU, 5ABC, 5ABT, 5AE, 5AK,
5AY.

CW: C3LT, 6HH, 6YZ, 7OK,
8YR, CE3AB, 3BA, 5AW, CO2BM,
6AJ, CR6AI, 7MB, FM8AD,
HK4AF, J3AAD, KG6DG, KH6CD,
6IJ, 6MG, 6MI, KL7GG, 7OK,
7FB, KP4CC, 4CP, 4DJ, 4FN,
4FQ, 4GA, 4HE, KV4AA, 4AH,
KZ5BE, M13AB, PZ1FD, 1WK,
UA9CA, 9CC, 9CI, 9DP, UD6AG,
6BM, UFG6AK, UG6AB, UIRKAA,
UJ8AE, UL7BS, VE6EE, 6HL,
6MC, 7EO, 7KC, 7KI, 7VC, 8AW,
8NX, 8OW, 8OZ, VK2ALG, 2ALL,
2BA, 2EC, 2CX, 2DH, 2DI, 2DN,
2DO, 2EO, 2FG, 2GT, 2HW, 2JT,
2NS, 2OI, 2PU, 2PV, 2QL, 2RA,
2RB, 2US, 2VQ, 2WU, 2ZF, 3AE,
3CX, 3DK, 3DN, 3DQ, 3EK, 3JA,
3KR, 3MH, 3NC, 3ND, 3PA, 3VJ,
3VO, 3XK, 3XO, 3YL, 3ZU, 4EL,
4JU, 4SU, 4UL, 5CW, 5FL, 5JS,
5KO, 6KW, 7KB, 7NC, 7YL,
VP2AD, 9E, 9L, VQ3HGE, 4HG6,
4KTH, VS6BA, 9AN, W7KVM/
K7S, Y1ZFD, YV1AI, ZC1AF,
6AO, 6IJ, ZD6AC, ZL1BQ, 1FE,
2AI, 2FA, 2FI, 2GH, 2QM, 2UV,
3CN, 3GE, 3GM, 3GU, 3IF, 4AW,
4CK, 4DV, 4FG, ZS1FS, 1GC, 3D,
6EW, 6FN, 6J, 6OI. (Rx: Modified
R11554.)

28 mc

T. W. W. Dearlove, 138 Coleford
Bridge Road, Frimley Green,
Surrey.

'PHONE: AP2D, 2G, 4B,
5TM, C1CS, CE3AB, 3AE, 5BH,
CPIJI, CR9AG, CX1DB, 4CS,
5AP, EQ1RX, HK4AR, 4CO,
HL1AA, 1AN, 1AQ, 1AR, 1MH,
J2AMA, 2AZA, 2CDJ, 2DND,
2IMR, 9ACD, KA1ABZ, KG6AD,
6BS/Iwojima, KZSLN, OA4BK,
4HA, PK2RK, OQ5CK, 5CF,
PZ1A, 1D, TG9RV, VK3AGB,
3NP, 3TE, 5AE, 5KG, 6HL, 6RU,
VQ3ALT, 3HGE, 4ERR, 4HRP,
5PBD, V5TAC, 7PS, 7PW, 7RF,
VU2BF, 2BG, 2BK, 2CQ, 2CR,
2ET, 2GI, 2MD, W1PFB/PM (In
motion), 2EJV/PK3, 2IBZ/MM,
3RWE/MM, 5OCN/MM, 5OFO/
MM, YN1EP, YS1AC, ZDA4H,
ZE2JA, ZS1CN, 1FD, 1KH, 1IF,
1T, 2AQ, 6B, 6CT, 6DW, 6JI, 6LW,
6X, ZL1BN, 1KN, 1OF, 2AT, 2BJ,
2LM, 2LV, 2QS, 3CX, 3DS, 3FL,
3HC, 3JO, 3LE, 4AO, ZP8AC.
(Rx: CR 100.)

C. S. S. Lyon, 15 Ullet Road,
Liverpool 17.

'PHONE: AP2G, AR8AB,
CE3DW, 3EE, CR9AG, EL3JA,
EQ2L, FF8FP, HC2OL, HH2CW,

HL1MH, J2RLK, 7ABN, 9ATT,
KA1ABZ, 1AGF, 1AZ, KG6CP,
6CS, W4MCI/KG6, KP4BM, 4ES,
4USA, KZ5RS, LU2DM, 3DD,
3DH, 3EL, 4DP, 4PA, 5BM, 6JB,
8ET, 9EV, MD5AF, 5KW, 5OV,
5PS, M13AB, 3ZJ, OQ5AR, 5CK,
PK2RK, PY1ACQ, 1AL, 1JP,
3BW, 4ZI, PZ1RM, ST2AM, 2CH,
2FU, 2JF, VK3CP, 5AE, 6FL,
VO4AC, 4X, VP3TR, 4TAJ, 6JC,
6YB, VQ3HGE, 4HRP, V5TFS,
7RF, VU2BG, 2CQ, 2CR, 2GB,
2GI, YV1AV, ZC6JU, ZD4AH,
ZE2JV, ZL2OW, 3AF, 3BV, 3CX,
3FV, 3LC, 3LE, 4AO, 4AP, 4BN,
ZS1B, 1DO, 1EO, 1KH, 1P, 1T,
5BZ, 6CY, 6JU, 6KD, 6KS.

CW: AP4A, C7OK, CM9AB,
CN8BK, CR7VAL, CT3AB,
CX4CZ, FE8AB, J7ABN, LU3EL,
8NA, M13ZJ, OQ5AQ, 5BU, 5HR,
UA6LJ, 9CI, VK2NY, 2TG, 3EG,
3YP, 4RC, 5MP, VF2KS, 6AT,
VQ2DH, 2GW, 3HPJ, 4FCA,
4KTH, VS6AE, 6BC, VU2CR,
ZL2FA, 3AF, 3JA, ZS1BM, 1EB,
1EO, 2A, 6JZ. (Rx: 0-V-1.)

D. Kendall, 40 Aberdale Gardens,
Potters Bar, Middlesex.

(Far East and Oceania)

'PHONE: C1CS, CR9AG,
HL1AE, 1AR, 1BB, 1MH, J2AMA,
2AZA, 2CDJ, 9AAI, KA1ABX,
1ABZ, 1RP, KG6AF, 6AF, 6AW/
VK9, 6CN, 6CW, PK2RK,
VK2ADC, 2AKR, 2AMU, 2VA,
3JD, 3KX, 3NP, 3QW, 3SB, 5AE,
5BF, 5WG, 6HL, 6RU, W2EJVP/
PK3, W2WVMV/C9, 6PJN/KG6,
XZ2KW, ZL2BT, 2CB, 2IA, 2NQ,
3AF, 3BV, 3CX, 3DD, 3DS, 3FL,
3KR, 3LC. (Rx: Home-built 14-
valve Superhet.)

D. Heaton, 1 Jer Lane, Horton Bank
Top, Bradford, Yorkshire.

'PHONE: AP2F, AR8AB/
C1CB, 1CS, J9AAI, KG6CP,
MD3MB, OQ5CK, 5CR, PK1MJ,
2RK, ST2CH, SV1RX, TR1P,
UB5BG, VK2ADK, 2AKR, 5AE,
VU2BG, W4MCI/KG6, ZL1DV,
1KJ, 3AF, 3FV, 3GN, 3HC, 3JO,
4AO, 4CN, ZS2AK, 4BL, 6CM.

B. Needham, 31 Bomore Road,
Kensington, London, W.11.

'PHONE: AP2D, 2G, 4B,
AR8AB, C1CS, CE1AH, 3AB,
CR9AG, CX5AC, EL6A, EP3ET,
EQ1RX, 2L, FF8FP, H18WF,
HL1AA, 1AH, 1AK, HZ1AB,
J2AMA, 2AZO, 2CDJ, 9ACD,
KG6AF, 6CP, 6CS, KP4BY, 4KV,
LU3BR, 3DH, 4EC, MD3BC, 5AF,
5EW, 5HJ, 5OE, 5OV, M13AB,
OA4BX, OQ5AR, 5BR, 5CH,
5CK, PK2RK, PY1JP, 2FC, 5AU,
PZ1BG, 1M, ST2AM, 2CH, 2FU,
2JF, TG9RV, UA3AW, 3DA,
UB5BG, VK2AGD, 2AZO, 2EW,
2TH, 3EE, 3JD, 3QW, 3WE, 4ER,
5KY, 5RV, 6FL, 6HL, 6MB, 6RU,
9GW, VO1AB, 1G, 1R, 2AT, 2BX,
2VP, 2Z, 4P, 4T, VP3DCA, 3TR,
4TZ, 6JC, 6YB, 9F, VO4CJG,
4ERR, 4HRP, 4NSH, 5PBD,
VS1AY, 7PS, 7RM, VU2AC, 2BG,

2CQ, 2DI, W3RWF/MM, 4MCI/
KG6, XE1AI, XZ2KN, YV4AM,
ZB1AC, 1AG, 1AK, 1AM, ZC6JU,
ZE2JA, ZL2BE, 2BN, 2CY, 2FY,
2JB, 2MU, 3AF, 3AY, 3BD, 3DS,
3FL, 3GJ, 3RF, 3TX, 4AO, 4AT,
4AQ, ZS1AX, 1CN, 1DO, 1P, 1T,
2CN, 2Q, 5DA, 5DS, 5G, 5Q, 6B,
6BN, 6CM, 6DK, 6FU, 6GL, 6IH,
6JI, 6JZ, 6KS, 6LF, 6LW, 6MD.
(Rx: R.208.)

B. J. Tyson, 139 Westwick Road,
Sheffield 8.

'PHONE: AR8AB, CE3AB,
EL3JA, LU3DH, MD3MB, 5AK,
5GW, 5HJ, M13AB, OQ5CC, 5CK,
PY1FM, ST2AM, 2JF, 2MP,
VU2CO, ZE2JB, ZS1DO, 1FD, 1P,
1PZ, 1T, 2AA, 6FD, 6FN. (Rx:
Eddystone 640.)

A. Bannister, 18 Demesse Road,
Manchester 16.

'PHONE: C1CS, CR9AG,
EQ1RX, 2L, FF8FP, HLIAD,
1AF, J2DMD, 9ACD, KA1ABZ,
1RP, KG6BP, OQ5CA, VK4ZB,
VO4CJG, 5PDD, W4MCI/KG6,
6PJN/KG6, ZE1JM. (Rx: 9-valve
S.H.)

D. W. E. Powell, Loughrizz,
Shaftesbury Road, Wilton, Wilts.

(Far East and Pacific Area only)

'PHONE: CR9AG, HLIAR,
J2AZA, KG6CP, PK2RK, VK5AE,
W4MCI/KG6. (Rx: 0-V-1.)

1.7 mc

Waldemar F. Kehler, 24b Husum/
Nordsee, Kampsiedlung/Lund 17,
Schleswig-Holstein, Brit. Zone,
Germany.

CW: G3ADJ, 3ATU, 3AZP,
3BZT, 3CBU, 3CFG, 3CTE,
3CUI, 3CXU, 3FTX, 8LG, 8PR,
8RB.

'PHONE: G2AYC, 2DWM,
2FXK, 2NV, 3AQM, 3PC, 5LF,
5SK.

D. L. McLean, 9 Cedar Grove,
Yeovil, Somerset.

'PHONE: G2HX, 2MM,
3BSX, 5MM, 6GU, 6ZO, 8PX,
GW4FW. (Rx: RCA AR88LF.)

3.5 mc

C. S. S. Lyon, 15 Ullet Road,
Liverpool 17.

'PHONE: PY7DO, VE1PX,
2HE, 2LQ, 3AGW, W1, 2, 3,
4DSK, 4KHR, 4LR, 8MIS, 8OZP,
8VAB, 8VPO, 9DOD.

CW: EA3BT, FA8BG, W8LZK/
KP4, UA3KAE, VE1BV, 1JY,
2WW, 3AJZ, 3DF, 3KE, W4AFV,
4ANK, 4ERU, 4GWW, 4IA,
4IMH, 4LKI, 5LSN, 5MET,
5NPW, 5OBA, 8AQ, 8LHJ, 8OF,
8SKD, 9CJV, 9PIW, 0CKK,
0INK, 0RPT. (Rx: 0-V-1.)

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All Post Orders To: JUBILEE WORKS, 167 LOWER CLAPTON RD.

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OUR NEW LIST IS NOW AVAILABLE. All enquiries must be accompanied by a 2½d. stamp
ALUMINIUM CHASSIS. Substantially made of bright aluminium, with four sides, 10 in. x 8 in. x 2½ in., 7/-; 12 in. x 9 in. x 2½ in., 7/9; 16 in. x 8 in. x 2½ in., 8/6; 20 in. x 8 in. x 2½ in., 10/6; 22 in. x 10 in. x 2½ in., 13/6.

PREMIER COIL PACK consists of a wired and aligned Coil Pack of the most Modern Type incorporating such features as Permeability Tuned I.F. Transformers with Litz windings on Polystyrene formers (7KC Bandwidth) Air Dielectric Trimmers, Litz wound medium wave coils. Tuned R/F stage, covers 13-40, 40-120, 200-557 metres. Dimensions of Pack, 6 in. x 4½ in. x 2½ in. Pair I.F. Transformers, 3-Gang Condenser, Slow-motion Drive and Dial are supplied loose. Complete Circuit is supplied. Price complete £3/17/6.

OSCILLOGRAPH POWER UNITS. Input 230v. 50 c. include transformer, metal rectifiers, voltage doubling and smoothing condensers. Type 409, output 900 v. 25/- . Type 410, output 1,800 v. 30/-.

SPECIAL HEADPHONE OFFER High-grade Double Headphones, using balanced armature units. D.C. Res. 60 ohms. 3/6 per pair. Matching Transformer if required, 2/6 each.

OSCILLOGRAPH FOUNDATION KIT. Comprises a transformer giving an output of 800 v., condensers, metal rectifiers, 3½ in. Cathode Ray Tube and base, and L.T. Transformer. Price 55/-.

H.T. ELIMINATOR AND TRICKLE CHARGER KIT. Consists of a complete kit of parts to construct an H.T. Eliminator with an output of 120 v. at 20 m/a and provision for Trickle Charging a 2 v. Accumulator. Two Metal Rectifiers are employed. With circuit, 35/-.

NEW 2-VALVE SHORT WAVE KIT. 16 to 2,000 metres, Switched Coil Pack ready wired and tested. 2 Mazda HL23 Valves, 'Phones, H.T. and L.T. Batteries, Condensers, resistors, diagrams and steel case, all ready to assemble. £3/19/6

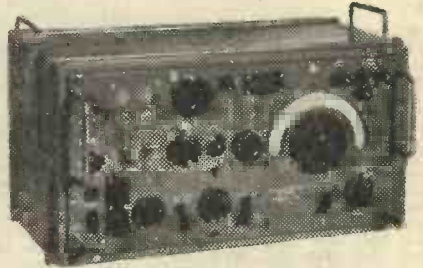


NEW C.R. and TELEVISION TUBE OFFERS. VCR.97 (ECR60). 6 in. Electrostatic, Short Persistence. Tube with Green Screen. New in Maker's Cartons. 55/- each

C.R. TUBES. We have available a large quantity of E.M.1.4/1 Cathode Ray Tubes. 3½ in. diameter Green Screen, short persistence, 4 v. 1.3 a. Heater. 800 v. H.T. Complete with socket. 17/6 each

C.R. TUBES V.C.R.138 (equivalent to E.C.R. 35) 3½ in. diameter. Green Screen, 4 v. 1 a. Heater, 1,200 v. H.T. Complete with socket and mumetal screen. 49/6 each

Magnetic TELEVISION Tubes by Mullard. 7 in. diameter, 2 volt heater. 5KV. Max. H.T. All new in Maker's Boxes. £5/19/6



RI07. ONE OF THE ARMY'S FINEST COMMUNICATIONS RECEIVERS. (See "W.W.", August, 1945). 9 valves, R.F. amp. osc. Frequency Changer, 2 I.F.'s (465 kc), 2nd Detector, AVC. Af. amp. A.C. mains, 100-250 v. or 12 v. accum. Frequency range 17.5 to 20 mc/s., 7.25 mc/s. to 2.9 mc/s., 3.0 to 1.2 mc/s. Monitor L.S. built in. Complete. Write for full details. £16/16/- Carriage paid.

SPECIAL VALVE OFFER.		1A7, 1H5, 1N5, 3Q5.	9/6 each. 36/- Set
6F6	10/6	VU134 (HVR2)	10/-
6V6	8/6	VU39 (R3)	9/6
CV6	5/-	VR137 (EC52),	5/-
VR65 (SP41, 6, 3v.)	5/-	VR136 (EF54),	7/6
VR92 (EA50)	5/-	VS70 (7475),	7/6
VR56 (EF36)	6/-	VT60A (807 Ceramic),	10/-
VR78 (D1)	2/6	717A,	7/6
VR55 (EBC33),	5/-	12SH7,	7/6
VT86 (6K7 met),	10/6	12SL7,	10/-
VR503 (KT33C),	10/-	12A6,	7/6
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VR57 (EF32),	7/6	RL18,	12/6

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		Price
3	500-0-500 v. 150 m/a. 4 v. 2½ a. 4v. 5 a. 4 v. 1 a.	35/-
4	865-0-865 v. 500 m/a. Tapped at 690 v. and 760 v. 4 v. 3 a.	75/-
35	300-0-300 v. 250 m/a. 4 v. 3-5 a. 6-3 v. 5-7 a. 6-3 v. 1-2 a.	35/-
30	30 v. 4 a.	20/-
31	40 v. 3 a. and 104 v. 1.5 a. (auto-wound)	21/-
32	700-0-700 v. 150 m/a. and 1000 v. 30 m/a. 4 v. 1 a. 4 v. 4 a.	40/-
33	38 v. at 2 a. tapped at 36 v. 34 v. 32 v.	15/-
34	1500-0-1500 v. 120 m/a. 4 v. 2-3 a. 4 v. 2-3 a.	55/-
34a	1500 v. 5 m/a. and 1500 v. 5 m/a. 4 v. 2 a. 2 v. 2 a. 2 v. 2 a.	25/-
49	275-0-275 v. 120 m/a. 5 v. 2 a. 6-3 v. 2.5 a. 6-3 v. 3 a. ct.	29/-
42	500-0-500 v. 170 m/a. 4 v. 4 a.	35/-
43	4 v. 20 a.	25/-
46	100 watt auto 230 v. 150 v. 100 v. 50v.	12/6

SWL STATIONS

No. 12

R. SPRINGETT operates this outfit at 12 Privett Road, Gosport, Hants., and simplicity is the key-note of all the equipment in use.

The receiver is the original 0-V-0 rebuilt to 1-V-2 with the RF stage untuned, and headphone operation. Also available is the Rx side of the TR9H ex-RAF unit, with which it is hoped to commence transmission when in due course the licence is obtained.

Aerials at present consist of an inverted-L about 30-ft. high and an indoor Windom for 28 mc work ; results have not been entirely satisfactory on 10 metres, but it is thought that they can be improved.

R.S. is a strong believer in starting with gear which has been home-built and which the constructor can fully understand ; he proposes to graduate by degrees through the various stages towards a modern amateur transmitting station, and we feel sure that most readers will agree on these methods.



SMALL ADVERTISEMENTS SECTION

We have had a number of requests and enquiries with regard to small advertising in the *Short Wave Listener*. It is therefore proposed to initiate a Small Advertisements Section in our next issue, dated July and due out on June 17.

Charges will be as follows :

READERS, 2d. per word, minimum charge 3s. ; Box Nos. 1s. 6d. extra.
TRADE, 6d. per word, minimum charge 7s. All advertisements must be of radio interest only, and copy for the next issue in hand by June 7 latest, addressed (with remittance) to the Advertisement Manager, *Short Wave Listener*, 49 Victoria Street, London, S.W.1.

NEW ZONE MAP

Have you had your copy of the five-colour version ? It is a fine production and will look well in any shack. It gives full details on the Zones, as well as direction, time and distance for all parts of the world relative to London and is sufficiently accurate for the whole of the British Isles. The size is 21-in. by 35-in., on heavy linen-backed paper for wall-mounting, and delivery is immediate, post free, on receipt of your remittance for 6s. to the Circulation Manager, Short Wave Magazine, Ltd., 49 Victoria Street, London, S.W.1. As we shall not be able to get suitable paper again, this will be the one and only printing—order yours while we have the stock.

The VHF End

EDX Season Opens—GDX Activity—
SWL VHF Club—Listeners' Reports

by A. A. MAWSE

THE EDX season has opened, news having reached us that G6ZQ (Cheltenham) made contact with OK2MV on five metres at 1305 on May 5. This is 9 days earlier than the first reported European DX signals last year.

What we call EDX is due to the existence of a layer of intense ionisation at about the height of the normal E layer, and known as sporadic-E. It is capable of reflecting signals at frequencies as high as 90 mc on occasions, but as its name suggests it is irregular in occurrence and no reliable forecasts are possible in the present state of the art. Even the experts differ on the causes of sporadic-E, so we shall make no attempt to prophesy when or what you will hear. We can only urge you to listen as often as you can from now on right through the summer, and to ask you to let us have in fullest detail all that you hear; not just lists of calls heard (although we do want *them*), but dates and times of the band opening and closing, directivity of signals (if you have a beam) and general conditions at the time of hearing Europeans. Needless to say, EDX stations will only be too glad to have your QSL, too!

A "Countries Heard" panel will be started as soon as we begin to get your reports, and don't forget that for this purpose G counts as one country.

Normally, EDX manifests itself at distances of from about 400 to 1,200 miles, but two-hop DX is not impossible—so readers may like to know that EP3H is active in Persia on 56/60 mc and tells us he would appreciate reports *via* BCM/QSL, and promises to QSL! There is, he says, another 60 mc station in Dhahran, Saudi Arabia. ST2FT is also reported active in the Sudan.

GDX Reports

Transmitting activity on five metres being on the increase, some good GDX logs have been received this month. G. E. Magrow (Dawlish) has sent some interesting barograph charts on which he has superimposed the calls of stations heard. If we might make a suggestion

here, it would be that instead of marking on the chart the calls heard (which may be a record of *activity* rather than *conditions*), a second graph be made of the signal strength of one or two *regular* stations at GDX distances: In the case of G.E.M. himself, G5US (Camberley, Surrey) would provide a useful signal as he runs a regular schedule beamed on Devon. If any others run tests on these lines we should be very interested to see the results.

G.E.M. has added to his Counties Heard score and looks like being in that second place in the table before long. For those looking round for "rare" counties G.E.M. draws attention to G2RY (Bridport), and G3TN (Portland Bill) in Dorset, G3YH and G6RB (Bristol) in Gloucestershire and G4RX (Bridgwater) in Somerset. To these we can add G5AM (Ipswich) in Suffolk. Don't miss these while searching for that EDX!

R. Rew (Birmingham), apologising for his numerous queries last month, comes

Five-Metre Counties Heard Starting Figure, 10

W. H. Pierce (Reigate)	30
P. J. Towgood (Bournemouth)	24
R. Rew (Birmingham)	24
G. E. Magrow (Dawlish)	21
A. H. Onslow (Hove)	13
D. L. Courtier-Dutton (Herne Bay)	10

up with a new batch. But don't worry, R.R., the more you send us the better we like it. The Editor may frown at us when we exceed our quota of two pages. As things are going at the moment he looks like frowning quite a lot.

Amongst R.R.'s requests is one for details of northern activity. Well, we know of the following:—GM3OL (Dumfries), GM3BDA (Airdrie), G3BW (Whitehaven), G2ADR (York), G4LX (Newcastle) and G2AOA (Preston), and of course there are two very active stations in Hull, G5GX and G6OS.

Another request is for information on push-pull RF stages in VHF receivers, as R.R. is considering experimenting with them on 144 and 420 mc. A good suggestion from him is the possibility of sawing in halves the stator vanes in the Type 27 convertors (using an Eclipse Junior saw), and so providing split-stator tuning. Those who have these

FIVE-METRE CALLS HEARD

G. E. Magrow, Sherwood, Exeter Road, Dawlish, Devon.

Under 50 miles: G2BMZ, 2RY, 3AUS, 3AVF, 3HW, 3JD, 3TN, 4RX, 5ZT, 6HZ, 6WT.

50-100 miles: G3YH, 6RB.

Over 100 miles: G2CIW, 2CWL, 2HLF, 2NH, 2XC, 3AAT/A, 3AEX, 3AUA, 3BLP, 4MR, 5DF, 5MA, 5OJ, 5PY, 5US, 5WP, 6HD, 6KB, 6VX, 6XM, 8AL, 8KZ, 8RS, 8SM.

Over 200 miles: 5MQ. (March 28 to May 2.)

Under 50 miles: G2BMZ, 3AUS, 3AVF.

Over 100 miles: G3AAT/A, 5US, 5MA, 6HD, 6HZ, 6VX, 8RS, 8SM. (M.A.W.E. No. 2.)

W. B. Harrauld, 124 Turney Road, Dulwich, London, S.E.21.

CV: G2QV.

***Phone:** G2AJ, 2CIW, 2FKZ, 2FPF, 2HDY, 2MC, 2MV, 3AEF, 3AEX, 3BLP, 3BOB, 3BTZ, 3CQ, 3CU, 3FD, 3FP, 4IG, 4RO, 5AA, 5KJ, 5MA, 5PY, 5VY, 6HD, 6KB, 6NF, 6OH, 6VX, 8AL, 8FK, 8GX, 8KZ, 8PO, 8SK, 8SM. (March 27-April 24. Rx: Converter EP54 RF, EP50 Osc., EP50 Mixer, into R1155 at 10 mc. Aerial: Long-wire in roof-space.)

R. Rew, 14 Shrublands Avenue, Quinton, Birmingham, 32.

Under 50 miles: G2AK, 2AOK/A, 2APW, 2RI, 3ABA, 3IS, 3LN, 4LU, 5BJ, 5BM, 5BR, 5JU, 5LJ, 5PP, 6FK, 6XJ, 6ZQ, 8KL, 8VN.

50-100 miles: G2ADZ, 2OI, 3APY, 3AUA, 3DA, 5MO, 5RP, 5US, 5WP, 6LC, 6NF, 6MN/A, 6OH, 6XM, 8WV.

Over 100 miles: G2CIW, 2MR, 2MV, 2NH, 2XC, 3BLP, 5GX, 5MA, 6VX, 8KZ. (Rx: 3 valve converter. Aerial: 3-element beam in roof-space. March 29-April 28.)

A. H. Onslow, 10 Egmont Road, Hove, Sussex.

Within 50 miles: G2HLF, 2XC, 3AAT/A, 3VB, 5LQ, 5MA, 5MR, 5PR, 6XM, 8DV, 8RO, 8SM.

Under 100 miles: G3BTL, 6KB.

Over 100 miles: F8GH, G2BMZ. (Rx: RF 27 into 7 valve superhet. 3-element rotary beam.)

A. H. Curl, 22 Chaldon Road, Fulham, London, S.W.6.

***Phone:** G2NH, 2ZV, 5KH, 8KZ. (Rx: Midwest 7-valve 1½-wave dipole.)

A. J. Slater, 72 Underdown Road, Southwick, Sussex.

Under 50 miles: G2CWL, 2FZR, 2HLF, 2MV, 2NM, 2XC, 3AAT/A, 3BNR, 3VB, 5KH, 5MA, 5MR 5PR, 5US, 6VX, 8RO.

50-100 miles: F8AA, 8NW, G5RP, 8LY.

Over 100 miles: F8GH, G2BMZ, 3AUS, 5ZT, 6WT. (March 20-May 1, on RF 27 converter into SX-24. Rotary Di-pole.)

R. Rew, 14 Shrublands Avenue, Quinton, Birmingham 32.

G2ADZ, 2AOK/A, 2APW, 2OI, 2RI, 3ABA, 3IS, 5BJ, 5PP, 6MN/A, 6VX, 8KL, 8WV. (Rx: 3 valve converter. Aerial: 3-element beam in roof-space. Listening period 1900-0001, April 11 only.)

D. L. Courtier-Dutton, Tlev-Tara, Hilltop Road, Herne Bay, Kent

Under 50 miles: G2FZ, R2KG, 3AUA, 3BWS, 3WS, 4IG, 6PG, 6VX.

50-100 miles: G2AJ, 2FKZ, 2MR, 2MV, 2NH, 3AAU, 3AEX, 4RO, 5MA, 8AL, 8KZ, 8RS.

Over 100 miles: G3DCV, 8WV, (April 9-22: Rx: RF Unit 25 into 1-V-2 battery Rx. Aerial: ½-wave dipole.)

convertors may be interested in the article by G. Elliott (a keen VHF listener), in the May issue of our *Short Wave Magazine*, describing modifications to the Type 27 for 50-60 mc reception. Finally, R.R. gives April 13, 15 and 26 as the best nights with him, and G2OI, G5MQ and G6VX as most consistent DX.

Both A. H. Onslow (Hove) and A. J. Slater (Southwick) have acquired RF Units Type 31. These units, with output on 7.5 mc, need no alteration to work on five metres, coverage being 76 to 56 mc. SP61's are employed, but tuning circuits are not ganged. Performance is claimed to be almost equal to the Type 27. A.J.S. now has a beam, which although only 10 ft. up is out-performing a dipole at 30 ft. He has been logging F8GH regularly at 2100 BST. A.H.O. enquires whether we know of any signals on 144 which could be used for tuning up the Rx on that band. We are going into this, and

will try to let you have a list. His offer, in the May issue, of advice on the subject of Type 27's brought him so many letters that he had to have his reply printed!

W. H. Pierce (Reigate) emphasises the importance of a good slow-motion dial to the band spread condenser on five. He uses a 15 $\mu\mu\text{F}$ variable with a 50-l dial, which spreads the band nicely. W.H.P. asks for a list of frequencies of 5-metre



The new Mullard sub-miniature valve types DL71, DL72 and DF70 are pentodes with very low heater consumption (50 mA) designed for operation with up to 45 volts HT.

stations. We know it would be useful, but space is now a major consideration. However, we'll see!

P. J. Towgood (Bournemouth) writes that he has not been able to put in much time this month, but on April 27—a good day with him—he heard G8DM (Watchfield, Wilts.) on 50.12 mc, and G3WS (London, E.) for new stations. P.J.T. also received G5US calling GM3OL (Dumfries) and would be very interested to know if anyone else heard the Scot—he did not, owing to a barrage of auto QRM.

D. L. Courtier-Dutton (Herne Bay) is converting a Type 27, and hopes to have a beam up soon—he has heard no GDX this month, but has his foot on the first rung of the "Counties" ladder. A. H. Curl (Fulham, S.W.6) sends a short call heard list, using a commercial superhet.

VHF Listeners' Club

Several readers have asked whether they are eligible for membership of the Fiveband Club, which is being sponsored by our parent *Short Wave Magazine*. We understand from the secretary, G2XC, that this club is intended for transmitters only, so we would like to suggest to you a "VHF Listeners' Club." The main object of such an organisation would be, naturally, to foster interest in the VHF bands amongst SWL's. Ways and means of doing this would be discussed by the members at an early date, but in the meantime we should like to know how many readers are interested.

Let us know what you think of the idea and we will act accordingly.

M.A.W.E. Nos. 2, 3 and 4

Magazine Activity Week-End No. 2 produced conditions and activity which were somewhat disappointing, although we notice that G. E. Magrow heard several London stations in Devon. In contrast, M.A.W.E. No. 3 (during which we are writing these notes) brought in some interesting GDX during its first few hours. G2ADZ (Oswestry), G2HX (Malvern), G2OI (Manchester), G3BK (March), G3IS (Rugby), G5BD (Mablethorpe) and G5PP (Coventry) were among the many signals logged in London and the South. We are looking forward to seeing some good logs from you in due course. M.A.W.E. No. 4 is scheduled for June 12-13, beginning at 1500 BST on the Saturday.

In Conclusion

Our address for next month's reports

including those lists of EDX, M.A.W.E. logs, Counties and Countries claims and all your news is, as usual, A. A. Mawse, *Short Wave Listener*, 49 Victoria Street, London, S.W.1. and the latest date is June 3—although if you hear EP3H or a VK we can take it by telephone or telegram (Abbey 2384) a day or two later!

CALL BOOK CORRECTION

Many readers will have seen the advertisement on p.164 of our last (May) issue, announcing the latest Call Book. We wonder how many noticed that slip about the number of amateurs it lists—the figure should of course be 100,000 names and addresses of amateurs throughout the world!

MORSE CODE Training



There are Candler Morse Code Courses for

BEGINNERS AND OPERATORS

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"BOOK OF FACTS"

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A.C.S. RADIO

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 MIDGET Microphone Transformers, high ratio, 2/6
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 I.F. TRANSFORMERS, 125 kc/s. Ideal for double Supers per pair 21/-
 H.F. CHOKES, Eddystone VHF 1011, 1/9; Short-wave 1010, 2/6; Transmitter type 1022, 3/-; All-wave type 1066, 4/-.
 VOLTAGE Regulator Tubes, VR75/30, VR105/30, VR150/30 each 12/6
 EDDYSTONE Small Die Cast Screening Boxes with lid, 4½ x 3½ x 2½ 7/-
 AVOMETER Model 7, £19/10/-; AVOMINOR Universal, £8/10/-
 RADIOCRAFT Transformers, Chokes, V.H.F. Converters, V.F.O. Units, etc. Full details on request.
 80 ohm Coaxial Feeder, 1/5 yd. 80 ohm Twin Feeder, 8d. yd. 12 S.W.G. Enamelled Aerial Wire, 75 ft., 9/-; 100 ft., 12/-; 140 ft., 16/-
 (Postage extra on all above items)

Our fully detailed list gladly sent on application.

A.C.S. RADIO

44 WIDMORE RD BROMLEY, KENT

Phone RAVENSBOROUGH 016

MONTHLY COMMENT

by

R. H. GREENLAND, B.Sc.

DX broadcast

It was unfortunate that the reports on the Set Listening Period for March 23 arrived too late to be included in the May number. Several excellent lists were received and the number of stations logged on each varied between fifteen and twenty-one in the allotted hour, *viz.*, 2230-2330.

Dr. T. B. Williamson (St. Albans) logged HI2T, 9735 kc; LRX, 9660 kc; ZYC8, 9610 kc; KZRH, 9640 kc; ZPA1, 6275 kc; PRE9, 6105 kc; and OXI, Godthaab, Greenland, 5942 kc, amongst others. J. P. Burden (Portsmouth) included VP4RD, 9625 kc; COBC, 9370 kc; LRS, 9315 kc; PJC1, 7250 kc; CBFW, 6090 kc; CJCX, 6010 kc; and HH2S, 5950 kc, in his list, and J. H. Saunders (Torquay) noted the following: HCJB, 9958 kc; HI2T, 9735 kc; WOOV, 9700 kc; VP4RD, 9625 kc; COCW, 6325 kc; ZFY, 6000 kc; OAX4Z, 5895 kc; YV5RM, 4970 kc; and YV5RN, 4915 kc. Dr. T. B. Williamson sends another fine report for the S.L.P. 2100-2200 on April 24. He heard quite a few unusual stations including: ZRK, 5887 kc; ZYB7, 11765 kc; CXA19, 11835 kc; LRR, 11880 kc; ZPA5, 11950 kc; and CQM4, 7948 kc.

Swedish Event

The Swedish authorities are to be congratulated on a notable effort in the field of short wave broadcasting between 2205 and 2230 on April 25. That expert on short wave radio in Sweden, Arne Skoog, was seated at his own receiver, tuned to the 25-metre band.

As he logged the various stations, their programmes and his own comments (in Swedish) were carried by landline to the Swedish national transmitters, medium and short-wave, which relayed the details for the benefit of their home listeners. The writer heard mention of CE1185, Radio El Mercurito, Santiago, Chile, 11850 kc; CE1190, Radio Sur de Chile, Valdivia, 11900 kc; CE1180, Sociedad Nacional de Agricultura, Santiago, 12000 kc; and LRS2, Radió Splendid, Buenos Aires, now on 11840 kc; and found it most fascinating listening to HCJB's English broadcast

World-wide reception of Short Wave programmes

via Stockholm. Here, too, it may be mentioned that as from May 1, the weekly Swedish DX broadcasts are on the air on Saturdays, as follows: 0745 (SBP, 11705 kc and SBT, 15155 kc); 1500 (SBT, 15155 kc and SDB2, 10780 kc) and Sundays 0100 (SBT, 15155 kc and SDB2, 10780 kc).

Two readers have just received verifications after long lapses! I. E. Alfrey (Chiswick, W.4) QSL'd CNR3 on April 2, 1947, and has at last got a reply; and R. Burr (Loughborough) posted a report to HCJB in October, 1947, and this is now acknowledged. Our advice is: Do not despair—keep on hoping—and remember the old adage: Better late than never!

Australia

Anzac Day was celebrated in Australia with a special service from St. Paul's Cathedral, Melbourne, and an actuality broadcast of the Veterans' March through the city, heard here at 1445 (a recording) on 15320 kc, 15200 kc, 11760 kc and 9615 kc. F. Smallwood (Bramley, Leeds) gives the news that the evening programme to the British Isles from 2000 to 2145 is now carried over VLC, 15200 kc, VLB, 9540 kc, and VLA8, 11760 kc; VLB and VLA8 closing down at 2130. He has logged VLQ3, Brisbane, Queensland, 9660 kc, heard at 2002 with News followed by the Queensland weather forecast (S7-8). J. P. Burden (Portsmouth) has logged the elusive VLW3 in Perth, Western Australia, on 11830 kc, mornings around 0830 (S4) and VLR, Lyndhurst, 9540 kc at 0815 (S6).

I. E. Alfrey (Chiswick) heard VLH5 at 0610 on April 16, giving a commentary on a boat race on the River Yarra at Melbourne, and followed at 0625 by another on a golf championship match. VLH5 operates on a frequency of 15230 kc.

TABULATED SCHEDULES

I. Radio Branch, Turkish Press Dept., Ankara, Turkey: Foreign Language Broadcasts—Radio Ankara, TAP, 9465 kc.**Daily News.**

1600-1615 in Urdu : 1615-1630 in Persian : 1630-1645 in Arabic : 1645-1700 in English : 1800-1815 in French : 1830-1845 in Greek : 1845-1900 in Rumanian : 1900-1915 in Serbo-Croat : 1915-1930 in Bulgarian : 1930-1945 in German : 1945-2000 in Hungarian.

Sundays.

2030-2045 Post-Bag in English.

Mondays and Thursdays.

2030-2045 Special Broadcasts for England.

Tuesdays (Fortnightly).

2155-2210 Special Broadcast for U.S.A.

II. Canadian Broadcasting Corporation. Daily Short Wave Broadcasts in English : Summer Schedule effective April 18, 1948.

To Europe		Frequencies	
1300-1500	Weekdays. Opening, music and official commentaries from the United Nations.	CKNC 17820 kc. 1300-2205 Daily	
1430-1500	Sundays. Opening and music.	CKCS 15320 kc. 1300-1412	
1545-1715	English programme for listeners in the United Kingdom.	CKCX 15190 kc. 1414-1600 Weekdays	
2100-2200	English programme for listeners in the United Kingdom.	CKCX 15190 kc. 1430-1600 Sundays CKCS 15320 kc. 1605-2205 Daily	
To the Caribbean			
2320-0030	English programme for listeners in the Caribbean and Latin America.	CKCX 15190 kc.* CHOL 11720 kc.	
*Tuesdays only : 2320-0100			
To Australia and New Zealand			
0845-1035	Sundays only. English programme for listeners in the South-West Pacific area.	CHOL 11720 kc. CHLS 9610 kc.	
0300-0335	Daily except Sundays. English official commentaries from the United Nations.	CKNC 17820 kc. CKCS 15320 kc.	

III. Nippon Hoso Kyokai (The Broadcasting Corporation of Japan), Tokyo, Japan.

LIST OF SHORT WAVE STATIONS

Programme	Station	Call-sign	Freq.	Power kW	Schedule
1st Network					
	Nazaki	JKF	9655	5	2225-0745
	Nazaki	JKF2	4910	5	2025-2215 ; 0755-1430
	Yamata	JKC	7257.5	5	2025-1430
2nd Network					
	Nazaki	JKA	7285	5	2125-2300 ; 0755-1300
	Kawachi	JKG	9695	5	2125-2300
	Kawachi	JKG2	4930	5	0755-1300
Repatriatees					
	Kawachi	JVW	15225	7.5	2250-0730
	Kawachi	JVW2	9505	7.5	0755-1330
	Kawachi	JVW3	15235	5	2250-0730
	Kawachi	JVW4	9560	5	0755-1330
A.F.R.S.					
	Nazaki	JKD	6015	5	2115-1405
	Yamata	JKE	9605	5	2115-0845
	Yamata	JKE2	4860	5	2125-1405
Locations					
	Nazaki	36° 10' 44" N.		139° 51' 00" E.	
	Yamata	36° 10' 15" N.		139° 49' 34" E.	
	Kawachi	34° 31' 26" N.		135° 53' 20" E.	

Asia

HLKA is the call-sign of the new station of the Korean Broadcasting System now operating on 7932 kc and heard in Europe 2115-2200. The writer received a weak signal on this frequency on April 22—a man's voice followed by a gong at 2245, then orchestral music. J. P. Burden was more fortunate; he logged HLKA on April 1, and though he has not heard it since, on that occasion (at 2130) it was an S9 signal. An interval signal, consisting of three ascending gong notes, was preceded by a popular waltz and followed by what appeared to be news in Korean. Broadcasting stations in Japan are now numerous, and reports are being verified. Send your QSL's to: R. H. Niimo, Vice-Chief of the Liaison Section, The Broadcasting Corporation of Japan, Tokio. The transmitters and times of operation are given under our Tabulated Schedules.

XGOY, Chungking, 11913 kc, was excellent on April 11 with news in English at 1600, then dance music followed by news in Mandarin at 1615. Reception reports were particularly requested, with the assurance that all communications would be answered. The final words were: "Ladies and Gentlemen, here is the National Anthem of China." R. Burr (Loughborough) received some satisfaction when, on April 22, he logged XGOY for the first time, identifying it by means of its English direction. Major C. Y. Chen, Officer-in-Charge of XGAF, "The Voice of the Chinese Air Force," announces that this station

operates simultaneously on 7100 kc and 11680 kc, according to the following schedule: 2300-2400; 0355-0530; 0900-1500. In addition, it is supposed to relay KCBA at 2100. J. P. Burden says that the Chinese station logged here at 1500 on 12220 kc was XMPA in Nanking, also classified in official lists as: "The Voice of the Chinese Air Force." He heard it at this time on April 18.



The Nazaki Transmitting Station, Japan.

In the Philippine Islands, KZFM, "The Voice of the People," is now on 9620 kc, and KZPI, Manila, on 9502 kc. F. Smallwood (Bramley) received KZRH, 9630 kc, with this direction at 2200: "This is M.B.C., The Manila Broadcasting Company, Station KZRH, The Voice of the Philippines in Manila; the time is 6 a.m." D. Branham (Chorlton-cum-Hardy) says this one appears to close at 1600 (midnight, local time) and reopen at 2100 (0500, local time).

D. Potter (Erdington, Birmingham) would like the exact QTH of Radio Batavia—has any reader received a recent verification with the address? Last month we gave this station's frequencies, and D.P. has heard their English broadcast from 1700 to 1730. The writer logged YHN (call-sign given) on April 24, announcing: "You are tuned to the Overseas Service of the Indonesian Broadcasting System; the time is 10.15 Indonesian Time (1715 GMT) and here is the News." The announced schedule for English broadcasts is: 1700-1800 and 2230-0030—and please note that YHN has deserted its former channel and is now operating on an announced wave-length of 27.68 metres, 10840 kc. On April 25 its signals were quite impressive, and it is wondered if it has already increased its power to the promised 100 kW.

The British Far Eastern Broadcasting Service in Singapore is in the news again! R. Iball (Workshop) hears them on all announced frequencies, but says their 7220 kc channel is unreliable.

This particular outlet, of course, is operated solely by Radio Malaya. Our good friend Margaret Ballingall writes from the Thomson Road studios, P.O.

Box 434, Singapore, as follows: "I enclose a copy of our latest schedule. You will note that it is much altered and simplified. The reason is that it has been decided to cut down the staff of this Station and reorganise the work on an austerity basis. This was partly due to the economic crisis in U.K. and partly because our 7½ kW transmitters do not allow our programmes to be received at satisfactory strength in our target areas. For the next two years, it is expected that we will operate on this reduced scale while high-powered transmitters are being erected."

The following brief extract from the schedule may assist readers: 0900-1630 (6770 kc, 11730 kc and 15300 kc) and 1030-1630 (9690 kc).

A. E. Jeffreys (London, S.E.14) logged the 15300 kc channel at 1500 on April 12 with a programme entitled "Brass Bandstand"; and Radio S.E.A.C., Colombo, Ceylon, on 15120 kc on a week-day closing at 1600 with the words: "Goodnight, everybody." He mentions that Radio S.E.A.C.'s Sunday evening transmission to the United Kingdom is now heard 1730-1930 on 9825 kc and 15120 kc, and for local listeners on 6075 kc and 3397 kc. The writer logged ZOH, Colombo, 4900 kc, at 1645 on April 11, broadcasting its Sunday Epilogue before the close at 1700.

In India, VUD8, Delhi, 21510 kc, has been excellent 1130-1200, during which period an English news and a News Letter are read. J. C. Catch (South Shields) logged this same station at 1025 with closing remarks in English. A. E.

Jeffreys mentions VUD5, 15190 kc and 9590 kc, with a transmission to Great Britain around 1530-1545 daily. E. J. Coates (Dagenham) sends a detailed schedule received from All-India Radio, but we note from it that the details contained in it cease to have effect as from March 15. Radio Taskent, 6820 kc, did not close until 1855 on April 25; the writer has yet to hear the Kurdish National Radio station on 7010 kc which operates daily 1530-1600; it is located in the mountains between Iran, Iraq and Turkey—any offers?

L. W. Lewis (St. Leonards) mentions Radio Azerbaijan giving news in English on 6105 kc at 1715 on April 4, and Damascus, 12000 kc, was noted at 1800 with native music and Arabic directions. According to the Swedish authorities, a Jewish station in Palestine operates on 13890 kc with the direction: "This is Palestine. Haganah calling!"

The schedule given is: 0900-0920; 2200-2220; 2300-2320. R. G. York (Croydon) logged ZMP18, Jerusalem, on 19300 kc with an S9 plus signal at 1455 on Easter Monday. J. B. Thomson (Bordesley, Birmingham) has received a schedule of foreign language broadcasts from Radio Ankara, TAP, 9465 kc; thank you, J.B.T.; we will include the details in our Tabulated Schedules section. B. Whiteley (Tewkesbury) says TAP is usually very strong, and he, too, has received their schedule. The usual Thursday talk in English at 2030—that is the time the writer heard it, but the schedule says 2130—from this station on April 29 was given by Dr. Phillips, Head of the British Council in Turkey.

Africa

From the continent of Africa several interesting signals have been heard. R. Iball logged FIQA, Tananarivo, Madagascar, on 9695 kc until 1710, after which the transmission was blotted out by a European; the direction given was: "Ici Radio Tananarive." B. Whiteley informs us that the Léopoldville "Goodwill Station" has a new schedule: 1920—News in English; 1945—Amongst Friends; 1950—Music; 2020—Talk on Art or allied subject. B.W. adds that on one occasion they thanked D. O. French (Norwich) over the air for his reports covering a week's listening. Well done, D.O.F.! J. P. Burden thinks that Radio Brazzaville has a regular mail-bag programme in English on Mondays at 1830; on April 20 he logged FIA, Douala, French Camerouns on 7950 kc during its

daily Arabic session 1630-1715, soon after which it normally signs off. He notes that VQ7LO, 4860 kc, closes down at 1900 with the direction: "This is Nairobi calling!" On Sundays you will hear an Epilogue just before the close; at 1830 on April 26, I. E. Alfrey listened to a round table talk in which ex-prisoners of war figured. On the previous day, the writer logged Lourenço Marques on 4920 kc at 1930 with the now-familiar slogan: "Lourenço Marques the station for happy listening, in the 60 and 85 metre bands"; at the same time another station on 4830 kc (perhaps Radio Mozambique, too) was heard with a Portuguese programme.

L. W. Lewis has sent in an interesting cutting from the *Bulawayo Chronicle*, containing news about Rhodesian Broadcasting stations. In Southern Rhodesia, the following wave-lengths are in use: Salisbury: (Day) 334 and 50 m.; (Night) 334 and 82 m.—Bulawayo: (Day and Night) 492 and 79 m. Umтали (305 m.), Gwelo (290 m.) and Gatooma (378 m.) are only medium-wave stations.

Generally speaking, the programmes extend from 0930 to 1130 and from 1600 to 1930 daily. According to J. P. Burden, ZQP, Lusaka, Northern Rhodesia, on 9710 kc cannot now be heard, as the adjacent Moscow station has extended its German session from 1630 to 1700, at which time ZQP closes its two-hour daily broadcast.

J. Holden (York) has received from Radio Algiers a verification card, green in colour, with black lettering; they state that as from March 29 the frequency was changed to 9570 kc. L. W. Lewis has had a letter verification from Ponta Delgada, Azores. The schedules are as follows: 11090 kc: 2000-2100 (Winter: 7017 kc); 4845 kc: 2200-2400. The address is: Presidencia do Conselho, Emissor Regional dos Açores, Ponta Delgada, San Miguel, Açores. The Canary Islands transmitter is located at Santa Cruz de Tenerife, and operates on 7275 kc from 2230 to 2300 daily.

Latin America

H.C.J.B., "The Voice of the Andes," has been consistent during the past month. At 0515 on April 17 it was audible on all four frequencies, 15115 kc, 12455 kc, 9958 kc, and the new channel of 5975 kc at the conclusion of its English programme, after which it broadcast a Russian programme "For our friends all round the world." J. P. Burden logged CE622, Santiago de Chile, 6220 kc, on April 9 with news in Spanish at 2330, during which he learnt of

Leonard Miles' uncensored account of the uprising in Colombia, broadcast over "La Voz de Bogota," which the Santiago monitors had evidently logged. Earlier J.P.B. heard HJCF, La Voz de Bogota itself, on 6240 kc, on this day of the revolution at 2310, at which time it was in the hands of the rebels who were broadcasting frantic messages to their comrades. What thrills the short waves can provide! J.P.B. has also noted an S8 signal at 2350 from Radiodifusora Nacional, Bogota, on 11680 kc. We believe the call to be HJCT and the schedule 2200-0415. L. W. Lewis heard this one with an S8-9 signal at 0100, when an English programme was in progress; it was a talk on the history of the city of Cartagena. OAX4Z, Radio Nacional de Peru in Lima, 5890 kc, was logged with direction in Spanish at 0425 on April 25. J. P. Burden hears PSL, 7935 kc, most evenings (except Sundays) when it signs on at 2215. The call is "Agente Nacional," it is located at Marapicu in Brazil, and can be identified by its time announcements made four times in two minutes at the half-hour. The writer has noted a mention of "Radio Nacionales"

and "Rio de Janeiro" in its Spanish direction.

L. W. Lewis has received a QSL card from "ZFY, The Voice of Guiana—the only English-speaking station in South America—entertaining the Caribbean." On the reverse is a fine picture of the Kaieteur Falls on the Upper Potaro River (842 feet high). The address is: British Guiana United Broadcasting Co., Ltd., 30-32 New North Road, Bourda, Georgetown, B.G.

In Central America, the lesser known Nicaraguans have been well received in the mornings around 0340. We have YNXW, Radio America, Managua, 8190 kc; HTX1, Radio Managua, 8320 kc; and a new one on 8350 kc, logged for the first time on April 30. All three closed at 0400, and the last-named with a long martial effort, presumably the Nicaraguan National Anthem. HRN, Tegucigalpa, 5875 kc, was heard on April 25, closing at 0400 after the reading of the late news in Spanish. On 5860 kc, a powerful signal has been noted from a Latin-American transmitter using the direction: "Radio Nacional" and having a letter "X" in its

4 VALVE SUPERHET

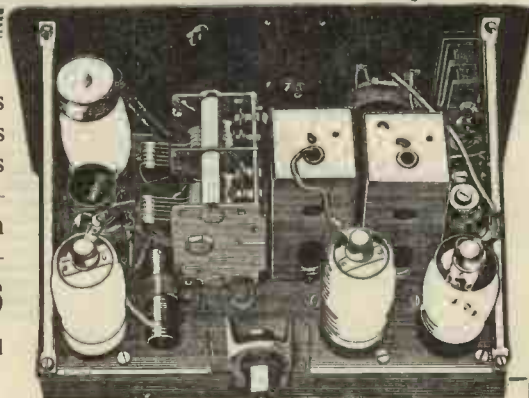
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DX BROADCAST—CALLS HEARD

Set Listening Period 2100-2200 April 24

T. B. Williamson, M.O.Q., Hill End Hospital, St. Albans, Herts.

1.	ZRK	Capetown	5887 kc.
2.	PRE9	Fortaleza	6105 kc.
3.		Tetuan	6067 kc.
4.		Stalinabad	7792 kc.
5.	SUX	Cairo	7862 kc.
6.	CNR	Rabat	8031 kc.
7.	CNR3	Rabat	9082 kc.
8.	LRS	Buenos Aires	9320 kc.
9.	KZRH	Manila	9640 kc.
10.	ZYB7	Sao Paulo	11765 kc.
11.	CXA19	Montevideo	11835 kc.
12.	LRR	Rosario	11880 kc.
13.	ZPA5	Encarnacion	11950 kc.
14.	FHE	Dakar	15580 kc.
15.	CQM4	Bissau	7948 kc.

Rx: Phillips SH7. Aerial: 15 ft. semi-vertical

I. E. Alfrey, 45 Rusthall Avenue, Bedford Park, Chiswick, London, W.4.

1.	April 1	2025	VLB9	Shepparton	9615 kc, S9
2.	April 8	0610	VLH5	Lyndhurst	15230 kc, S7-8
3.	April 15	2010	VLB6	Shepparton	15200 kc, S9
4.	April 17	2000	VLQ3	Brisbane	9660 kc, S7
5.	April 23	2030	VLG6	Lyndhurst	15230 kc, S7
6.	April 24	2030	VLG6	Shepparton	11760 kc, S8-9
7.	April 25	0850	CHLS	Sackville	9610 kc, S8-6
8.	April 25	0912	VLG10	Lyndhurst	11760 kc, S8
9.	April 26	1745	VQ7LO	Nairobi	4840 kc, S7
10.	April 26	2030	VLH4	Lyndhurst	11880 kc, S7

Rx: V55R. Aerial: Indoor

A. E. Jeffreys, 21 Monson Road, London, S.E.14.

1.	March 28	1845	SEAC	Colombo	9825 kc, S8
2.	March 28	1935	OTC2	Leopoldville	9767 kc, S8
3.	March 28	2040	VLB9	Shepparton	9615 kc, S8
4.	March 28	2054	FZI	Brazzaville	9440 kc, S6
5.	March 29	1406	HVJ	Vatican City	9660 kc, S6
6.	March 29	1545	VUD5	Delhi	9590 kc, S6
7.	April 8	1615	SEAC	Colombo	15120 kc, S6
8.	April 9	0840	KNBX	San Francisco	15250 kc, S6
9.	April 12	1530		Singapore	15300 kc, S6
10.	April 12	1540	VUD5	Delhi	15190 kc, S7

Rx: 0-V-1. Aerial: 16 ft.-T

R. Iball, 1 Riddell Avenue, Langold, Workspg, Notts.

1.	April 1	1930	CS2WD	Parede	12560 kc, S7-4
2.	April 2	0315	CFRX	Toronto	6070 kc, S6
3.	April 3	1645	ZQP	Lusaka	9705 kc, S4
4.	April 3	1415		Singapore	6770 kc, S3
5.	April 3	1416		Singapore	9690 kc, S6
6.	April 3	1417		Singapore	11735 kc, S5
7.	April 3	1418		Singapore	15300 kc, S6
8.	April 3	1600		Singapore	7220 kc, S4
9.	April 9	2000		Alicante	7950 kc, S8
10.	April 13	2245	CBLX	Montreal	15090 kc, S5
11.	April 17	1045	KRHO	Honolulu	15250 kc, S3-4
12.	April 17	1215	EPB	Teheran	15120 kc, S8

Rx: Bush 5. Aerial: 20 ft. centre-tapped

B. Whiteley, 2 Rope Walk, Tewkesbury, Gloucestershire.

1.	March 30	2000	EAQ	Madrid	9368 kc.
2.	April 1	2130	TAP	Ankara	9465 kc.
3.	April 3	1400	SDB2	Motala	10780 kc.
4.	April 4	2150		Tetuan	7090 kc.
5.	April 7	1930	OTC2	Leopoldville	9745 kc.
6.	April 7	2045	FZI	Brazzaville	9440 kc.
7.	April 9	0400	TGWA	Guatemala City	9685 kc.
8.	April 15	0410	WGEO	Schenectady	9530 kc.
9.	April 16	0600	KWIX	San Francisco	9570 kc.
10.	April 17	1430		Geneva (U.N.)	9515 kc.
11.	April 18	1130		Leipzig	9690 kc.
12.	April 19	0430	COBQ	Havana	9380 kc.

Rx: Home-constructed S.G. | Detector (HL) | Pentode. Aerial: 50 ft. vertical

hurriedly pronounced Spanish call-sign, only given at the close down around 0400. Has anyone identified this one? B. Whiteley has logged TGWA, 9685 kc, before it closed down at 0500. Previously, at 0445, after a news in Spanish, he heard: "This is the National Broadcasting Service." J. P. Burden was surprised to receive TGWA on 15170 kc at 1250 on April 21. The call: "TGW y TGWA, La Voz de Guatemala" preceded a Spanish news. In Mexico, XEBT, 9625 kc, was logged by L. W. Lewis at 0500 on April 7 (S8). It normally closes at 0557 to the strains of "Liebestraume." J. P. Burden, like the writer, has heard XEQQ, 9680 kc, with an S9 signal when giving its call at 0500. J.P.B. says it closes with Ravel's Bolero at 0615, but the writer has heard it signing off at 0545.

In the West Indies, VP4RD, Trinidad, 9625 kc, has provided L. W. Lewis with a verification card which gives the schedule: 1100-1300; 1600-1800; 2000-0300 daily; 1300-1600 Sundays only.

ZQI, Kingston, Jamaica, 3480 kc, has recently been heard by J. C. Catch (South Shields) with news and a cricket commentary at 0215, but there was accompanying heavy QRM. Dominican Republic stations are again in the picture; La Voz del Yuna was logged one morning with a loud signal on 5970 kc (HI4T), and was identified by direction and a gong with four descending notes at 0400.

HI2A is now reported to be on 7210 kc from 2230 onwards. L. W. Lewis heard COHI, 6450 kc, closing at 0600 on April 7; the final English direction was: "Radio Havana, Havana 2, Cuba's White Network, is now closing down until 6.28 in the morning." J. C. Catch logged COCQ (Say-Oh-Say-Coo), 8825 kc, with call at 2345; COBZ with call: "Say-Oh-Say-Zad," 9025 kc, at 0055; and COKG, 8955 kc, with mention of "Santiago de la Cuba" at 0200.

Europe

Here, Greece claims our greatest attention perhaps. You can log this country at 1630 daily, when the following announcement is given: "This is the Athens Broadcasting Station; you are listening to The Voice of Greece on short waves, 41.09 metres, 7300 kc. Here is the News from Athens in English." The English broadcast extends till 1645, after which a similar one in French can be heard. J. P. Burden gives the call-sign as SVD2; he has logged SVD2 on 15345 kc also, with an English news bulletin at 2230, and notes that both sessions terminate with the

Greek National Anthem, the latter at 2330. D. Potter has heard English programmes from Prague, Czechoslovakia over OLR3A, 9550 kc, 1845-1900, and over OLR2A, 6010 kc, 2045-2100; and A. E. Jeffreys notes an English session from Warsaw, Poland, 6220 kc, at 2030.

From Austria, L. W. Lewis has heard Vienna, 11785 kc, at 0800 (S7) and Innsbruck, 6000 kc, at 2115 (S5). The verification from Vienna mentions a frequency of 9565 kc and power 800 watts, and is a most attractive card in red, white and green on a blue background, with a map of Austria on the lower part. J. Holden (York) has received a card from KZCA, 7220 kc, showing a map of Austria in red on a white background, with call letters in blue. The power is 350 watts and the address: Station KZCA, B.D.N., A.P.O. 541, c/o P.M. U.S. Army.

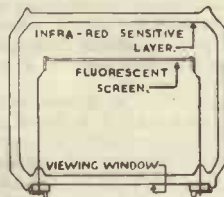
L. W. Lewis also gives Nordwest-Deutscher Rundfunk, Hamburg, 6110 kc, with an S9 plus signal at 1730; for B. Whiteley's benefit, Mitteldeutscher Rundfunk is located at Leipzig.

Lastly, A. J. Slater (Southwick, Sussex) finds that medium-wave DX is falling off with the approach of summer conditions, but he has logged VP4RD, Trinidad, on 1295 kc. We think A.J.S. will not mind if we mention here that one of his verifications *Confirming a FB Report* (the italics are ours)—that from WMBR, Jacksonville, Florida—took the form of a 14 lb. food parcel; one good turn deserves another!

Late reports are acknowledged from J. M. Simpson (London, N.W.6) and C. G. Costello, Shortwave Editor of *Tune In*, Wellington, New Zealand; these will be dealt with in the next issue.

To conclude, please send reports for the month of May to: R. H. Greenland, *The Short Wave Listener*, 49 Victoria Street, London, S.W.1, to reach us by May 27 at the latest.

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The following Clubs are known to have been active during the past six months, and the names and addresses of their Secretaries are published as sent in to our parent *Short Wave Magazine* for insertion in "Month With the Clubs" during that period. Clubs with their own transmitting callsign have it shown in brackets immediately after the place name. Interested readers in these localities should apply direct to the address given.

- ABERDEEN (GM3BSQ).** A. D. J. Westland, GM3BQU, 17 Beaconsfield Place, Aberdeen
BALDOCK. N. F. Wilshire, G3CEU, 13 The Tene, Baldock, Herts.
BARNET. R. Walker, G6QI, 7 Potters Lane, New Barnet, Herts.
BASINGSTOKE. L. S. Adams, 16 Bramblys Drive, Basingstoke, Hants.
BIRMINGHAM. N. Shirley, 14 Manor Road, Stechford, Birmingham 9.
BLACKPOOL. H. D. Ashworth, G4PY, 5 Albion Avenue, Blackpool.
BOURNEMOUTH (G3AYG). F. C. White, G3XP, Chester House Hotel, Chine Crescent, Bournemouth.
BOVINGDON AIRPORT (G3DGS). J. D. Lord, Police Station, Bovingdon, Hemel Hempstead, Herts
BRADFORD. W. S. Sykes, G2DJS, 287 Poplar Grove, Great Horton, Bradford.
BURNHAM AND HIGHBRIDGE. T. N. Carter, G3BPV, P.O. Radio Station, Highbridge, Som.
BURTON-ON-TRENT. E. B. Hardy, G3BSL, Hill Cottage, Dunstall, Burton-on-Trent.
BURY (G3BRS). R. H. McVey, 46 Holcombe Avenue, Elton, Bury, Lancs.
CANNOCK CHASE. D. M. Whitehouse, 69 Church Street, Cannock, Staffs.
CATTERICK. L/Cpl B. G. Taylor, c/o 2 Sqdn., 1st T.R., Royal Signals, Catterick Camp, Yorks.
CHELTENHAM. H. Brislin, 52 Cleevemount Road, Cheltenham, Glos.
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COVENTRY (G2ASF). J. W. Swinnerton, G2YS, 118 Moor Street, Coventry.
CRAY VALLEY. G. Miles, G2CXO, Cotswold, Mottlingham Lane, London, S.E.9.
DERBY. A. C. Steadman, 230 Chellaston Road, Shelton Lock, Derby.
DONCASTER (G3CBM). H. Flintham, 73 Hexthorpe Road, Doncaster.
DORKING. J. Greenwell, G3AEZ, 5 London Road, Dorking, Surrey.
EAST SURREY. L. Knight, G5LK, Radiohme, Madeira Walk, Reigate, Surrey.
EDGWARE (G3ASR). R. H. Newland, G3VW, 3 Albany Court, Montrose Avenue, Edgware, Midx.
EXETER. E. G. Wheatcroft, 34 Lethbridge Road, St. Loyes, Exeter.
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GLOSSOP. H. Buxton, 11 Walker Street, Hadfield, Nr. Manchester.
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NORTH-WEST IRELAND (G13CFH). D. R. J. Adair, G13BVB, Cosy Lodge, Culmore Road, Londonderry, N.I.
NORTH-WEST KENT. B. A. M. Herbert, 18 Leamington Close, Bromley, Kent.
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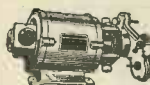
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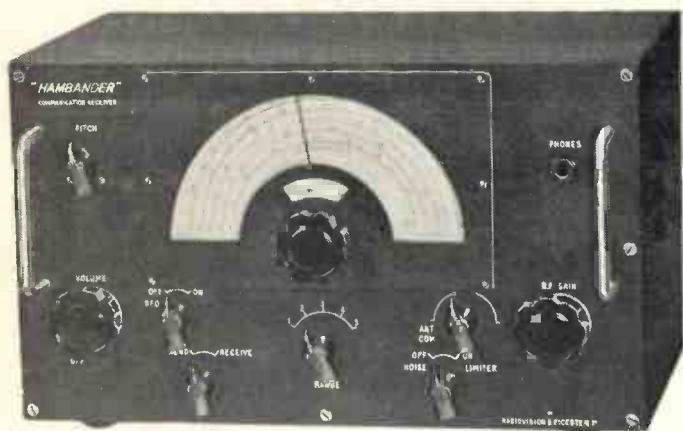
Revision 49-22-86-97 Metres

Giving Frequency, Wavelength, Callsign and Location

These lists appear each month, covering the 11-128 metre section of the wave band within which all the short wave broadcasting services of the world operate. For economy of space, this band is dealt with in five sections, a list of active stations in one of these sections being given in full every month. Such revision is necessary due to constant changes of frequency, callsign and operating schedules. All stations appearing in our lists are normally receivable in this country and are under regular observations.

Fre- quency	Wave- Length	Callsign	Location	Fre- quency	Wave- Length	Callsign	Location
6090	49-26	CBFW ZNS2	Montreal. Nassau.	5800	51-72	CE8AA	Santiago, Chile.
			Azerbaijan.	5660	53-00	HHCN	Port-au-Prince.
			Sackville.	5620	53-38	OAX2A	Trujillo, Peru.
6087	49-28	CKOB	Buenos Aires.	5302	56-58	DTYC	Munich.
6085	49-32	VP4RD	Port of Spain.	5030	59-64	YFA1O	Macassar.
6080	49-34	CKFX	Vancouver.	5019	59-77	VVKO	Caracas.
			Hamburg.	4990	60-12	YV3RN	Barquisimeto.
			Montevideo.	4970	60-63	YV5RM	Caracas.
6075	49-38	CXA3 S.E.A.C.	Colombo.	4963	60-45	HJAE	Cartagena.
6070	49-42	CFRX XNCR	Toronto. Yenan.	4960	60-48	VUD2	Delhi.
6065	49-46	SBO WLKS	Motala. Kure, Japan.	4955	60-54	HJQC	Bogota.
6063	49-48	VU7MC	Akashvani. Tananarivo.	4950	60-61	ZOI	Kingston.
			Nanking.	4945	60-67	HJCW	Bogota.
6060	49-50	XGOA VQ7LO	Nairobi.	4930	60-85	JKG2	Kawachi, J pan.
6055	49-55	CXA14 HJFA	Colonia. Perira.	4923	60-94	HJAP	Cartagena
6050	49-59	GSA	Daventry.	4920	60-98	VUM2 CR7BV	Lourenço Marques.
6045	49-63		Kuala Lumpur.	4915	61-04	ZOY	Accra, Gold Coast.
6040	49-67	YDD	Bandoeng.	4910	61-10	YV5RN	Caracas.
			Moscow.	4903	61-19	HJAG	Nazaki, Japan.
6035	49-71	CXA30	Montevideo.	4900	61-22	ZOH	Barranquilla.
6030	49-75	XEKW HP5B	Rangoon. Morelia. Panama City. Rome.	4895	61-29	HJCH	Colombo, Ceylon.
6028	49-77		Johannesburg.	4885	61-41	HJDP	Bogota.
6025	49-79	PGD	Hilversum. Brazzaville.	4880	61-48	YV5RU VUB2	Medellin. Caracas.
			Vere Cruz.	4878	61-51		Bombay, India.
6020	49-83	XEUW	Bogota.	4875	61-54	HJFH	Pietermaritzburg.
6018	49-84	HJCX XUPA	Tia-Pei, Taiwan.	4865	61-66	HJEX PRC5	Armenia Cali.
6016	49-87	PRA8	Recife.	4860	61-73	VQ7LO JKE2	Belem, Brazil. Nairobi.
6015	49-88	JKD	Nazaki, Japan.	4855	61-79	HJCA	Yamata, Japan.
6012	49-90	XEOI	Mexico City.	4847	61-90	HJGF	Bogota.
6010	49-92	OLR2A CJCX CE6O1 OAX4Q	Prague. Sydney, N.S. Antafogasta. Lima, Peru. Delhi.	4845	61-92	CSX2	Bucaramanga.
			Leopoldville.	4840	61-98	VUC2 YV1RZ	Punta Delgada. Calcutta. Valera.
6007	49-94		Johannesburg.	4835	62-05		Bogota.
6005	49-96	CFCX HP5K	Montreal. Colon. Innsbruck.	4830	62-11	YV2RN	San Cristobal.
			Georgetown.	4825	62-18	PRJ4 HJED	Paranaiba. Cali.
6000	50-00	ZFY	Salisbury, S.R. Damascus.	4820	62-24		Singapore.
5995	50-04	PR13 HS8PD	Belo Horizonte. Bangkok.	4815	62-31	HJBB	Cucuta.
5986	50-12	LSR1	Buenos Aires.	4810	62-37	YV1RL	Maracaibo.
5984	50-14	OAX4P	Huancayo.	4800	62-50	YV1RX	Maracaibo.
5980	50-17	YSW	Santa Anna. Andorra.	4794	62-58	HUB	San Salvador.
5975	50-21	HCJB	Quito.	4790	62-63	YV6RU	Bolivar.
5970	50-26	VONH HI4T	St. Johns. Trujillo.	4783	62-73	HJAB	Barranquilla.
5948	50-44	HH2S	Port-au-Prince.	4781	62-75	YV4RO	Valencia.
5945	50-46	OXI	Godthaab.	4777	62-80	HJGB	Bucaramanga.
5920	50-68		Moscow.	4770	62-89	YV1RY	Coro.
5907	50-78	OAX4V	Lima, Peru.	4752	63-13	YV1RV	Maracaibo.
5900	50-85	ZNB	Mafeking.	4725	63-49	YV5RY	Caracas.
5890	50-93	HVJ CR4AA OAX4Z	Vatican City. Praia, C. Verde. Lima, Peru.	4712	63-66	HC2ET	Guayaquil.
5885	50-98		Cape Town.	4656	64-44	HC2AK	Guayaquil.
5875	51-06	HRN	Tegucigalpa.	4370	68-65		Tananarivo.
5870	51-11	TIGPH	San Jose, C.R.	4020	74-63	HCI1M	Ibarra, Ecuador.
5843	51-34	PZH5	Paramaribo.	3935	76-24	HC5EH	Cuenca, Ecuador.
				3914	76-65	ZOP	Lusaka, N.R.
				3800	78-95	ZEB	Bulawayo.
				3658	82-01	ZEA	Salisbury, S.R.
				3570	84-03	YV5RD	Caracas.
				3530	84-99	YV5RS	Caracas.
				3515	85-35	YV6RC	Barcelona.
				3505	85-59	YV5RX	Caracas.
				3490	85-96	YV3RS CR7AB	Barquisimeto. Lourenço Marques.
				3480	86-21	ZOI	Kingston, Jamaica.
						YV4RQ	Puerto Cabello.
				3470	86-46	YV7RB	Cumana.
				3460	86-71	YV4RP	Valencia.
				3450	86-97		Johannesburg.

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1 Wafer, 6 pos. 2 pole. Overall
length 2" x 2" wide. Ask for SWL.8.

1 Wafer, 2 pos. 2 pole. Overall
length 1½" x 1½" wide. Ask for
SWL.9.

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