SHORT WAVE LISTENER



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DECEMBER 1947 VOLUME 2 · NUMBER I

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36 v. ..

THE SHORT WAVE LISTENER

A MONTHLY MAGAZINE FOR THE LISTENING AMATEUR

VOLUME 2

DECEMBER 1947

NUMBER 13

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.

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EDITORIAL

Policy

It will not have escaped observation that in recent months there has been a slight change of focus with regard to the range of contents in the Short Wave Listener.

While not in any way attempting to cover the same ground as our parent Short Wave Magazine—for which we have not the room, anyway—we are devoting more space to the discussion of subjects of direct concern to the intending amateur transmitter. There are those, not particularly interested in amateur transmission, who deplore this tendency. But the fact is that there are far more readers of the Short Wave Listener who have ideas about getting a licence eventually than there are who intend to remain at the SWL stage.

Long experience in this field has merely confirmed what we have always believed—that the best amateurs on the air are those who started as SWL's. As we have said before, a sound apprenticeship on the receiving side is the best possible introduction to amateur transmission. It is with this fundamental principle in mind that space is now devoted in the Short Wave Listener each month to the fascinating problem of getting on the air.

Even if you have neither immediate intention nor opportunity of getting your licence, read these articles carefully and keep them for reference—they contain the fruits of years of practical experience. If you are a keen SWL, the urge will come sooner or later—so learn Morse, too, while you are about it!

In this great hobby of Amateur Radio, in which there is so much to be done and to be learnt even after one has become an old-timer, there is always room for the newcomer and the beginner.

Indeed, Amateur Radio draws its inspiration from the fledgling operators who are now coming on the air in increasing numbers.

Amateur Transmission - for the Beginner

A Series for the Guidance of SWL's

PART III

by THE OLD TIMER

(This article explains and discusses the problem of transferring the precious RF from the transmitter into the aerial. The treatment is based upon practical experience with the aerial types covered.—Ed.)

Last month I excused my brevity about certain aspects of aerial theory by saying that you would find it all in the various handbooks. For this instalment, I can give no such reference, for I want to deal with a very important subject that has been sadly neglected in print. I refer to the various means of coupling aerials to transmitters.

It is strange that this should prove to be the weak spot in the armour of so many well-qualified amateurs, but I have noticed it repeatedly, and there is no doubt about it. Take ten amateurs at random, present each of them in turn with the same transmitter and the same aerial, and only four or five of them would succeed in transferring the power from one to the other by the best method.

Just as a feeder, or system of feeders, has to match the radiating part of the aerial itself, so it is just as important that it should be matched to the output of the transmitter. All that is involved is a coil, one or possibly two condensers, and a few odd bits of wire; but how simple it is to

make a mess of things !

I am not going to deal with any curealls or fancy couplers, but just with well-known and well-tried systems which can hardly be bettered when used under the correct conditions. So let us start from the very beginning, in which we are confronted, let us say, with a transmitter which has its final tank circuit tuned to 14 mc; and with an aerial which is 33 feet long and has a 33-foot length of "Zepp" feeder.

Feeder Lengths

This aerial, at its point of junction with the feeders, is undoubtedly voltage-fed; so that half a wavelength down the feeders (33 feet in this case) the same condition is repeated. So we want to "voltage-feed the feeders." This can be done by clipping them on to either end of a tuned circuit, as in Fig. 1 (a). This circuit is tuned to the frequency in the 14 mc band on which the transmitter is being used; but it is not the tank circuit of the transmitter. Nothing so simple, because the latter, if a single-ended PA is in use, may be earthed at one end and "live" at the other. So our feeders must be clipped on to a coil which is coupled to the tank circuit.

Now the effects of trying to couple two tuned circuits to each other are well-known. Too tight a coupling produces double-humps and kindred effects; even suitably loose coupling involves considerable "interlock" between the two circuits, with the two tuning controls chasing each other round the dials; too loose a coupling results in poor transference of

power anyway.

So the fashion these days is very much inclined towards link-coupling, which we are coming to a little later. You can satisfy your curiosity by studying the three examples of it shown in Fig. 2.

Meanwhile, we are content to observe that a Zepp aerial with half-wave feeders can be fed as in Fig. 1 (a), the coil being—well, just a coil tuned to the right frequency.

If your feeders are of such a length that the voltage-feed condition does not exist at the bottom end—if, for instance, they are a quarter-wave, or three-quarter-waves, or any odd number of quarter-waves long, a condition of current-feed will exist at the bottom, and your tuned circuit will have to be dealt with as in Fig. 1 (b). In this case it is the capacity of the feeder system, in series with that of the tuning condensers, which goes across your inductance to make a tuned circuit; note, therefore, that the coil will have to be larger than the one in Fig. 1 (a). To check for resonance, hot-wire or thermoammeters, or just ordinary flash-lamp bulbs, may be inserted between the condensers and the feeders.

Now if you have a dipole, correctly fed at the centre with 72-ohm coaxial, or twisted pair, or flat-twin, you will have to think on different lines. Many is the benighted amateur who has tried to connect a 72-ohm line across a nice high-impedance tuned circuit (believe it or not) and wondered what was happening. Obviously, thinking from fundamentals, you must have a step-down transformer

between the tuned circuit and the line. So that is just what you do; you couple a single turn (or possibly two turns, determined by experiment) tightly to your tuned circuit, and connect them to your low-impedance line—Fig. 1 (c) shows how.

So far everything has been pretty logical, and-that's the way it is. Last month we spoke about the "Windom" aerial, with a single-wire matched-impedance feed; fed, so to speak, with a blend of current and voltage. Well, the answer to this at the downstairs end is just about what you would imagine; a tuned circuit with the feeder tapped about one quarter or one third of the way up from the earth end. Fig. 1 (d) shows the scheme, and note that the bottom end of the tuned circuit is earthed in this case; a very important point, because the earth lead forms the "image" of the feeder with this type of aerial.

On the other hand, the end-fed aerial, which is voltage-fed simply by having one of its ends rudely pulled down into the shack and hitched on to a tuned circuit, needs no earth connection and often ends up with the aerial tapped on at, or very near, one end of the coil, as in Fig. 1 (e). These last two types, by the way, may be tapped directly on to the tank circuit if the PA is single-ended, although this procedure is not really recommended. It does work, but the coupling is somewhat

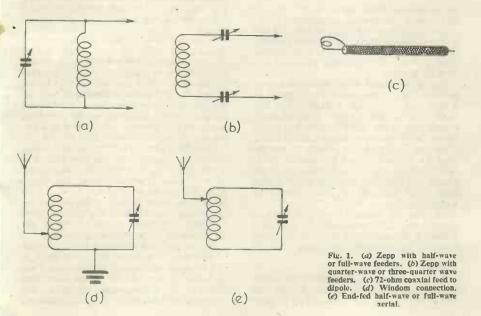
tight, and another tuned circuit between the transmitter and the aerial does much to get rid of unwanted harmonics.

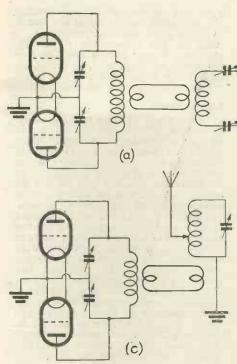
So we will conveniently forget this simplification and assume hereafter that the aerial, of whatever type it and its feeders may be, is taken to a coil which has got to be coupled to your transmitter.

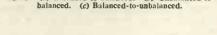
Link Coupling

This is where we begin to expound the advantages of link coupling. You can have a double-ended or "balanced" feeder system; or you can have a single-ended or "unbalanced" system. Examples of the former are the Zepp and the dipole; of the latter the Windom and the end-fed aerial. Likewise you can have a doubleended (push-pull) transmitter or a singleended affair in which one end of the tuned circuit is earthed or "earthy." If you had never heard of link coupling, you might be pardoned for scratching your head when confronted with a push-pull transmitter and a Windom aerial! But with link coupling you can cope with it efficiently:

Fig. 2 (a) shows the obvious "balance-to-balance" arrangement, whereby a push-pull transmitter is coupled to a Zepp aerial. Round the centre of each of the two tuned circuits is wound a single-turn link, quite tightly coupled. The line between these links may be co-axial, or flat-twin, or even a twisted pair, so long







(b)

(a) Balanced-to-balanced. (b) Unbalanced-to-

as something better than ordinary lighting flex is used. You see at once how it works—a step-down transformer at one end and a step-up at the other; the low-impedance line is virtually non-radiating and may run quite a reasonable distance provided it is of high quality.

Fig. 2 (b) shows how to couple an unbalanced (e.g. single-ended) transmitter to a balanced system like a Zepp. The link at the "home" end is tightly coupled to the earthy end of the tuned circuit, but to the centre of the balanced aerial tuning circuit. Conversely, Fig. 2 (c), which shows the case we suggested two paragraphs back, indicates how to couple a balanced transmitter to a Windom or some aerial of that kind. All perfectly simple, straightforward, and logical, but then your outlook must also be logical to enable you to choose the right one—and if you have followed the argument thus far, even the necessity for thought is removed!

What to Expect

Now a few more elementary but practical points which one doesn't always find out in time; you don't read of all of them

in books, but you know all about them after playing with a transmitter for a while!

When you apply the drive to your PA stage, the anode current will rise to a very high value until you grab your anode tuning condenser and bring it into resonance. At the resonant point the current will be very low; but will increase considerably as the aerial is coupled. Some specimen figures will probably be helpful. These have been obtained recently with a PA consisting of a single 807 running with 500 volts on the anode and 250 on the screen.

With the drive applied (3.5 mA of grid current) the off-resonance anode current goes up to nearly 100 mA; with the anode circuit tuned to resonance but not coupled to the aerial, plate current falls to below 10 mA (note that the steepness of this dip is a measure of the efficiency of your tuned circuit); with optimum aerial coupling, using the link arrangement as in Fig. 2 (b), the anode current comes up to 65 mA.

Note this, too; if your aerial and feeder system is correctly cut and operated, and if your coupling is not too tight, the reading on your tank or anode circuit dial which gives this figure of 65 mA will be almost exactly the same as that at the bottom of the steeper (unloaded) dip which gives 10 mA. In other words, coupling the aerial should not necessitate de-tuning.

If you use link coupling between your output tank and the aerial circuit itself, it will be most convenient to make up a set of tanks coils with the single turn link "built-in"; commercial varieties are available with a five-pin plug arrangement,

carrying the two ends of the coil, the centre-tap, and the two connections to the link. Loose, floppy links are not useful things to have around the transmitter; they invariably touch something they shouldn't, their insulation burns through, and there you are—off the air again!

If you use a Zepp aerial, it will be convenient to mount the coil and condensers on a board near the lead-in point, running the coaxial feed line between the two link coils from there to the transmitter itself. On the other hand, a dipole or any form of aerial fed through low-impedance line can come right through the shack to the transmitter.

Points to Watch

Finally, just a few warnings. Don't run your transmitter too long at a time without the aerial coupled; your PA won't like this much, particularly if it is a tetrode. Under such conditions its screen current will rise to an uncomfortably high figure. On the other hand, don't do all your tuning-up with the aerial coupled, or your local unpopularity will rise as steeply as the plate current! Wherever possible, provide a tapping on your final HT supply so

that you can play with the PA on half voltage; this is invaluable for trying out different L/C ratios, different forms of coupling circuits, and different degrees of coupling.

And an even grimmer one: Use parallelfeed for your PA's tank circuit if you possbly can, otherwise you will have the coil at positive HT potential and the link (if it is physically earthed) some 500 or 600. volts away from it. So not only will it be extremely painful (or even worse) if you grab hod of both at once, but the first time your link slips you are liable to see flashes and smellexpensive smells. Parallel feed is safer, and if your RF choke is reasonably efficient, just as good from every point of view. Use it whenever you can, particularly whenyour PA is on a metal chassis; the temptation to hold the chassis down with one hand, while heaving the coil out with the other is very natural. One day the HT won' be switched off; we don't want to lose any readers!

Next month (am hoping to cover the problems of keying and modulation; but they are secondary to these earlier ones of generating RF and transferring it into the ether, which have therefore had the first

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Think It Over

CW or 'Phone-and the Rx

by I. A. BATES (GM3BZP)

(Our contributor argues wisely, but some of his statements will provoke comment -Ed.)

WORD in your ear, chars! The Short Wave Listener has row completed its first year and there have been two points noticeable in the Calls Heard section: two rather important points. First, relatively few appear to listen to CW; and, secondly, most a you use big

commercial receivers.

I can see a few pairs of eres glancing at the top of the page, and can hear their owners remarking "Yes, he's got his ticket: had to swot up the code. He's welcome!" Now, I am not trying to speak de haut en bas-efter all, no one is born able to read Morse-I just want to pass on a hint or two about what you're missing.

What You Miss!

You, OM, only listen to 'phone. Do you remember that day when you popped out of bed at 6 a.m to collect a few VK scalps, and found all the 'phone signals unreadable-modulation far below the noise level? Certainly there were a few chirping noises going on—among them ZK1AB and ZM6AF—but they didn't mean a thing to you, and you crawled back to bed. You got home from work in the eening, had your tea, then on with the cas. "Hang it! Conditions still hopeess. Not a readable signal in the bard." So saying, you went of to the No: not a readable signal in the band. (Unless you count CR6AI, CR9AN, and a few other CW stations.)

"Ah, yes!" you reply, "but if DX is all that much easier on CW, it isn't worth having." Isn't it? It just means more countries are needed to represent a high standard on CW: but it is at least as difficult to list 140 countries on CW as 100 on 'phone. Besides, you think shortwave listening's a grand hobby; well, you can enjoy it oftener if you read code, because it is always readable long after the last 'phone signal has disappeared into the mush. It is not really hard to learn; the beginning is the worst, as

with most things.

Rolling Your Own

Now for this factory-built superhet business. I'm not going to reiterate the old crack about "real amateurs"; that has had its day. Look at it this way, though. You heard some marvellous DX the other day-how? You tuned it in on a whacking great slow-motion dial that spread it over umpteen degrees of arc; it wasn't loud enough, so you turned up the AF gain; some QRM, so in with the crystal filter, and phase out the interfering signal. You now had a good, healthy Q5 S9 signal bellowing at you from the loudspeaker; but where is your personal credit in the matter '

Really to learn skilful operating, there is nothing like a spell with an 0-V-0; not a disguised 0-V-1, using a 6F8G or 240B, but a real 0-V-0, with an HL2K or some such valve. Then, you must learn to twiddle knobs to a nicety—two at a time. You must learn to read the really weak stuff, because you haven't got an AF gain to turn up; and you must learn how to concentrate and read through QRM, instead of just switching in the crystal filter someone else put there for you. And just think of that glow of pride when you hear your first ZL on 7 mc with your 0-V-0. "All my own work!"

Think it over.

BACK NUMBERS

A few copies of back numbers of the Short Wave Listener have now become available, as follows: December 1946, January 1947, March-November 1947. The price is 1s. 4d. each, post free. Apply to the Circulation Manager, 49 Victoria Street, London, S.W.1.

The second reprint of the Zone Map is now to hand, and copies can be obtained at 3s. 9d. each, post free This is a wall-mounting great circle map of the world, centred on London, glving the DX Zone boundaries and the Zone areas by callsign; it also gives much other useful information of the greatest value to the DX-minded SWL.

BARNES RADIO & WHOLESALE (DEPT. S.L.) S.M. Drives (R.A.F.), \(\frac{1}{2} \) coupling, 2 knobs, scate, 5/3 or 10/- pair; S.W. Colls, fine job, \(\frac{4}{2} \) set, 19-170 metres; Switches, 2 bank, \(6 \) position, \(2/6 \); Condensers, \(1,000 \text{ V2 mfd.}, \(3/- \); Microammeters, \(m/c, 0 \) 5 m/a 15/-; Stand-off Insulators, \(4/- \) doz. (less bolt); \(13-1 \text{ L.F. Ferranti Transformers, 15/-; } \) Les. Transformers, 3/6; switched midget phone or meter Jacks, 2/9; 6" Speakers in cabinets (special line), 30/-; M.K. 3-pin 5 amp Plugs, with short lead, 17/- doz.: Variable Condensers, 50 pF. lead, 1/1- doz.; Variable Condensers, 50 pt, 1500 v, ball bearings, 7/1: multi range Meter Units with two M/c meters, switches, etc., complete, 39/(ideal Xmas present); R1116 Battery, 15-2000 m Receivers. £9 complete (£şsted); New Rotary Transformers, 24v input, 200v 50 m/a output, 11/only; "Special" 3 valve chassis in cabinet with V-Holders, switches, lights, transformers, etc., over 40 components (Ex-R.A.F.), £1 only. Send for incresting Lists, ½d., S.A.E. 2 ELMDALE RD., PENN, WOLVERHAMPTON

Mains Operated Code Oscillator

by J. N. ROE (G2VV)

(If you want to learn Morse, you need something with which to practice. Here is the design for a simple tone oscillator, operated off the AC supply.—Ed).

Sooner or later to almost every SWL comes the desire to learn Morse. The knowledge that many interesting transmissions, both commercial and amateur, are restricted to CW—plus the need of an operating knowledge of the code as a requisite for obtaining a licence—continually prompts the wish to master this stumbling block. It is of little help to memorise the dots and dashes, used to form the various letters and figures, without simultaneously learning to recognise them as signals.

One of the most satisfactory methods of tackling this problem is to employ an audio oscillator emitting a keyed note.

Construction and Circuit Details

The audio oscillator here described can be put together with few components and most of them will, no doubt, be found in the average junk box. Actual layout is left to the individual, but a chassis measuring about 8 in. by 6 in. should accommodate the parts without difficulty. Connections for 'phones and key may be arranged by terminals or two-point jacks.

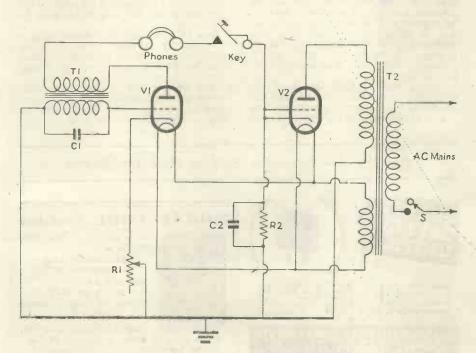
Reference to the circuit shows that two

TABLE OF VALUES

Code Oscillator

200 volts, 40 mA.

S Mains On/Off toggle switch.
V1, V2 ML4, 354V, or similar triodes.



Circuit of G2VV's AC-operated code practice oscillator.

indirectly heated triodes are used—V1 is the actual oscillator, and V2 operates as a rectifier. The valves used were 4-volt in the original model, but 6-volt triodes are equally suitable and if adopted the low-voltage winding of T2 should be rated at 6 volts, 2 amps. Any small mains transformer giving about 200 volts for HT will be suitable as T2.

C1 is the audio tone control and by substituting different values the frequency of the note can be varied. If desired, several switched capacities could be

arranged across the secondary winding of T1. The value given, $002 \mu F$, will produce quite a pleasing audio note.

R1 is used as a volume control, although it will probably be found that its operation has some effect upon the audio frequency.

No difficulty should be experienced in getting the oscillator to work, but in the event of V1 not oscillating readily the connections to either the primary or secondary winding of T1 should be changed over.

Echo of VR6AY

by H. L. KERSHAW

THE recent visit to this country of Dorothy Hall—W2IXY—recalls a pre-war short wave listening experience at a former QTH, which may be of interest to newcomers to short wave radio. On referring to an old log book I find that it was on March 28, 1938, on the 20-metre band that I first heard VR6AY in contact with W2IXY and telling her that a very welcome mail boat was anchored off the island and was floodlit at night; later—April 3, 1938—VR6AY informed W2IXY that fever was prevalent on the island.

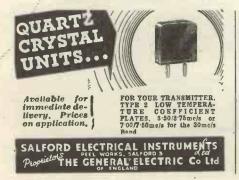
During another QSO on April 30, Granville, the operator who installed the Tx, stated he was shortly leaving but was unable to find room in his luggage for the farewell presents given to him by the islanders.

The next entry in the log, May 24, 1938, brings a sense of drama, for Andrew Young, a descendant of one of the Bounty mutineers, was asking for various supplies for the island. W21XY gets busy in her big-hearted way and the next move was when she was heard reassuring Andrew Young that the British Consul in New York was consulting the High Commissioner in Fiji regarding the plight of the Pitcairners, and that help would soon be on its way.

The QSL card opposite shows the gear donated by various American radio manufacturers and the geographical situation of Pitcairn Island in the Pacific

The address side of the card bears matter relating to the historical association with the Mutiny of the Bounty and the islanders' present mode of living.

For Up-to-Date Information, Read the Short Wave Listener



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This station, designed and built by Coto-Coil Co., has been a pitt from these manufacturers who have donated their parts and equipment; Aerovox Corp., Amer. Lava Corp. Amperex Electronic, Bassett Research, Biliey Elec. Co., Cardwell Mfg. Co., Oto-Coil Co., Kenyon Transformer Co., Ohmite Mfg. Co., Par-Metal Products, Parris-Dunn Corp., Pioneer Genemator Corp., RCA Radiotron, E. M. Sargent Co., Shure Bros., Triplett, Willard Storage Battery Co.

CATE AND THE STATE OF THE STATE

Operator district to Journal Map printed by permission of Simon and Schuster

PITCAIRN ISLAND

Pitcairn Island was settled in 1789 by a small band of Englishmen of H.M.S. Bounty. Headed by Fletcher Christian and assisted by Edward Young, the



Have you heard?

If I didn't open this column with the words "Another good month's listening," or something similar, it would be a change; but "no change" is still the order of the day, and it has been another very good month—a wonderful one for the enthusiastic DX man.

The SLP's were perhaps not quite as successful as usual, chiefly because we were unlucky enough to hit a terrific burst of short-skip conditions which practically wrecked the 14 mc stretch. The 28 mc band, nowadays, produces such consistent DX results that they are hardly worth reporting any more!

But the "Calls Heard" pages speak for themselves, and there will be more to say on that subject towards the end of these Yes—a further rationing scheme

is essential!

HAZ

The number of top-scorers has increased to seven, the new arrivals at the head of the list being A. Baldwin (London, E.11) and G. Curtis (South Harrow). Congratulations to them both. In the 'Phone section R. A. Hawley (Goostrey) has bounced to the top with his new score of 37Z and 133C; nice work, too. There have been several changes of position in this list, and the scorers of 37 and 36 now

occupy nearly half of it.

My suggestion for a little friendly contest during October has produced, some surprising results. N. A. Phelps (London, N.10) quite nonchalantly sent along a list of stations heard during October which, after checking, admitted his score of 40Z and 135C as correct! And that really is a score for a month's listening. Second place is held by O. A. Good (Oswestry) with 38Z and 108C. D. W. Bruce (Eltham) put up a noble effort for third place with 37Z and 107C. All these scores, of course, were for 'Phone and CW. In the 'Phone Only category the best claim came from R. A. Hawley (Goostrey) with 36Z and 91C; was E. J. Logan (Hertford) with 35Z and 103C and third O. A. Good (Oswestry) with 34Z and 72C.

Please note that to hear DX like this in a period of one month involves quite a lot of listening; these fellows are keen, all right, and deserve a lot of credit for their

AMATEUR BAND COMMENTARY

by the DX Scribe

operating skill, because it is they, the operators, that collect the DX, far more than their receivers, however good the latter may be.

The Top Bands

I think we can still admit the 3.5 and 1.7 mc bands as "short waves"; and surely some of the signals heard on those bands qualify as DX? Look at those first two lists of Calls Heard under the heading of 3.5 mc, and you'll probably agree. Several readers comment on this band, and as they say, even if you don't get up early in the morning to listen for the W's, you can hear some very interesting stuff there.

D. W. Bruce (Eltham) has been finding W's up till 0700 GMT, and heard 18 countries on the band during October. I. E. Alfrey (Chiswick) rolled in 15 countries in eleven days and comments on the consistent signal from VEIGR, who was S7 for several mornings at about 0630 GMT. K. Parvin (London, W.1) listens in Central London on 3.5 mc and makes rude remarks about modulated 'phone transmissions on the He heard W2MMO/D4/MM when 33 miles off Land's End. (Your Scribe, conversely, heard W3JAK/MM when some 100 miles from John-o'-Groats.) K. P. queries two stations calling themselves IDP and AKF, either working amateurs or calling CQ-any idents. please?

J. M. Graham (Glasgow) and D. F. Willies (Holt) are two others who say they find 3.5 mc a pleasant change from the "real DX" bands. The former suggests an SLP on 80 metres before long, and the latter remarks that reports on transmission there seem to be appreciated, and yield

a very good return.

L. M. Singletary (Honiton) has so much to say on the subject that I must quote him: "The keen SWL should always bear in mind that it is of far more value to endeavour to hear transmissions on bands where they're not expected to be heard, than to sit back and hear the "usual" DX roll in on the more normal channels. . . . The QSL-chasing department of the fraternity will get far better returns on their reports by remembering this. For example, the VK who consistently "skeds" with British stations on 14 mc is hardly likely to be surprised and delighted to know that he has been received by a British SWL on one of these occasions, and the chances of a verification are just about zero.'

The DX Bands

All the usual DX has been coming in throughout the month, with one or two unusual stations added. Your Scribe is delighted to be one up on everyone else by having heard FU8AA (New Hebrides) on 28 mc for at least ten consecutive mornings. Look for him on 28010 CW at about 0830—his full QTH is in the list. He is usually calling "CQ France"—but doubtless by the time this appears you will

all have heard him.

Other small points, while I think of them: MIA (San Marino) is genuine, and his full QTH is in the list. D5AA appears to be a similar case. HE1EO (Liechtenstein), which a few readers threw away as a phoney, is perfectly all right; QSL via HB9EO. And ZS6OL really is in the Bechuanaland Protectorate and is therefore another country for your collections. KX6AF appears to be genuine; he is somewhere in the Marshall Islands and is suspected of being ex-J9SIR; KX6USN is on Bikini, but only counts as Marshall Islands. PK6 and PK7 appear to be "splits" of the Dutch New Guinea-Celebes-Moluccas group, but the final answer is a bit hazy as yet.

Now some individual letters. A. Cross (Perthshire) says he is a new contributor, but was interested in short-wave radio twenty years ago, after which he went to the Far East. He sends D5AA's QTH and settles that query, but he has also heard D1AA! Other curiosities include ET3AF and ET3AH, along with M1A who, as we have said, is genuine. A. Bannister (Manchester) is another newcomer, who has been doing some 50 mc listening as well as covering the other bands. (Reports on 50 mc matters are dealt with in the Short Wave Magazine.) He breaks into the 'Phone HAZ list with a starting score of



General layout at HE9RAP, Elysee 18, Lausanne. one of our Swiss SWL readers.

33Z, 93C, and sends a list of Calls Heard,

but, alas! too late.

Yet another "first" from D. A. Pullen (Colchester), who has just built himself a converter using EF54/EF50/EF50; it covers 7 to 35 mc in four bands. He comments on some "bad noises" heard: UC2BB (T6), UO5AC (T5) and CR5VP (T4). I agree with him that it's time some of these 1920-style notes were cleaned up. E. A. Bovey (Dartmouth)—another newcomer !- remarks on the fine DX conditions of October 18, particularly the outstanding signals from ZL4AO and E.A.B. says it really was PK1MH. possible to hear all continents at once that evening, and finishes with a moan about the awful short-skip conditions during the 14 mc SLP. (We do hope the next will be better.)

B. Cage (Ipswich) asks the best time in the morning to hear Alaska on 'phone. Well, four or five weeks ago it was as late as 0930, but we doubt whether they will be coming in by the time you read this, unless they are still there at about 0800. Seems as if early morning signals from W6, W7, VE7, VE8, KL7 and so on are good in autumn and spring but vanish during the winter; of course, this winter they may not, conditions being so marvellous at present. The other part of B.C.'s query concerns KG6. Well, they have been heard during the afternoons on

ZONES HEARD

LISTING

Listener	Post-war Zones	Post-Wa Countries
'PHONE and CW		
N. A. Phelps (London, N.10)	40	181
O. A. Good (Oswestry)	40	170
K. Callow (Mansfield)	40	163
L. N. Goldsbrough (Wirral)	40	156
A. Baldwin (London, E.11)	40	156
G. Curtis (South Harrow)	40	155
D. W. Bruce (Eltham)	40	152
M. H. Preston (London.		
S.W.17)	39	176
C. S. S. Lyon (Liverpool)	39	157
A. E. Hardman (Manchester)	39	149
A. W. G. Boulton (Faringdon)		149
R. A. Hawley (Goostrey)	39	144
W. J. C. Pinnell (Sidcup)	39	135
G. P. Watts (Norwich)	38	144
A. Frost (Thornton Heath)	38	136
G. V. Haylock (London, S.E.13)	37	440
N. S. Beckett (Lowestoft)	37	130
	37	115
M. D. Lipscombe (Seaford)	37	115
L. M. Singletary (Honiton)	36	112
M. Harrison (Darlington).	36	131
L. Collis (Banstead)	30	128
F. A. Herridge (London, S.W.12)	36	110
D. L. Courtier-Dutton	35	
Herne Bay)	32	105
Rev. D. D. White (Toller).	31	81
B. Hayes (Bletchley)	31	66
PHONE ONLY		
R. A. Hawley (Goostrey)	37	133
M. D. Lipscombe (Seaford)	37	113
A. J. Slater (Southwick)	36	140
A. H. Onslow (Hove)	36	138
E. J. Logan (Hertford)	36	133
D. W. Bruce (Eltham)	36	131
D. Heaton (Bradford)	36	130
C. G. Tilly (Bristol)	36	130
D. L. McLean (Yeovil)	36	124
L. Collis (Banstead)	36	120
T. W. Jones (Birmingham)	36	110
O. A. Good (Oswestry)	36	109
N. S. Beckett (Lowestoft).	36	104
L. N. Goldsbrough (Wirral)	35	123
G. P. Watts (Norwich)	35	122
E. J. Parish (Watford)	35	120
C. S. S. Lyon (Liverpool)	35	117
G. Hare (Leadenham)	35	116
B. Cage (1pswich)	35	108
S.E.6)	35	108
L. Tombs (Swindon)	35	108
L. Shearlaw (Camberley)	35	104
K. Callow (Mansfield)	34	84
A. Bannister (Manchester)	33	93
P. A. Kerry (London, W.7)	33	86
W. B. Harrald (London,	33	80
S.E.21)	33	81
J. Crunden-White		3,
(Chorleywood)	31	98
O. R. F. Mason (Southend)	30	59

14 mc and mornings on 28 mc, and when they come across, they really do.

G. L. Ross-Hine (Hurn Airport) sends a list of DX and some useful QTH's, but laments that he spends so long listening to the natter on 3.5 mc that he has to turn in without doing any DX-hunting. R. Springett (Gosport) is one of many who have obliged with the full address of 11AHK, who really is in Sardinia.

A. H. Onslow (Hove) collected six further countries with W2WMV/C9, MD7RJ, M1A, VR2AP, ZS6OL and a local who was previously missing. He has now Heard All States, W3JMO having filled the gap during the SLP. A. B. Ward (Harrogate) logged 75 stations in 75 minutes on 28 mc, and sends a list, but unfortunately it doesn't qualify for Calls Heard as it contains lots of "local" W's and VE's.

M. C. Pavely (London, S.E.6) asks whether W6YOT/C6 is in Zone 23 or 24. Not knowing his exact QTH, can't say, but 24 sounds the more likely. M.C.P. has also heard W2CDJ/KL7; at the present there are quite a lot of W's using the "Portable-KL7" suffix, such as W4GFK/KL7 and W7QB/KL7—the latter with some S9 'phone.

O. A. Good (Oswestry) sends one of his larger omnibus letters, and analyses the difference between October 1946 and October 1947. As he says, "Stations hard almost daily this year were rarities at this time last year—especially with regard to VK and ZL." The answer, of course, is that we are nearer to the sunspot maximum, and that we may not have DX conditions like this for another eleven years. October opened for O.A.G. (0555 GMT on the 1st) with eight W6's in five minutes!

He suggests that PK7 may be the new prefix for Dutch New Guinea, as he heard PK7AQ early in the month. The most interesting DX logged included HZIAB, W6VRF/KG6, W5WCN/KG6, CR6AI, VE8MB, VP2GB ('phone), VP3LF, VP5AS, HC6KI and ET3AG. O.A.G. scored 38Z, 108C during October (34Z and 72C on 'phone).

L. Tombs (Swindon) enjoyed the 28 mc SLP and found KL7DY, who gave him a new zone. He is another one who would like SLP on 3.5 or 1.7 mc; for the latter band he suggests a little contest to see h.w many counties can be heard. The trouble there, of course, would be identification of the CW stations—but it's worth considering.

J. R. Tyzack (South Shields) writes to

say that on October 26 at 2300 he heard HRAS calling CQ with MCW on 14 mc; several W's went back to him but no QSO resulted. From his call, of course, he's a commercial or a ship belonging to Honduras—or a phoney.

A. Baldwin (London E.11), very proudly joining the ranks of the Forty Scorers, must be getting sated with 14 mc DX, for he says he is forsaking 14 me in the early mornings and. listening on 7 mc instead. The result appears in Calls Heard. It has been sufficiently interesting to indu e him to do more next month. On 14 mc he has logged almost everything, including HE1EO, VP5AS, VP8AD, KX6AF and UQ2BC. He asks for the Zone of C7TK—the answer to that one is definitely 24.

Here let us digress on the subject of 7 mc. Recent words with a W4 on 28 mc about the band showed that the position over there is the same as in Europe-that the band is open for DX over long stretches, but that practically everyone is so busy working locals that either they don't know or don't care about the DX. This W4 said that he heard Stations several British nights from about 2100

onwards—all in among the W QRM—but that if he called them they invariably came back working another G or a European somewhere else. Of course, it's probably true that about 70 per cent. of the licensed amateurs are just not interested in DX; therefore some of them working 'phone on 7 mc simply wouldn't turn a hair if they did know that the Americans were coming in on CW.

But it makes a band quite unworkable, this mixture of local 'phone and DX CW, without any semblance of band-planning or organisation. We'll have to go on night-shift for a while and winkle out some new ones!

Back to A. J. Slater (Southwick) whose prize catches on 14 mc phone were



View of another corner of H. Christopher's station at Hull, featured as "SWL Stations—No. 6." Most of his equipment is home-built.

VP2AD, C3AC, C4CK, KA7GC, PK1MH VR2AP, KG6AW/VK9, W3KXO/J9. He had some good Asiatic and Oceanic ones on 28 mc, too. He suggests that as a "long shot" an SLP for 28 mc on a Sunday morning would be amusing; and it shall be done—next time. It certainly has been marvellous in the mornings lately, and we must hope for good behaviour in the future.

E. J. Parish (Watford) is also very keen on 28 mc, where he has heard a station signing ZD6AR (although he is not quite certain). No one else appears to have mentioned this one, so it remains a mystery. CP5EP on 14 mc 'phone gave him his first Bolivian. G. P. Watts (Norwich) collected his 38th Zone with

	DX QTH'S
C8KY	Box 73, Lanchow, Kansu, China.
CM9AA	Via Radio Club of Cuba, Havana.
D5AA	Gabriel Migeon, SP 76422, BPM 451, French Zone, Germany.
ЕТЗАН	Frank Frost, PO Box 858, Addis Ababa, Ethiopia.
FU8AA	Rene Thevenin, Isle-de-Pentecote,' New Hebrides.
HC1CF	Box 2850, Quito, Ecuador.
IIAHK	Aldo Ravenna, Via Principe Amadeo 8, Cagliari, Sardinia.
16ZJ	G. R. Chiffey, Government Press, BMA, Etritrea, MELF 5.
J9ABX	W. C. Baxter, APO 331-3, c/o San Francisco.
KG6AAF	HQ 20th Air Force, APO 234, c/o PM, San Francisco.
KM6AA	C.A.A., Midway Island, Central Pacific.
KW6AC	C.A.A., Wake Island, Central Pacific.
M1A	Dr. Corrado Francini, Republica di San Marino.
PK6TO	Box 76, Macassar, Celebes.
VP4TAD	APO 857, c/o PM, Miami, Fla.
VP5AS	APO 861, c/o PM, Miami, Fla.
VR3A	R. Garrett, Washington Island, via Fanning Island, Central Pacific.
VS1CH	Petty Officers' Mess, R.N. Wireless Station, Krangi, Singapore.
VS2BU	Sgt. Morgan, RAF Butterworth, Penang, Malaya.
VS2CB	c/o Telecoms Dept., Kuala Lumpur, Malaya.
VS6AC	367 Signals Unit, RAF, Hong Kong.
VS7PS	No. 1 A.W.B.S., c/o GPO Colombo, Ceylon.
VU2EC	Northern Command Signals, Rawalpindi, Pakistan.
W2WMV/C9	Box 10, Navy 3930, Fleet PO. San Francisco. (Stn. at Mukden, Manchukuo)
ZC6DZ	Capt. P. G. Keller, "B" Mess, HQ No. 1 Inf. Div., British Forces in Palestine.
ZS2AT	Rev. A. B. Trewin (exG2AT), Standard Bank of S.A., East London, Cape Province.
ZS6OL	c/o RAF, Gaberones, Bechuanaland Protectorate.

VQ8AF; W. J. C. Pinnell (Sidcup) logged ZA1G, ET3AF and PX1C—three new countries, all on 7 mc, and all a bit fishy, as he says.

L. N. Goldsbrough (Wirral) heard 37Z during the month, and speaks of the wonderful conditions for VK and ZL during the evenings, He says of the 14 mc SLP "the first half hour wasn't so bad, but after that the Noise—and the

People!!" HI8WF was a nice one he pulled out of the bag during the month—elusive chaps, these HI's—don't think I've ever heard one myself!

M. D. Lipscombe (Seaford) has enjoyed 28 mc and says the mornings have brought in many ZL's and also VK, J8, J9 and KG6. Evenings, of course, are full of W6, W7, VE5, VE6 and VE7. M.D.L. has also been logging KW6AC in the mornings—and on 14 mc he has found all the usual DX (which, for October 1947, means practically anything!)

C. S. S. Lyon (Liverpool) is another who says it has been one of the most interesting months he has ever experienced. On the 3rd he heard three VK6's on 14 mc 'phone; he had a pleasant surprise with the reappearance of UAØKQA (our friend in Zone 19) on November 1. The number of KA's and C's also surprised him—that has really been a feature of the month. VP2GB was another welcome and rather uncommon one.

L. Shearlaw (Camberley) unearthed a nice one in the form of VQ1BJ (Zanzibar) calling CQ on 28 mc (0855 on October 5), and seems to have logged practically everything else on the map as well. T. W. Jones (Birmingham) logged KG6AW/VK9, and heard VE8OG give his QTH as Victoria Island, which seems to put him in Zone 2. VE8MB, received at 2000 GMT, said he was 600 miles North of the Arctic Circle.

N. S. Beckett (Lowestoft) sends some nice QTH's and added to his score of countries with W6VR/KG6, M1A, UH8AA, CP5EP, HE1EO and UD6KBA. A "probable phoney" from him is OQ8VT, who doesn't sound right at all. G. J. Rawlinson (Enfield) would very much like the QTH of OX3MC?

Maritime Mobiles

R. A. Hawley (Goostrey) has now been joined in his chase for MM's by D. L. McLean (Yeovil), who sends in a list with no fewer than sixteen of them! The ships are too numerous to mention, but R.A.H.'s best bits of DX with them were W2LDH/MM at Jiddah and W3KIF/MM in the South Atlantic. An interesting one was W2QHD/MM in the Manchester Ship Canal! D.L.McL.'s best DX was W3WTQ/MM, off East London, South Africa, and W6VRJ/MM off Luzon. Philippines. MM's are a fascinating pursuit but an elusive one-I can never warn readers to look for so-and-so, because by the time you read it he's somewhere else !

DX FORECAST FOR NOVEMBER/DECEMBER (ALL TIMES GMT)							
	7 mc	14 mc	28 mc				
NORTH AMERICA East and Central West Coast	2 000-0800 0 500-0800	All day \$\int 0500-0800 1600-1900	1200- 223 0 1500- 20 00				
CENTRAL AND SOUTH AMERICA	2300-0700	2220-0800	0800-1700				
AFRICA North of Cancer South of Cancer	All day 1900-2300	All day 1500-2300	0800-2200 0900-2000				
ASIA West of 75 deg. E. East of 75 deg. E	1700-0800 2000-0600	0700-2300 1200-2200	0800-2200 0800-1700				
OCEANIA							
VK, ZL, ZK, ZM, VR	{ 0400-0800 1600-2100	0800-1100 1700-2000	. 0800-1400				

NOTE.—The times given above are the most likely periods during which signals may be expected from the parts of the world indicated. Under unusual conditions, signals may be heard outside these times.

2100-0600

Calls Heard

Here is what we would like in the Calls Heard for next month and until further notice:

28 mc: No Europeans and no U.S.A. or

Canada (except VE8).

14 mc: As 28 mc. No Europeans. 7 mc: 3.5 mc: No U.K. stations. 1.7 mc: Anything goes.

PK, KA, KG6, etc.

There may be some criticism about cutting out the W stations from 28 and 14 mc lists of Calls Heard, but no one can pretend that they mean anything while conditions stay like this. After all, W6 and W7 used to be rarities, but now one hears them in dozens whenever the bands are open. So send in those lists, and since they are shorter—there will probably be room for everyone next month. This month less than half of those received have been squeezed into the available space and we want to be able to give everyone a showing.

HAZ

It has been decided to run an "HAZ Marathon" for the year 1948; starting with the appearance of the issue dated March (which, of course, contains the reports of the January DX) the HAZ column will be printed in order of merit of Zones and Countries heard in 1948, with the post-war totals appearing as a secondary column. That should stir up some of you top-scorers to further flights of activity. If friend Phelps can score his 40 in one month—as he has done in October -the figures should be pretty high after a month or two of 1948!

1300-2000

0800-1300

Set Listening Periods, November

November 29, 2100-2300 GMT-14 mc 'Phone.

November 30, 0900-1100 GMT-28 mc 'Phone and CW.

The deadline for all logs, letters, HAZ claims and general information is first post on December 3, at 49 Victoria Street, London, S.W.1, addressed to The DX Scribe, Short Wave Listener. So, once more, good luck and good listening.

THE 1.7 MC CONTEST

With further reference to the note on p. 371 of the November issue of the Short Wave Listener, following is a list of the Clubs entered for the Short Wave Magazine 1.7 mc Club Transmitting Contest, as at November 10

November 10:

Aberdeen (GM3BSQ), Ashton-under-Lyne (G3BND),
Beaumanor (G3BMR), Burton (G2DAN), Bury
(G3BRS), Carlisle (G3ART), Coventry (G2YS),
Edgware (G3ASR/A), Grafton (G3AFT), Grays
(G2YH), Hi-Q (GM3AR), Medway (G5FN), North
Angus (GM6RI), Nottingham (G3CKV), Romford
(G4KF), Slade (G2AK), Stroud (G2FRG), Wanstead
(G3BRX), Warrington (G3CKR/A), West Cornwall
(G2IL), Wirral (G8BM) and Worcester (G3BDS).

The Contest opened on November 15 and concludes

The Contest opened on November 15 and concludes at midnight on Sunday, November 23. How many of

these call-signs did you log?

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 callsign (e.g., WIAZ, 1BCR, 1CQL, 2DY, 2EF, etc.). The callsigns, 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**

28 mc

Oct. 25, 1800-2000 GMT

J. M. Graham, 2 Kelvinside Terrace West, Glasgow.

'PHONE: CO2JJ, CX4CS, LU2DM, 7CD, OX3GC, PY2LM, LU2DM, 7CD. OX3GC. PY2LM, 2NX, 2QK, VE4SH, 6PP, 7AJP, 7AKS, VO2AP, 6T, VP6HR, W5BBR, 5KJE, 5KZ, 5LVZ, 5MGT, 5MMK, 6AV, 60B, 6WTC, 6ZUT, 7BKC, 7BBV, 7KSA, 0BBS, ØBMX, ØCK, ØEQD, ØJQK, ØKFQ, ØNUN, ØOWX, ØZDS, ØZGO, ØZMJ. (Receiver: Marconi CR100.)

Cage, 331 Landseer Road,

VE4SH, 7ABD, 7AJE, VO2AL, VP6JC, W5ALA, 5MMK, 7AFR, 7BVV, 7IIX, 7KSA, 7TIH. (Receiver: 0-V-1.)

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

'PHONE: HK4CO, LU2DM, 7CD, OQ5BA, PY2QK, VE5XR, 6NA, 6PP, 7AAD, 7AEZ, 7AIP, 7HIZ, 7UU. VO6H, W5GCS, 5JHS, 7HTZ, ØGIC, ØIGL, ØIUN, ØJDQ, ØNUN, ØVAZ, ØYMU, YV5ABG, ZS6IR. (Receiver: 3-stage converter.)

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

'PHONE: CO2JJ, EL6A, LU2DM, 7BU, PY2LN, 2QK, VE4CI, 5EA, 6WS, W5ALA, 5MMK, 7GGY, 7KZR, ØBMY, ØIGL, ØJPC. (Receiver: 7-valve superhet. 1800-1900 only.)

L. Shearlaw, Kaduna, Frimley Road, Camberley, Surrey.

PHONE: LU2DM, 7CB, MD5GW, PY2QK, SU1BF, VE4SH, 7ABP, 7AJP, W5GCS, 5JBD, 5JHS, 5LDF, 5MMJ, 7BVV, 7HUG, 7QNC, ØAWL, ØBMX, ØWKB, ØVSK. Receiver: R208.)

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

HK4CO, KL7DY, PY2QK, SUIBM, VE4LF, VE4SH, VE6PP, VE7AJP, VE7AOD, VE7UU, VE7AJP, VE7AOD, VE7UU, VOIO, VOIT, VO6H, VO6P, W5NMM, 7BVN, 7HTB, ØBPD, ØJDQ, ØNUN, ØRFG, K9AAY.

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

'PHONE: HK4EB, OQ5BA, PY2LM, 2QK, SUIBM, IWS, VE4LF, 4SH, 6WS, 7ABD, 7AJP, VO6H. (Receiver: AR88LF, 1800-1850 only.)

L. Tombs, 31 Little Avenue, Swindon, CX4CS, KH5GT, 'PHONE: CX4CS, KH5GT, KL7DY, LU5BQ, PY2QK, 2LM, VE4SH, 6KZ, 7ABD, 7AJP, 7XR, VU2GB, W5GCS, 5KRZ, 5LDF, 5MMK, 6MBD, 7BVV, 7HTG, 7IIX, 7KSA, ØAWX, ØBMX, ØGCS, ØGSW, ØKIW, ØNUN, ØRLO. ØYNU, ØZDS. (Receiver: 10. value syneries) 10 valve superhet.)

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

'PHONE: CE3AB, CO2JJ, CX4CS, HH2CW, HK4CO, OQ5BA, PY2LM, 2QK, LU3AX, SUIBM, VE4SH, 6KZ, 6PP, 7UU, WSALA, 5BBR, 5EGU, 5ISW, 5KRZ, 5LTP, 5MKG, 6AGT, 6IFW, 7JBC, 7KPB, ØDHN, ØIGL, ØJGQ, ØMKB, ØOIV. ØRLO, VO6P. (Receiver: SX24.

E. A. Parkinson, 8 Hawthorn Drive, Rodley, Leeds.

CX4CS, HK4CO, PY2QK, SUIBM, VE4CI, 7APS, VO6T, W5ALA, 5LDE, 6VVD, ØAWX, ØBMX, ØMKB, ØVSK. (Receiver: Eddystone 504.)

R. A. Hawley, Torview, Brookfield Crescent, Goostrey, Cheshire,

'PHONE: CO2JJ, HK4CO, KL7DY, LU2DM, 8ZX, NY4LM, PY2LM, 2QK, VE4Cl, 4LF, 5EA, 6NA, 6PP, 6WS, 7ABD, 7AJP, 7XR, VO6T, VP6IC, WSALA, 5APW, 5BBR, 5EIL, 5MMK, 6AGT, 6HUM, 6IRA, 6OB, 6YKZ, 7JGI, 7JNC, 7KJG, 7TLY, ØBMX, ØDHN, ØEGC, ØTFQ, ØUQK. (Receiver: Eddystone 504.)

14 mc

Oct. 26. 0800-000 GMT

B. Cage, 331 Landseer Road, Ipswich.

'PHONE: W7GTB, ZL2GX. (Receiver: 0-V-1.)

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

'PHONE: CN8BA, MB9AD, 9AG, OX3BD, 3GG, VK2TC, XEIIZ, ZL2GX. (Receiver: BC-342-N.)

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

EA9AI, MD2C, OX3BD, VK3HS, 3KR, 3SB, 4KS, W6DLF, 6WMH, 7GC, ZL2GX.

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

'PHONE: CN8BA, VK2TF, 2WD, 3XK, 4HD, W6PLL.

CW: FA8IH, HP4Q, VK2TI, 2YC, 2ZR, 3LN, 3QI, 3XU, 7LZ, W6AAO, 6AM, 6EAK, 6FHI, 6NNV, 6PB. (Receiver: 0-V-1. 0800-0845 GMT.)

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

CW: FA81H, VK2TI, 3LN, 3MD. (Receiver : Hallicrafters S20.)

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

'PHONE: FA3GZ, OX3BD, VE8OO, VK2TC, 3HF, 4KH, 7AJ, W6FYM, 6PLL, 7GC, ØAEQ.

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

'PHONE: CN8BA, D5AA, EA9AI, VK2AGM, 2WD, 6DD. (Receiver: 'AR88LF. 0800-0830 only.)

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

'PHONE: VK2TC.

CW: CN8MI, FA8RA, FT4AB, VK2TR, 3GU, 3LN, 3QI, 7LJ, W5FNA, 5KC, 6HZT, 6NNV.

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

CW: FT4AB, KL7KV, VK2DG, 3KX, 5JS, W6AM. (Receiver: V55R.)

L. N. Goldsbrough, 246 Chester Road, Whitby, Wirral, Cheshire. CW:VK2AHA. 2TI, 2TR, 2VA, 2ZH, 3CN, 3GU, 3PA, 3QI, 7LJ, W6BPD, 6EAK, 6LDJ, 6QJL

6TTU, ZL2LM. (Receiver: battery 1-V-2, 0800-0900 only.)

ZONED LISTENING

14 mc

N. S. Beckett, 26 Grosvenor Road, Lowestoft.

'PHONE: Zone 1: KLTFC.
Zone 8: CO2CT, 2UP, HH2CW,
H18FA, KP4DO, 4KD, VP5AS.
Zone 24: CIIC. Zone 26: XZ2AG.
Zone 27: W6VR/KG6. Zone 28:
VS2BO, 2BU. Zone 29: VK6RU.
Zone 31: KH3IJ. Zone 40:
OX3BD, 3GE, 3GG, 3MG, TF3EA.
(Receiver: 5-valve superhet.)

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

Zone 1: KL7AT, 7DM, VE8OG.
Zone 8: CO2IV, 2MA, 7CX,
HH2CW, KP4KD, 4XE, VP5AS.
Zone 24: C1BC, 1JC, 7TK,
VS6BA. Zone 25: J3AAH, 4AAO.
Zone 26: XZ2AG, 2PQ. Zone 27:
KAISR, KG6AI, 6BF, W6WCN/
KG6, Zone 28: PK1MH 4KS,
6ME/VK9OU, VS1AG, 1BG, 2BO,
2BU. Zone 29: VK6RU. Zone 31:
KH5AW, 6CT, 6GF, 6HJ, 6HJ,
Zone 40: OX3BD, 3GC, 3GE,
3GG, 3MC, 3MG. (October 1-25,
0700-1000 and 1800-2300 BST. Receiver: 0-V-1.)

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

'PHONE: Zone 1: VE80O, W70B/KL7. Zone 8: KP4BU, VP5AN. Zone 24: C11C. Zone 28: VS2BU. Zone 29: VK6FL. Zone 31: KH5LS. Zone 40: OX3BD, 3GE, 3GG, 3MC. (Receiver: AR88LF.)

A. Cross, The Manse, Muthill, Perthshire.

Pertishire.

Pertishire.

PHONE: Zone 1: VE8MG,
800. Zone 2: VE8MB. Zone 3:
VE7AIS, 7EF, 7ZM, W6BAT,
6ELW, 6EZP, 6LO, 6LS, 6LSO,
6MBD, 6NO, 6PDB, 6PIW, 6PLL,
6RO, 6RS, 6TLT, 6TPG, 6WNH,
6WX, 6YDK, 6YX, 7BVO, 7GC,
7HIA, 7HSZ, 7VT. Zone 6:
XEIAC, ICQ. Zone 30: VK2AGJ,
2GU, 2II, 2WD, 2WW, 3BZ, 3HG,
3KX, 3MAG, 3NH, 3XD, 4JM,
5FL, 5LK, 5TR, 7AJ. Zone 31:
KH6JQ. Zone 32: ZL3MJ.
2000-2200 GMT.

PHONE: Zone 7: TI2OA.
Zone 8: CO2MA. 8MP, HH2LV,
KP4BU, 4CA. 4CH, 4CL, VP2AD,
SAS. Zone 9: HK1AT, 1FQ,
PZ1OY, VP4TX, YV1AN, 3AM,
5AB. 5ABQ. Zone 10: OA4M.
Zone 11: PY1HP, 1HW, 4BU,
4IE, 4RK, 7AS, 7AY. Zone 12:
CE1BE. Zone 13: CXIVD, 2AX,
2CL, LUIJC, 3EB, 4BH, 5AD,
5BH, 5CA, 6AJ. Zone 33: CN8AL,
8AM, 8AU, 8BA, 8BT, 8BV, 8EE,
8EE, 8KO, 8MZ, FA3FB,
3GZ. 3QZ, 8CF. Zone 34: MD1F,
2B, 2C, 2G, 5AB, 5RH, TRIP.
Zone 36: OQ5BR. Zone 37:
ET3AF. (Receiver: 5-valve superhet.)

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

CW: Zone 23: O6HH. Zone 24: C1C, 1JF, 3AT, 4XX, TTK, CR9AN, VS6AC, W2WMV/C, W6IIM/C, W0MCF/C. Zone 25: J2AUA. 2AHI, 3AAD, 3AAH, 4AAO, 4AAU, 5AAL, 8ANU. Zone 26: XZ2DY, 2HP, 2PQ. Zone 27: J9ABL, 9AEH, K6SBU/KG6, KAIAE, 1AD, 1FM, 1NL, 1TK, 6FA, KG6AL, 6BU. Zone 31: KH6CI, 6EA, KM6AA, KP6AA, KY6AF, (Receiver: 1-V-1.)

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

'PHONE: Zone 8: CO2MA, 8MP, HHSPA, H18WF, VPSAS. Zone 26: XZ2AG. Zone 40: OX3GC, 3GE, 3GG, 3MC, TF3MB. CW: Zone 1: KL7BD, 7LL, 7MH. Zone 8: KP4EE, 4KD.

CW: Zone 1: KL7BD, 7LL, 7MH. Zone 8: KP4EE, 4KD. Zone 24: C3AT. Zone 27: KA1HR. Zone 28: VSICE. Zone 29: VK6FL. Zone 31: KH6IJ. Zone 40: OX3GD, 3GG, 3GG, 3MG. (Receiver: battery 1-V-2.)

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

"PHONE: Zone 1: KL7JO, W7OB/KL7, VE8MB. Zone 8: CO2KO, 2MA, 7CX, 7VP, KP4CL, NY4ZQ, VP5AS. Zone 24: C.IJC, IYT, 3AT. Zone 25: J2HYS, 4AAM, 5AAJ, 8AAA, 8AAA, 8AAT, Zone 27: KAIHR, IVVS, W6VRF/KG6, W6WCN/KG6. Zone 28: PKIMH, VS2BO, 2BU. Zone 29: VK6DD, 6HL, 6RU. Zone 31: KH6AV. Zone 40: OX3BD, 3GE, 3GG, 3MC, 3MG, 3SD.

CW: Zone 1: KL7BD, 7TB, 71T, 7MH, W4GFK/KL7, W7DRS/KL7, W7DRS/KL7, W7DRS/KL7, W7DRS/KL7, W7DRS/KL7, W7DRS/KL7, W7DRS/KL7, W7DRS/KL7, W7GRS/KL7, W7GRS/KL7,

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

CW: KL7CZ, 7FM, 7IB, 7KV, VE8BC, W4GFK/KL7. Zone 8: KP4KD. Zone 24: VS6AR, 6BA. Zone 25: J2AAQ. Zone 28: PK6ME, VS1AG, 1AQ, 1CE. Zone 31: KH6CT. Zone 39: VQ8AF. Zone 40: OX3MG. (Receiver: Halllcrafters S20.)

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

0630-0800 and 1500-1800 GMT

PHONE: Zone 1: W7QB/KL7.
Zone 8: CO2UP. Zone 26:
XZ2AG, Zone 28: VS2BU. Zone
29: VK6FL, 6HL, 6RU. Zone 31:

KH6AW. Zone 40: OX3GG,3ME.

CW: Zone 1: KL71Y, VE8OG.

Zone 24: W@MCF/C1. Zone 25:

J5AAL. Zone 28: PK3AR, 7AQ.

2100-0100 GMT

'PHONE: Zone 8: CO2BM, 2KO, 2SG, 2WL, 7CX, 7VP, HH2CW, 2LD, KP4CA, VP5AS. Zone 40: OX3BD, 3GC, 3MC.

CW: Zone 1: VE8OG. Zone 8: CM2BC, 2JK, KP4F1, 4KD. Zone 24: C1AN, TTK. Zone 27: KA1ABV, 6FA. Zone 28: VS1CF. (Period: September 30-November 1. Receiver: 0-V-1.)

T. W. Jones, 56 Cuckoo Road, Nechells, Birmingham.

PHONE: Zone 1: KL7FC, 7KR, VE8BC, 8MB, 8NM, 8OG. Zone 8: CO2KO, 2MA, 8MP, HH2CW, KP4CH, 4CL, VP2MT, 5AS, 5RS. Zone 24: CIJC, 4CK. Zone 26: XZ2AG, Zone 27: W6VRF/KG6. Zone 28: KG6AW/VK9, VS2BO, 2BU. Zone 29: VK6RU. Zone 31: KH6AW, 6CT. Zone 40: OX3BD, 3GC, 3GE, 3GG, 3MC, 3MG, TF3EA. (Receiver: V55R.)

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

0700-0800 GMT

*PHONE: Zone 1: VE8OG, 80O, W7ELJ/KL7. Zone 8: CO2UP, VP2AD. Zone 27: KG6AI. Zone 29: VK6DD. Zone 31: KH6AW, 6CT, 6JQ. Zone 40: OX3BD.

1215-1300 GMT

'PHONE: Zone 25: J2AVA. 2HYS, 2ROC, 5AAL, 9AAS, W3KXO/J9 (Iwo-Jima). Zone 27: W6WCN/KG6 (Saipan). Zone 28: KG6AW/W89 (Admiralty Islands). Zone 40: OX3BD.

1800-2300 GMT

Zone 8: CO2BM, 2MA, 7BP, 8MP, HH2LD, 3VE, KP4BU, 4CL, 4FH, NY4ZO, VP5AS, W9TKS/KP4. Zone 24: C3AC, 4CK. Zone 25: J8AAA. Zone 26: XZ2AG. Zone 27: KA7GC, W6WCN/KG6. Zone 28: PKIMH, VS2BU. Zone 29: VK6AP, 6FL, 6HL. Zone 40: OX3BD, 3GE, 3GG, TF3EA. (Receiver: SX24)

E. A. Parkinson, 8 Hawthorn Drive, Rodley, Leeds.

2050-2330 GMT, October 1-3

'PHONE: Zone 8: CO8MP, H16EC. Zone 28: VK4V, VS2BU. Zone 40: OX3BD, 3GE, 3GG, 3MC. (Receiver: Eddystone 504.)

28 mc

J. M. Graham, 2 Kelvinside Terrace West, Glasgow.

'PHONE: CEIAH, CM9AA, CN8AM, 8BA, 8BH, 8BV, 8EH, CR9AG, CXIDB, 2AX, 4CS, 5AL.

CALLS HEARD-(contd.)

EL2A, 3A, 5A, FA3GZ, 3JY, 8CF, 8DX, HH5PA, HK3DW, J8AFK, 9AAO, 9AAS, KP4BI, 4CI, 4ES, LU3BAC, 3BQ, 4BC, 5CA, 9AAO, 9AAS, KP4BI, 4CI, 4ES, LU3BAC, 3BQ, 4BC, 5CA. MD5AF, 5GW, 5KW, 5TS, NY4LM, OQ5AR, 5BA, PK2RK. PY1JY, 2AC, 2AJ, 2LM, 2NX, 2OK, 4BK, 4RK, 7AT, 7DD, 7QG, PZ1A, 1M, STZMP, SU1HF, 1WS, T12OA, VE4LF, 4SH, 5SY, 6LQ, 6PZ, 6WS, 7ABD, 7AJP, 7EL, 7MQ, 7UU, VK2ADC, 2AKI, 2ALQ, 2FP, 2KW, 2QW, 3AHB, 3GG, 3JD, 3OP, 3QK, 3XJ, 5LC, 6KW, 6MU, VO1T, 2AP, 2D, 2RM, 2T, 6T, VP4TAX, 4TK, 4TZ, 5AL, 5EM, 6HR, VQ2FR, 3EDD, VS1CA, 7PW, VU2BF, 2CS, 2DS, 2TM, 7JU, W2LDH/MM, 2LFO/MM, 3KIF/MM, 3NCV/MM, 5AXI/MM, 6VKV/16, 7BTN, 7EK, 7EMP, 7HZQ, 7IGI, 7IJX, 7ILL, 7JJQ, 7KER, 7KPE, 7KSA, 7OZC, 7SMZ, XZ2HP, 2XT, YN1HB, ZC6JP, ZDKC, 4AL, ZEIJX, 1JZ, ZSIDF, 1P, 1T, 2AF, 2D, 2CI, 4AE, 5KK, 50 CDW 3BQ, 4BC, 5GW, 5KW, ZEIJX, 1JZ, ZSIDF, 1P, 1T, 2AF, 2AQ, 2CI, 4AF, 5BK, 5Q, 6DW, 6IK, 6IW, 6W. (October 9-25. Receiver: CR100.)

S. H. Foster, 1 Nicholson Square, Londonderry, Northern Ireland.

CE3EE, CN8BA, 8BV, 8EH, EL2A, FA8CF, HK3EO, LU5AD, 6AJ, OQ5BE, PY7AD, VK6HL, VO2G, VU7AB, W2VJW/ MM, W5AAT, 5AET, 5CEW, 5JFF, 5JYM, 5MIL, 6IDY, ZBIAB, 1L, ZS4AL. (Receiver: 1-V-2.)

R. A. Hawley, Torview, Brookfield Crescent, Goostrey, Cheshire.

Crescent, Goostrey, Cheshire.

PHONE: AC4YN, CICH,
8KY, CM9AA, CN8BA, CR9AG,
9AM, CX4CS, EL2A, FA3GZ, 3JY,
HC1FE, 1KP, HH2CW, HK3AB,
12FOX, 2HYS, 5AAJ, 8AAA,
8AAJ, 8ACS, 8AFK, 9AAO,
9AAS, 9ABX, KG6BE, 6BT,
KL7DY, KP4BI, 4CI, 4DR, 4ES,
4FK, KW6AC, LU5AE, MD5AF,
5DS, 5GW, 5KS, 5TS, 7BJ, 7BK,
NY4AB, 4LN, OO5BA, OX3GC,
PY1JY, 2AY, 7QG, PZ1A, 1J, 1M,
ST2MP, SU1HF, 1WS, VE4JJ, 4LF,
4RO, 4SH, 5EA, 6PP, 6SR, 6WS,
7AEB, 7AFD, 7AJN, 7CI, 7EI,
7EL, 7MQ, 7UU, VK2ADC, 2AKR,
2ALQ, 2GU, 2YV, 3CP, 6AW,
6FC, 6FL, 6HL, 6KW, 6RU,
VO2AP, 2AQ, 2D, 6D, 6H,
VQ3EDD, VS7IT, VU2AF, 2BF,
2BJ, 2GB, 2OC, 2TM, 7AB, 7BR,
7JU, W1PPH/MM, 21BZ/MM,
2LDH/MM, 2LFO/MM, 2NYC/
MM, 2OAC/MM, 2OAC/MM, 2OAC/MM, 2OAC/MM, 2OAC/MM, 2OAC/MM, 20AC/MM, 20AC/M MM, SCNA, SEDY, SJBO, SKC, SKI, SLQS, SMMK, SMMV, SMPG, 5NHV, 5GAA/W6, W6FMZ/C6, 6DAJ, 66HP, 6IRA, 6LED, 6LRN, 6MA, 6QAP, 6SEY/W6, 6SGH, 6TAC, 6USM, 6UZH, 6VIH, 6VKV/I6, 7ADR, 7AHI, 7ATH, 7BG, 7EWP, 7FIV, 7FS/MM, 7JDM, 7KJG, #KSA, XZ2DN, 2YT, YN1HB, ZB1AB, 1AC, 1AG, 1F, 1L, 2A, ZC6IP, ZD2KC, 4AL, ZL1CD, 1GI, 1HY, 2FY, 2QS, 3IC, 3BV, 3LE, 4AT, 4BN, ZS1P, 1T. (Receiver: Eddystors 504) stone 504.)

D. F. Willies, The Wilderness, Grove Road, Holt, Norfolk.

'PHONE: CM9AA, KP4DV, OA4AL, PZ1A, ST2JF, TI2RC, VE6LL, VO2IK, W5CNK, 5EUI, VE6LL, VO2IK, W5CNK, 5EUI, 5KL, 5NAM, 6VKV/16. (Receiver: R103/A with converter.)

Rev. A Cumming, 77 High Street. Lymington, Hants.

*PHONE: CICH, CEIAH, 3AB, CR9AG, 9AM, CXIDB, 2AX, EL2A, 2B, 5A, FA3JY, 8DX, HK3AB, 3DW, 4CO, KG6BT, KP4CI, 4ES, KV4AB, LU3BR, CZ 8PB, MDIE 2B, SAE-CAY, SAE-KP4CI, 4ES, KV4AB, LU3BR, 5CZ, 8BR, MD1F, 2B, 5AF, 5AL, 5AM, 5GW, 5TS, NY4AB, 4LM, OQ5AR, 5BA, 5BR, PY1FM, 2QK, 7DD, PZ1A, ST2JF, 2MP, SU1HF, 1WS, TF3EA, VE4CI, 4SH, 6EL, 7AFU, 7AKS, 7AVD, 7MQ, VK2ADT, 2AKR, 2ALQ, 5BH, 6HL, 6RU, VO2AT, 2G, 2T, VP4TAX, 4TT, 4TZ, 6ZI, VQ3EDD, 3EYE, 4ERR, VU2DG, 2GB, 2KM, 2PA, 2TM, 7AB, 7JU, W21BZ/MM/SU, 2LDH/MM/HZ, VJV/MM/CRT, 5AAT, 5BUZ, 5GZH, 5MZA, 6PRB, 6TFP/KP4, 6VTV/16, XE1A, XZ2AG, 2YT, 5MQ2, 5MAA, 6FRB, 61FFIRFA, 6VTV/16, XE1A, XZ2AG, 2YT, YV1AN, ZC6BS, 61H, 61P, 61L, ZD2KC, 4AL, ZS1AX, 1BV, 1CN, 1FD, 1P, 1T, 2AF, 2C1; 4H, 5CY, 5DG, 6BG, 6DW, 6OL, 6U, 6W. (Receiver: Eddystone 504.)

M. D. Lipscombe, 83 Stafford Road, Seaford, Lincs.

EL3A. J8AAX, 9AAS, KG6BT, KP4CI, KW6AC, MD5AF, 5KW, 5RH, 5TS, PYIJY, 7DD, PZIM, SUIHF, VE4LF, 5XU, 7AFD, 7EL, VK2HK, VP4TT, 6IC, SUIHF, VE4LF, 5XU, 7AFD. 7EL, VK2HK, VP4TT, 6JC, VQ2FR, 3EDD, 4ERR, W5ABN, VQ2FR, 3EDD, 4ERR, W5ABN, 5LEC, 6IR, 6LEB, 6LRN, 6OGY, 6PRB, 6SPB, 6VRV, 7EWP, 7JFA, 7KAE, 7KOH, ZD2KC, ZL1DY, 1GI, 1GW, 1HY, 2AW, 2FY, 2JB, 2LV, 2QS, 2WH, 3AW, 3BN, 3BV, 4BN, 4FO, ZS1P

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

"PHONE: AR8AB, CICH, W2WMV/C9, CM9AA, CN8MZ, CX4CS, FA3JY, 8CF, HC2OA, HH5PA, HK4CO, W6VKVIG, BAAM, 9AAI, 9AAO, KL7DY, KP4DC, 4ES, 4JA, MD5AF, 5GW, 5TS, 6AR, 7RI, NY4AB, OQ5BA, PYIJY, 2DS, 2LM, 2QK, STZFT, SUIHF, IWS, VE4CI, 5AQ, 5EA, 6AZ, 6PP, 7AEB, 7AFD, 7MQ, 7UU, VK2GU, 3GG, 3JD, 3KX, 6FI, 6RU, 3GG, 3JD, 3KX, 6FI, 6RU, PHONE AR8AB, CICH, 3GG, 3JD, 3KX, 6FL, 6HL, 6RU, VO2AK, 2T, VP4TAX, 4TK, 5EM, 6FO. 6HL, VO3EDD, 4FRR VOZAK, 21, VY41AX, 41K, 5EM, 6FO, 6HL, VOJSEDD, 4ERR, 5DES, VU2AC, 2AF, 2BF, 2GB, 2KM, 2TM, 7IU, W5BAA, 5ETG, 5KL, 5KRZ, 6AQS, 6CTO, 6ITA, 6PCK, 6PEN, 6UJ, 6VJQ, 6WIJ, 6YTH, 6YXM, 6ZSC, 7BQX,

7CJU, 7CSC, 7EK, 7EMF, 7EMP, 7IIX, 7ILL, 7KJG, 7KKN, 7KSA, 7NIV, XEIA, YV5ABC, ZC6JP, ZD2KC, 4AB, 4AL, ZL3BV, 3LE, 4AO, 4BN, ZSIP, 1T, 6W. (Receiver: 0-V-1.)

27 mc

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

*PHONE: KP4CM, W1RF, 2FMI, 2PYY, 3MFS, 3QWW, 4JOH, 4LPL, 5BUZ, 5FAP, 5GBE/2, 8HP, 8MFV, 8YIZ, 8ZGV, 9EHJ, 9UIT, ©ZB. (Period: October 26-November 2.)

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

KP4FK, VE1AK, 1NX, W1DKS/ portable mobile, 2CRT, 2GA, 2GUX, 2OUS, 2QDI, 2TGO, 2VHA, 3NTS, 4GLB, 4HXR, 5BEB, 5BUZ, 5LRS, 5LWU, 5MLU, 6EAS, 9WAU, 9BOT, 9EHJ, ØGRJ, ØJTA, ØPHR, OUHB. (Receiver: AR88LF.)

3.5 mc

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

VE3GQ, WIAAH. THONE: VE3GQ, WIAAH, 1ASP, 1CMP, 1CMP, 1MNM, 2EG, 2EOV. 2EPM, 2PAB, 3BFG, 3DPK, 3ESK, 3EUT, 3KRQ, 3LAJ, 4EL, 4IYT, 4KQQ, 4YZS, 8IKS, 8OHZ. (October 17-20, 0630-0800 BST. Receiver: 0-V-1.)

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

'PHONE: WIAI, IAW, IBHE, IDAF, IKTE, ILNI, 2AFY, 2ENZ, 2PJF, 2RUI, 3HN, 3SCB, 4JND, 8RHZ, 9ECH, VEIGR.

E. Alfrey, 45 Rusthall Avenue, Bedford Park, Chiswick, London,

2100 GMT. Receiver: V55R.)

D. F. Willies, The Wilderness, Grove Road, Holt, Norfolk.

'PHONE: D2AV, 2DB, 2DY, 2FI, 2GX, 2HL, 2IA, 2IH, 2IQ, 2IR, 2KW, EI2P, 6J, 8J, 8L, PSBD, HB9HK, LX1BT, OH1OD, OK1SW, ON4BW, 4CC, 4EDB, 4FB, 4IE, 4JN, 4KD, 4KL, 4LV, 4REM, 4SA, 4SET, 4SF, 4TB, 4ZL, OZ1AJ, 1K, 3IB, 3IP, 6AA, 6AP, 7JC, 7KB, 7NC, SM6NZ, VE1GR, WIERX.



SWL STATIONS

No. 6

ILLUSTRATED is the station of H. Christopher, 55 Spring Gardens, Anlaby Common, Hull, E. Yorks.

The main receiver is a Hallicrafter SX-24, which has five switched bands covering 540 kc to 43.5 mc and is fitted with all the usual refinements. The large scale S-meter is found very useful for giving comparative signal strength reports. The speaker is a 6-in. Wharfedale.

A home-built power pack is provided for general purpose use; next to this is an ex-Government Class "D" Wavemeter, which has been converted to run off AC.

Other equipment includes a home-built 2-valve preselector, two EF-39 valves. working into the stand-by receiver which is an RCA straight 4-valve set. There is also an Eddystone 2-valve Rx with two Mullard E-series pentode valves, which is used chiefly for the reception of local amateurs on the 160-m band. Mounted at the top of the rack is an 8-in. P.M. speaker, which can be plugged into whichever set is in operation.

Two aerials are available; the main one, which is erected in the garden at the back of the house, is a single wire inverted-L, 75-ft. long and 25-ft. high.

A second single wire, 25-ft. long, in the loft, is used chiefly on the standby receivers.

H.C. is an architect by profession and has been interested in radio since the old crystal days in the 20's. He first became converted to short-wave reception in 1936, after visiting a local amateur transmitting station. H.C. is on the Committee of his local radio society.

Results from the station are very good and H.C. hopes to graduate to a transmitting licence in the near future. We are sure all readers will wish him luck and congratulate him on a very nice outfit.

OSL BUREAU NOTE

Our QSL Bureau holds cards for the SWL's named below; as we are without their addresses, these cards cannot be delivered. Please send a stamped addressed envelope to BCM/QSL, London, W.C.1, when the cards will be forwarded on the next clearance. BRS-2270, BRS-3085, BRS-14769, DE-1693, GPZ-E4, GPZ-E5, REF-4562, Jony and G. Ashman.

WHAT ABOUT YOU?

If your subscription is due, you will have received the renewal notice with your copy. To ensure continuity, please deal with the matter straight away! It is only necessary to return the renewal notice with your remittance.

PSE QSL

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.

AR8AB P.O. Box 293, Université St. Joseph, Beyrouth, Liban. On 14300-14400 kc VFO-controlled 'phone, after 1900 GMT; and on 28440, 28481 and 28700 kc 'phone after 1230 GMT.

CN8BB 81 Rue Galilee, Casablanca, French Morocco. Operating 14350-14400 kc 'phone 1400-1700 GMT, and occasionally on 28200 kc during period 1400-1600 GMT.

D2IQ No. 1 Wireless Regt., Royal Signals, B.A.O.R.3. Reports particularly wanted on 1.7 mc CW transmissions.

F3IG 30 Avenue Emile Zola, Saint-Maur, S., France. On 7150, 14300 and 28600 kc 'phone, mornings and evenings.

F9BA 15 Rue Martin Garat, Paris XXe, France. Operating 'phone on various frequencies in 7, 14 and 28 mic bands, 1300-1340 and 1830-0001 GMT

daily; also on 58.5 mc with CW and 'phone.

G2AHG Plas Newydd, Stoney Bank Road, Thongsbridge, Huddersfield, Yorks. QSL's 100 per cent. for reports on 3.5, 7 and 14 mc CW and 'phone; usual frequencies 3523, 7046, 7080, 7173, 14092, 14160 and 14346 kc.

G2BMI 27 Oakleigh Road, Hillingdon, Middlesex. Reports wanted on 1875 kc transmissions (over 25 miles distant); 7109 and 14218 kc (over 50 miles) and any distance for transmissions on 58 mc

band; CW operation only.

G2CWL 22 Rack Field, Haslemere, Surrey. Operating phone on various frequencies in 28 mc band, during evenings and at week-ends.

G2FZO 4 Fair View Terrace, Moreton-In-the-Marsh, Glos. Reports from outside U.K. on 3.5 mc 'phone and CW, and from outside Europe on 14 and 28 mc transmissions; operating periods 0600-0730 and 1700-2300 GMT; using VFO on 14 mc.

G3AHB 19 Burlington Avenue, Slough, Bucks. VFO-controlled 'phone in bands 7000-7150, 14200-14400 and 28200-28700 kc, operating 1900-2300 GMT daily and during week-ends.

149 Lessingham Avenue, Tooting, London, 17. Reports on CW transmissions on 7016 G3CAS S.W.17.

7055, 14032 and 14110 kc.

G3CJC 3 Birdwood Grove, Fareham, Hants. Reports wanted on CW transmissions on 3.5, 7, 14, 28 and 58 mc bands; please enclose S.A.E.

G3COT 56 Strafford Road, Barnet, Herts. Will QSL all useful reports on 7 and 14 mc CW transmissions.

G3CSE 568 James Reckitt Avenue, East Park, Hull, Yorks. All reports (any distance) on 3.5 mc CW Monday-Friday 1830-2200, and Saturday-Sunday 1400-2359 GMT.

G3CSL 18 Leinster Road, Old Swan, Liverpool, 13. CW operation on 7015 and 14030 kc; reports welcomed from outside U.K., and particularly from ZS on 14 mc signals; operating times irregular.

G31M 17 Links Road, Blackpool, Lancs. All reports from over 1,000 miles on 14 mc 'phone transmissions during Thursday every week will be acknowledged.

G5LP 22 Second Avenue, Wellingborough, Northants. Reports on 3.5, 7 and 14 mc CW, operating 1800-2000 GMT.

HA8PE Pestszentersebet, Budapest, Akacfa Utca 46, Hungary. Reports on 14 and 28 mc CW. HB8VX Steinenvorstadt 50, Basel, Switzerland. Operating 'phone mainly on 3.5, 7, 14 and 28 mc bands.

HB9GN Villa Cecil la Riollaz, Payerne, Switzerland. Reports wanted on 14000-14100 kc CW.

KH6lJ ARRL KH6 QSL Bureau. Operating VFO-con-trolled 14 mc 'phone and CW, 0600-0800 and 1900-2000 GMT.

LASX P.O. Box 898, Oslo, Norway. Reports on

14 mc 'phone.

LX1AC Rue Pierret 1a, Luxembourg. 'Phone opera-tion on 7000, 7007, 7140, 14159, 14250, 14300 and 28450 kc, also 56 mc band, during periods 1230-1400 and 1800-2230 GMT.

OKIAW Mestec Kralove 9, Czechoslovakla. On 3530, 28000, 28066, 28100 and 28154 kc, also on 56 mc band, during Saturday and Sunday after-

noons; operating on 3.5 mc after 2100 GMT.

OK1PN Kutna Hora, Hlouska 350, Czechoslovakia,

VFO-controlled CW on 3.5, 14 and 28 mc bands, operating 0400-0600 and 1600-21000 GMT.

OKIUY Horni Cernosice, Masarykova 142, Czechoslovakia. Reports wanted on CW transmission,

3500-3635 ke, operating 2000-001 GMT.

ON4RG 84 Rue de l'Eglise, Humbeek, Belgium.
Operating 'phone on 3·5, 7, 14 and 56 mc bands from 1830 GMT daily.

OZ2CW Ringstedvel 33, Hasler, Denmark. Operating phone in the 3700-3800 ke band, 1600-2200 GMT daily.

OZAWF Molle Alle 21·1 th, Copenhagen, Denmark. CW on 14022 and VFO-controlled on 14140-14292 kc, 0500-2300 GMT daily.

PAOCE Marnixkade 39, Amsterdam C, Holland. Reports on VFO-controlled 14 mc CW.

PAOCT Thomas a Kempisstraat 151a, Zwolle, Holland. Operating CW and 'phone on 3612 kc, during periods 1700-1900 and 2130-2200 GMT dally.

SUIKK clo 40 Elkesley Road, Welbeck Colliery, Mansfield, Notts. Station now QRT, but SWL reports requested on any signals heard on 14 mc during period November 1946-January 1947, when special aerial tests were being carried out.

VEIRP 20 Compton Avenue, Halifax, Nova Scotia, Canada. VFO-controlled CW on 1400-14200 kc, operating during periods 0900-1000 and 2100-2300 GMT.

VE7ZM Box 909, Dunçan. British Columbia, Canada. Operating CW and 'phone on 7, 14 and 28 mc, VFO-controlled; all genuine reports QSL'd.

VK3ND Farnsworth Street, Castlemaine, Victoria, Australia. Operating 'phone and CW on various frequencies in 7, 14 and 28 mc bands, during normal DX periods.

VP4TU 73rd AACS Gp., APO 869, clo P.M., Miami, Fla., U.S.A. VFO-controlled 'phone and CW at HF end 14 mc band and LF end 28 mc; 100 per cent. QSL station.

VQ2JC P.O. Box 95, Kitwe, Northern Rhodesia.
Operating CW on 14100 kc and 'phone on 14150 kc, mainly during period 1500-2100 GMT daily.

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W6WLY 201 Prospect Avenue, Long Beach 3, California, U.S.A. Operating VFO-controlled CW on 14 mc, also spot on 28000 and 28100 kc, during periods 1600-0200 GMT (28 mc) and 0200-0800 GMT (14 mc).

ZD4AL SIOMS Field, West Africa Signal Regt., Accra, Gold Coast. Reports wanted on VFO-controlled 14 mc CW, 1730-2300 GMT daily, and 28 mc 'phote, 1400-1600 GMT daily: Sunday operating periods 0900-1600 GMT.

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MONTHLY

DX broadcast

by

R. H. GREENLAND, B.Sc.

World-wide reception of Short Wave programmes

All who heard the special broadcast for readers of the Short Wave Listener from Stockholm on October 26 will agree that for style and manner of presentation little else could have been desired. The Swedish Broadcasting Service paid us a tribute in opening with an encouraging message from our Editor. The talks on Swedish Festivals and Sport indicated the many likenesses in the customs of this Scandinavian country and Great Britain; who knew, for instance, that tossing the caber is a game played only in Gottland (Sweden) and Scotland? The musical items, quaint folk songs and a Pastoral Suite by a modern composer provided soothing interludes. Finally, Mr. Arne Skoog's DX News was original and welcome. From the announcer's opening remark: "We are happy to have you with us," to the final reminder that all reports would be acknowledged by the Swedish Broadcasting Service, the programme was one of friendly greeting to all interested in shortwave radio. Thank you, Sweden! Reception reports of this broadcast are acknowledged from a large number of readers at home and abroad.

The writer has lately given considerable thought to what listeners really want in short-wave broadcasting, judging from the various points which have arisen in recent correspondence.

There are undoubtedly two groups: The one requiring good entertainment under reasonable conditions; the other consisting of individuals who spend a session at their receivers in the hope of logging some distant and probably a somewhat insignificant DX station.

If you are one of the former, then it is for you that we endeavour to provide an accurate Programme Periods Column each month. Obviously, these cannot be infallible, as witness the case of the United States short-wave broadcasting system: the call sign of one of their stations operating on a particular frequency in November will not, in all probability, be

the same for the identical channel in December.

From DX enthusiasts may I ask for an even greater number of reports. These should not merely give a reference to the date, time, frequency and signal strength of the transmission. Send also a brief account of what was heard, and, if possible, the interval signal and actual station direction radiated.

GENERAL COMMENTS

This month I am choosing Asia, Africa and Latin America as the continents serving us with the greatest volume of DX news, and shall use what little space remains to comment on the remainder.

Asia

Various Far East broadcasting stations have changed their schedules and in some cases their frequencies. WLKS, Kure, Japan, has moved to 6065 kc (0800-1330); it is emphasised that all correct reports will be verified.

XNCR, Yenan, China, now occupies 6100 kc, and KZFM, Manila, mentioned by me last month as a new station, has already moved from 9515 kc to 11800 kc. XMAG, Nanking, China, is an elusive one to log on 4275 kc, with a schedule 0300-1500 (Weekdays) and 0001-1500 (Sundays). All reports should be forwarded to: The Army Advisory Group, A.P.O. 909, c/o Postmaster, San Francisco, California.

Postmaster, San Francisco, California.

Another Nanking station is XGOA, operated by the Chinese Central Broadcasting Administration, on 11835 kc.

Normally it signs off at 1415 and the news in English is timed for 1300.

XGOY, Chungking, on 11913 kc, can be received here reasonably well most days between 1400 and 1530. For more than 30 minutes on October 18, the writer listened to an excellent recorded concert provided by the London Philharmonic Orchestra, at the conclusion of which the Chinese speaker said: "This was the daily Symphony Programme. We hope you have enjoyed today's programme and will let us know." Then at 1500 he continued: "Good Morning and Good Evening! This is China calling Great Britain, Europe and the South Seas. XGOY, the Voice of China, presents the news." A highly ornamental orchestral fanfare preceded the reading in English of the news, first in headlines, and followed in detail.

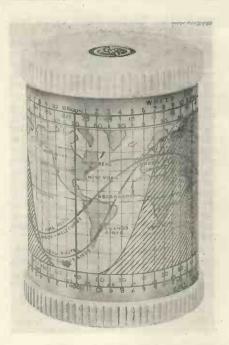
The writer also logged KZRH, Manila, with dance numbers and English announcements around 1415 the same afternoon. From Java, ah English news bulletin has been well received here at 1645. The frequencies were 18600 kc (PLA) and 19345 kc (PMA)—S9 signal strengths for

both.

The British Far East Broadcasting Service in Singapore has also adopted the new channel of 9690 kc. The writer located it on October 18 with news in English between 1415 and 1425. Earlier in the month the 6770 kc transmitter was fair at 1655, when tenor songs were noted on October 8. The best-heard signals from Malaya were, however, received from the Blue Network station of Radio Malaya on 4820 kc, around 1545 on October 18. Most clear were Frank Sinatra's words (recorded) as he sang: "A Friend of Yours." After the "pips" time signal at 1600, which was stated to be half-past eleven, came the reading of a news summary, followed by final announcements and "God Save the King."

All-India Radio provided me with an interesting comparison between stations in the 60-metre band on October 8, when VUD2, Delhi (4960 kc), VUM2, Madras (4920 kc), VUB2, Bombay (4880 kc), and VUC2, Calcutta (4840 kc) were all audible at 1645. Normally VUC2 closes down at October 3 saw VUM2 relaying 1630. speeches from Madras University at 1645 on the occasion of certain centenary celebrations in the city. VUD2, a week later, was logged between 1615 and 1645 with a "Brains Trust" in English, and VUB2 simultaneously had a talk on Economics.

From ZOH, the Ceylon Broadcasting Station in Colombo on 4900 kc, more transmissions have been logged, and all of them in English. On October 9 there were some fine readings of poetry included in a talk on Hilaire Belloc; and two days later, a BBC transcription of "The Debate



The Fisk Solariscope, designed by Sir Ernest Fisk and produced by E.M.I. It gives local time and daylight-dark conditions between any two places on the earth's surface and is thus an invaluable adjunct to the station. It is a good buy at one guinea.

Continues" was in progress at 1615, to be followed by dance music relayed from the Grand Hotel, Colombo, at 1630. At 1700, the clearly announced words: "Goodnight, Everybody, Goodnight' and the sounds of the National Anthem are significant closing features. My are significant closing features. My reference in the October number of the Short Wave Listener, to the elusive broadcasts in English from Burma are perhaps qualified by the following message just received from Rangoon: "Precautionary measures enforced in this city since the assassination of the Burmese leaders have led to the temporary suspension of all English 'line' programmes from the Burma Broadcasting Service. It is our earnest hope that conditions will improve day-by-day and permit the resumption of our Saturday evening studio item of 'Singing To You.' " The address of the Burma Broadcasting Service is now; 30 Lowis Road, Rangoon.

Coming westwards, Asharq-al-Adna broadcasts in Arabic from Jaffa have been logged again at excellent strength around 1700 on two frequencies, namely, 6790 kc

and 6135 kc. The new Arabic service from Damascus is now heard on 12000 kc at good strength during the early evenings, though recently Morse interference has made identification difficult. E. Strangeway (Malton, Yorks) remarks that JCKW, Jerusalem, 7220 kc, is a fairly easy signal to log until the close-down at 2100, though he admits that much QRM from KOFA is more than a nuisance! From FXE, Beirut, Syria (8036 kc), too, there have been interesting transmissions on occasions. The Lebanese Broadcasting Corporation frequently relies on relays from Paris for its French programmes. For instance, on October 9, at 0615, I was surprised to hear such phrases as "a la droit, a la gauche" and "a la gauche, en l'avant" interspersed with bright pianoforte and violin accompaniments, then realised that it was early morning jerks!

At 0630 came a gong note, the time signal, and the news in French, direct from Paris. On another occasion FXE was surprisingly strong at 0500 with a native Arabic programme.

Radio Tabriz, Azerbaijan, Iran, is apparently still on 12180 kc, for E. Strangeway heard it on this frequency on

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October 14 with news in English from 1800 to 1807.

Africa

Here, Cape Town justly claims first consideration. Operating on 5885 kc daily, its signals are not usually good, but October 8 was an exception when the news in English (from London) was perfectly audible at 2045. At the conclusion, the South African announcer said: "This is Cape Town," after which came a musical interlude before the impressive eleven strokes from Johannesburg's City Hall clock were heard at 2100. Then same the brief Epilogue in Afrikaans before the final English direction: "Cape Town calling! This is Cape Town now closing down until 6.45 a.m. to-morrow morning. Goodnight, everybody, Goodnight." The playing of two National Anthems: "Die Stem van Suid Afrika" and "God Save the King" is a distinctive concluding feature.

Of the Radio Club de Mozambique's stations, I have been able to trace one on 9645 kc (CR7BJ) and another in the 60-metre band on a new frequency of 4840 kc. A recording of the overture to Mignon was well received on the 4840 kc channel at 1730 on one occasion.

E. Strangeway (Malton) logged CR6RB Benguela, Angola, 9165 kc, with a mixed programme of gramophone recordings until the close-down at 1900 on September 16; the quality was, bowever, very poor.

In Madagascar, Radio Tananarive broadcasts regularly on the short waves over three transmitters in parallel on 6063 kc, 9669-kc, and 10615 kc. The broadcast hours are: 0345-0530; 0820-1045; 1420-1740. All reports should be sent to: Radio Tananarive, Office of the French High Commissioner, Tananarivo, Madagascar.

The better known French short-wave broadcaster in Central Africa, Radio Brazzaville, is particularly powerful on its 11970 kc frequency. Recently the writer heard it at 0350 one morning with the news in English, followed at 0545 by "Odds and Ends," another English feature.

W. J. Pye mentions a new one, but offers no times; he says: "Once or twice recently Praia, Cape Verde Isles, has been putting in a very good signal for its microscopic power on 6405 kc." Our information is that CR5AA, Praia, Cape Verde Islands, operates on 6400 kc (46.88 m) exactly, with a power of 30 watts,

on the following brief daily schedule > 2030-2200.

Latin America

The writer has now heard Radio Trinidad, VP4RD, broadcasting on 9645 kc, and not on the previously announced channel of 9625 kc. Reception between 2145 and 2210 on October 19 was reasonably good, with a selection of popular dance tunes before 2200, when a time signal was announced (by a man) as: "Six p.m. Trinidad Standard Time".

Then came a Children's Hour, with instructions how to play a new version of Old Mother Hubbard. The next evening at 2200 came the clear direction: "This is Radio Trinidad, Port-of-Spain, Trinidad, British West Indies, at the Crossroads of the Caribbean." Another treat was in store for October 21, when at 2045 VP4RD was heard with a running commentary on the cricket match then in progress between Jamaica and British Guiana. Though this concluded at 2100, the writer was fortunate enough to log a station on 15085 kc, which continued the commentary until the close of play at 2110. This was perhaps VRR6, Stony Hill, Jamaica. It seems probable that more will be heard from these and other British West Indian stations in the next few months, when the MCC tour will be in progress. Commentaries on the Test Matches will of a certainty be relayed. One final reference to VP4RD; it is understood that Radio Trinidad is to introduce a capital-Z as the prefix letter of its call sign. The operating schedules now are: Weekdays: 0100-0800; 1600-1800; 2100-2300. Sundays: 0100-0800; 1600-2300. The Voice of Guiana, ZFY, Georgetown, 6000 kc, was also logged at good strength on October 11 at 2315 with a broadcast from London featuring a visit to Radiolympia.

Here I shall digress, to include some valuable information about Latin American stations supplied by Dr. T. B. Williamson (St. Albans, Herts). Here are his efforts:—

CE8AA, Santiago, Chile, heard on 5800 kc at 2345 with call: "Radio Sociedad Nacional de Agricultura" followed by usual Latin American type of musical programme.

HCQRX, Quito, Ecuador, logged on about 5995 kc from 0100 to 0300 with an S7 signal and intermittent heavy CW QRM. Gave call every thirty minutes, preceded by a single chime, as: "La Voz de la Capital, Radio Quito."



A BC verification card received by R. Osbaldeston, Manchester.

HC1VT, Ambato, Ecuador, heard on 7000 kc at 0300 with a lady announcer. Closed down with the call "La Voz de Tunguragua" and the Ecuadorean Anthem.

ZPA3, Asuncion, Paraguay, 11870 kc, logged at 2345 with guitar songs (S4). The call is: "ZP3 y ZPA3, Radio Teleco."

OAX6E, Arequipa, Peru, 6335 kc, \$5 at 0430 with the call: "Radio Continental."

CXA3O, Montevideo, Uruguay, 6035 kc

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4-Valve I (Tuned) V.2.

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Particulars sent on request

SHORT WAVE (HULL) RADIO

30/32 Prince's Avenue, HULL

Telephone 7168

d-'L.

announces as Radio Nacional; and CXA3, Montevideo, 6075 kc, as Radio Ariel, and relays CXA10. Both are heard

around midnight.

HIIX, Trujillo, Dominican Republic, now on 6080 kc, broadcasts English-Spanish lessons, Monday, Wednesday and Friday, at 2315-2330. The direction is either: "La Voz de la Republica" or "Radiodifusora Oficiales." Signal strength peaks to S9. HI2T now uses 7275 kc and 11900 kc with the call: "Por la libertad y la democracia de las Americas transmite la Voz del Yuna en Cuidad Trujillo."

TGOA, Guatemala City, 6100 kc, heard regularly at 0500 with the call: "La Voz de las Americas. La Reina del Aire." XEOI, Mexico City, 6012 kc, can be heard after OAX4Q closes down, with swing music and call "Radio Mil" at 0500. HOLA, Colon, Panama, 9505 kc,

was logged at 0200 with an English programme (sponsored), and HP5B, Panama City, 6035 kc, was S7 at 0300 with the call: "Radio Miramar" and a news bulletin in Spanish. Congratulations, T.B.W.!

For my own part I have been hearing various South Americans, and have had some satisfaction in confirming some of

my previous logs.

In the first place, my unknown station mentioned in September and now ascertained to be on 5870 kc, is none other than CP15, La Paz, capital of the Republic of Bolivia. Radio El Condor, as it is termed, is an NBC station of the Pan-American network and operates 2330-0300 daily. Another station using the same frequency closes daily at 0400. This was mentioned in the August number, and with its male and female announcers

DX BROADCAST_CALLS HEARD

D. A. Pullen, 14 Lisle Road, Colchester,	Essex.
--	--------

1. 2. 3. 4. 5. 6.	October 7 October 7 October 7 October 8 October 8 October 11	1400 1430 1715 2130 1415 1430 2245	CKCX CKNC FZI WBOS VLA6 VLC7 VP4RD		Sackville Sackville Brazzaville Boston Shepparton Shepparton Port of Spain	15190 kc, S9 plus 17820 kc, S9 11970 kc, S7 15210 kc, S8 15200 kc, S9 plus 11840 kc, S5
8.	October 12	1000	KNBX		Dixon	9625 kc, S9 9490 kc, S8
9.	October 15	2100	VLC11		Shepparton	11210 kc, S9 plus
10.	October 15	2130	VLA8		Shepparton	11760 kc, \$8
11.	October 15	2145	VLB9		Shepparton	9615 kc. \$8
			F	₹x. R103	Mk.11 plus 3-stage Converter.	Aerial: 9 ft. vertical

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

1.	October 17	2055	VP4RD	Port of Spain	9625 kc. S7
2.	October 18	2245	LRS	Buenos Aires	9315 kc, S7
3.	October 19	1500	XGOY	Chungking	11913 kc. S8
4.	October 20	1800	VQ7LO	Nairobl	4860 kc, S7-8
5.	October 20	1925		Baden-Baden	6320 kc, S9
6.	October 20	2000	HNF	Baghdad	6782 kc, S6
7.	October 24	1815	HVJ	Vatican City	9660 kc. S9
8.	October 24	2245	ZFY	Georgetown	6000 kc, S7
9.	October 26	1530	VUD5	Delhi	9590 kc, S9 plus
10.	October 26	1600	SBT	Stockholm	15155 kc, S9 plus
				Rx. V5	

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

October 1	0130	XEHH	Mexico City	11880 kc. S8
October 3	1800	VUM2	Madras	9565 kc. S3
October 14	1700	K70K	Manila, P.I.	9690 kc. S4
October 14	2100	CR6RA	Luanda, Angola	9470 kc, S6
October 22	0410	CFRX	Toronto	6070 kc, S5
October 22	1415	KZRH	Manila, P.I.	9635 kc, S5
October 23			Port-au-Prince	6165 kc, S6
October 23			Port-au-Prince	5660 kc, \$7
		HRD2		6045 kc, S4
			Kuala Lumpur	6050 kc, S8
			Tananarive	6065 kc, \$5
October 25			Colombo	6075 kc, S6
				5800 kc, \$3
				7350 kc, S4
				7000 kc, \$6
October 27	0530	XEOI		6012 kc, \$5
			Rx. SH7 Aerial	: 100 ft. Inverted
	October 3 October 14 October 14 October 22 October 22 October 23	October 3 1800 October 14 1700 October 14 2100 October 22 0410 October 22 1415 October 23 2330 October 23 2345 October 25 0200 October 25 1600 October 25 1600 October 26 0045 October 26 0045 October 26 00130 October 26 00200	October 3 1800 VUM2 October 14 1700 KZOK October 14 2100 CR6RA October 22 0410 CFRX October 22 1415 KZRH October 23 2330 HHCM October 23 2345 HHCN October 25 1555 October 25 1555 October 25 1600 FIQA October 26 0045 CE8AA October 26 0045 CE8AA October 26 0130 HC2AN October 26 0200 HCIVT	October 3 1800 VUM2 Madras

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RADIO OPERATOR'S CHEST, CH.120A. enable you to keep all your BC.610 equipment together and to lock it up safely when not in use. Front drops down for use as writing desk or table; compartments for JB70, BC614, BC342 or BC312; pigeon holes for spares, books, loudspeaker, phones, mike, key, etc.; fitted with interior lamp. Alxo suitable for any Tx or Rx operator's gear. Size 48 in. × 22 in. × 7 in., £4/15/-, carriage 10/- extra.

ACCESSORIES for BC.610, including Handbooks, spares, headphones, microphones, keys. State your

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B. A complete set of nine spare Valves.

A set of eight spare Brushes for the Dynamotor D. Four spare Fuses and two spare Dial Lamps.

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and fading siren as closing signal at 0400, you can scarcely fail to find it. I suggest this one is TIGPH, San Jose, Costa Rica, recently returned to the air (little has been heard of it since pre-war days) with the

slogans: Alma Tica and Reina del Aire. Twice have I logged an excellent transmission on 4720 kc. On October 3 at 0330, it was the best of all the Latin Americans, with a commentary in Spanish of some sporting event. Again, on October 10 at 0310, it was the best signal in the best short-wave broadcasting band at this time. Good orchestral music continued until 0335, then vibraphone notes were noted and a slogan which appeared to be: "Radio Confidente." The station then closed with the playing of a march which was certainly not the Ecuadorean Anthem. which would seem to indicate that it was not HC2ET, Guayaquil, on 4715 kc. HC4EB, Radio Manta, 6870 kc, was audible, however, with a Spanish talk at 0335 on October 3. In Peru, my best were OAX4V, Lima, 5915 kc, with orchestral works at 0345, and the ever-present OAX4Z, 5895 kc, with an exquisite recording of: "Just a Song at Twilight" before the close at 0425. Chile provided

CE1180, Santiago, 12000 kc, with tenor songs at 2205 on October 9; and Paraguay came into the picture the same evening at 2145, with ZPA5, Asuncion, putting in an excellent signal on 11945 kc. The programme included baritone and soprano songs and light orchestral pieces, and at 2200 came the eagerly awaited direction in Spanish: "Radio Encarnacion transmite Rio Grande" preceded by a series of vibraphone notes.

LRR, Rosario, Argentina, 11880 kc, was equally prominent on this band, with a Spanish news at 2205. Radio Belgrano was mentioned in the direction at 2210, indicating that LRR is actually associated with this network. CXA10, Montevideo, Uruguay, 11900 kc, was my final check on October 9, when it was heard at 2225

with a talk in Spanish.

Venezuelan stations are perhaps best heard in the 60-m band. The outstanding has been YV5RU, 4880 kc, with call: "Ondas Populares (popular waves) Caracas" at 2300 on October 11. YV1RV Maracaibo, 4752 kc, was poor by comparison, with marimba music at 0325 the previous day. In Colombia, a most reliable station is HJCT, Bogota, on

6200 kc, announcing as: "Radiodifusora Nacional." The news in Spanish can be heard at 0410 daily, and it closes with the National Anthem of Colombia at 0430. Good music has been heard on 4855 kc

from HJCA at 0440. This is Radio Cristal, also in Bogota.

YSR, San Salvador, 6270 kc, is still a good morning catch with orchestral music between 0400 and 0500. On October 10,

PROGRAMME PERIODS

I. GMT 0700-0830. Schwarzenburg, Switzerland, 11865 kc (25.28 m.) Announcement: This is 0715 HER5 the SBC, the Swiss Broadcasting Cor-poration. Programme Summary, followed by News in English. Shepparton, Australia, 15200 (19.74 m). News from Australia. 0730 VLA6 0800 FXE Beirut, Syria, 8036 kc (37.34 m). Orchestral music.

Mitteldeutscher Rundfunk, Leipzig, 9730 kc (30.83 m). Gong indicating 0830 Programme summary time-signal. in German.

II. GMT 1300-1400.

1310 VLR Lyndhurst, Australia, 9540 kc (31.45 m), BBC News at 1300. ABC News at 1310, then News for the Inland and Islands. Radio Andorra, Andorra la Vieja, 5980 kc (50·16 m). Station direction 1330

in Spanish. Swing music. Chungking, China, 11915 kc (25.18 m). 1345 XGOY Western music including vocal numbers.

III. GMT 1600-1800.

1600 Radio Malaya, Singapore, 4820 kc (62.24 m). Conclusion of Dance (Sats.) Time signal followed by the Session. direction: "This is the Blue Network of Radio Malaya." News Summary, God Save the King and Close down.

1630 British Far East Broadcasting Service, Singapore, 6770 kc (44.31 m). Dance Music

Sackville, Canada, 15320 kc (19.58 m). Canadian Chronicle. 1645 CKCS (Mon. to Fri.) 1730 Radio Omdurman, Sudan, 13320 kc Colonel Bogey March, followed by (Fri.) News in English (Weekly).

1745 TAP Ankara, Turkey, 9465 kc (31.69 m). News in English.

IV. GMT 1830-2030.

1830 WNRX New York, 21730 kc (13.81 m). The Voice of the United States of America (Fri.) presents: "This Land and Its People." 1845 FZ.I Brazzaville, French Equatorial Africa, 11971 kc (25.06 m). World News in English.

1900 WBOS Boston, Mass., 15250 kc (19.66 m). Armed Forces Radio Service : Coming Events.

Marques, Mozamorque, 1930 CR7R.I Lourenco 9645 kc (31·10 m). Vibraphone notes before direction in Portuguese. Light Orchestral Concert.

VLA8 Shepparton, Australia, 11760 (25.51 m). Melbourne Post Office Kookaburra. Station Clock. nouncements. Orchestras of Australia.

V. GMT 2100-2300,

2100 WRUL Boston, Mass., 15290 kc (19.62 m). Financial News. 7860 kc (38 17 m). 2115 SUX Cairo, Egypt, Native music. 2130 Radio Falange, Alicante, Spain, 7940 kc (37 78 m). "Lili Marlene" and similar recordings Sofia, Bulgaria, 9350 kc (32-09 m).

2145 News in English. 2200

VP4RD Port of Spain, Trinidad, 9645 kc (31-10 m). Direction: "This is Radio Trinidad, Port of Spain, Trinidad, British West Indies." Time signal for

The Voice of the Andes, (Ecuador, 12455 kc (24.08 m). 2215 **HCJB** (FrL) Mail Bag."

2225 VONH St. Johns, Newfoundland, 5970 kc (50.25 m). True Nature and Sea Stories (Sponsored broadcast). Call at 2230: "VONF and VONH at Saint Johns." A fragment from the Morse code preceding the News of the World.

TABULATED SCHEDULES

Radio Maroc. CNR3, Rabat, French Morocco.

0645-0900 9082 kc. 1820-2400 16666 kc. 1200-1430

The Voice of America in Manila. H. 11840 kc.

Department of State, Office of Information and International Affairs, International Broadcasting Division, c/o American Embassy, Manila.

Daily. 0900-1505. 0900-1110 Broadcast in English to China.

1100-1200 Chinese. 1200-1215 Malayan.

1215-1230 Dutch. 1230-1300 Korean.

1300-1315 French. 1315-1350 Annamese.

1350-1400 Siamese.

1400-1505 Broadcast in English to the Dutch East

Ш. Radio Nacional de Guatemala. de Guatemala. TGWA, TGWB. Short Wave.

Service Schedule Call Fre-Wave-Power quency Length

Commercial 1230-2000 TGWA 15170 kc 19.78 m 10 kw

2300-0515 TGWA 9760 kc 30.73 m 10 kw Cultural

1800-2000 TGWB 6440 kc 46.58 m 1 kw ° 2300-0430 TGWB 6440 kc 46.58 m 1 kw

British Far East Broadcasting Service, Singapore.

21720 kc, 13.81 m. 0530-0600 : 0800-1030 Additional daily Service. News in English at 0900.

A frequency of 15300 kc (19.61 m) is used in parallel for the 0800-1030 transmission.

the writer logged it at 0445 with Schubert's Unfinished Symphony. It closed with Spanish directions and a Sousa March

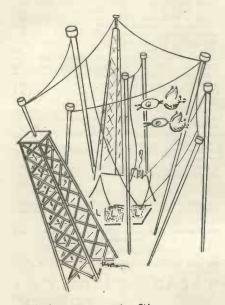
at 0505

HIIN, La Voz de Partido Dominicana, on 6245 kc, can sometimes be heard with political harangues in Spanish around 0445. On these occasions it closes down as late as 0500. Two Cubans have caught my attention: COCW, Havana, 6324 kc, provided typical dance music at 0340 on October 3, and COBZ, Radio Salas, Havana, 9026 kc, demonstrated in the same manner before 0555 on October 9. Before the close at 0600, there was frequent mention of Radio Salas, with a bugle call as interval signal, and an announcement in Spanish of the box number to which reports should be addressed.

Australia, Europe and North America

Radio Australia's evening transmission to the British Isles is now heard over three transmitters: VLB9, 9615 kc, VLA8, 11760 kc, and VLC11, 15120 kc. Best reception at the moment appears to be either on the 31-m or 25-m band channels. On October 28, the writer logged VLB, 9540 kc, at 1400 with a news bulletin in English during the daily broadcast to the Eastern States of North America.

In Europe, the writer has noted a topical talk in English from Sweden at 1515 on



Obviously an amateur station, Sidney.

Sundays. Your station would be SBT Motala, on 15155 kc with its regular broadcast to the United States of America.

Two readers have made some interesting observations on Radio Andorra M. Brown-Greaves (Rudgwick, Sussex) maintains that the station's announcement of its wavelength as 50 metres is inaccurate, for he has checked the frequency by wave-meter and found it to be 5980 kc. This is confirmed by A. W. Gilbert (Fordingbridge, Hants) who notes that sometimes the announced wavelength is 50·16 m; the daily programme in English is 2415-2330. A.W.G. kindly sends in the schedule for La Voz de Guatemala, and this has been included in the Tabulated Schedules column.

From the United States, early October's highlight was the annual World Series Baseball Championships in which the New York Yankees and the Brooklyn Dodgers figured. The most reliable station carrying these commentaries was WRCA, New York, on 15150 kc.

W. J Pye has logged various Pacific coast transmissions, including KWID, San Francisco, 11900 kc, with choral music at 0845. At 0900, KWIX, 11890 kc, commenced its daily schedule, and both gave dictation news in English. Both stations work in the American Armed Forces Radio Service. He has logged KNBI, 11790 kc, at 0915 with a Radio Forum dealing with the Telecommunications Conference at Atlantic City. 11730 kc, was heard simul-KGEX, taneously with the same programme. W.J.P. further states that CHOL, Sackville, Canada, 11720 kc, carrying the CBC programmes for the Pacific, was S8 right through to the close at approximately 0915. Might I add that this is a Sunday service commencing 0745, and that another transmitter, CHLS, 9610 kc (31.22 m) is also utilised. E. Strangeway 9610 kc (Malton) has heard KCBR, 9750 kc Sundays 0900-1100, and KCBA/KCBF, 9700 kc, and KRHO, 15250 kc at the same time. On October 25, the writer checked up on the last named, logged with the following clear direction at 1000: "This is KRHO, Honolulu, operating on 15.25 mc in the 19-m band." A summary of world news was followed by a commentary on press opinions in the United States.

Some late news comes from a number of readers. D. O. French (Norwich) has received a detailed schedule from FZI; English broadcasts are given from Brazzaville at 0530, 1215, 1845, 2045, 2215 and

0001. He puts in a useful list of All-India Radio broadcasts; these will be tabulated

in our next number.

D. A. Pullen (Colchester) was surprised to hear KNBX, 9490 kc, between 1000 and 1100 recently; he, too, has logged VP4RD, 9645 kc, reception of which was best after 2200. I. E. Alfrey (Chiswick, W.4) reports varying strengths in the signals of this station, and has logged LRS, Buenos Aires, 9315 kc, with direction in Spanish at 2300. He mentions HVJ, 9660 ke, with an English broadcast on Fridays at 1815 entitled: "The Sacred Heart Programme." Reception reports are invited. On October 12 at 2100 he logged CR7BJ, 9645 kc, with the call: "Radio Lourenço Marques"; listeners were asked to try the 60-m and 86-m bands to see which suited them best.

There is another pile of news from Dr. T. B. Williamson (St. Albans): unfortunately much of this must wait until

next month.

He mentions a station heard on 9570 kc at 1300 with news in English from the BBC, and which closes down at 1400. This seems to be VLH3, Melbourne, 9580 kc, carrying the ABC National programme. The writer has heard the English news followed by an Australian local news at 1310. T.B.W. would like some Set Listening Periods for a definite frequency range of the short-wave broadcast bands at a given time. Would others welcome this new departure?

Finally, remember that all correspondence for comment in the January number must be received not later than November 30, and please limit your DX Broadcast Calls Heard items to twelve in number. Write R. H. Greenland, c/o Short Wave Listener, 49 Victoria Street, London, S.W.1.

READER CIRCLE

If you are renewing your subscription direct with us, or having one for the first time, you are entitled if you so wish to have your name and address printed in the Reader Circle. The main object of this feature is to facilitate personal contact between readers living in the same or neighbouring localities. But insertions are only made at the direct request of the individual concerned. So when writing for your subscription, please say whether you wish your QTH to appear.

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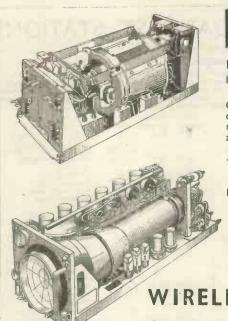
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Revision 41.61-50-12 Metres

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 observation.

Fre-	Wave		and are different	The Tree	Wave		
quency		Callsign	Location	Fre- quency		Callsign	Location
7210	41·61	GWL	Daventry.	6165	48 66	HER3	Berne, Switzerland.
7167	41.86	HI8Z	Santiago, D.R.	0103	40 00	TILS	San Jose, Costa Rica.
7165	41.87		Moscow.			HHCM	Port au Prince, Haiti.
7153	41.94	XGOY	Chungking, China.	6160	48 . 72	HJCD	Bogota, Colombia.
7126	42-08		Hargeisa, Brit.	0.00			Moscow.
			Somaliland.	6155	48.75	EOB	Teheran, Iran.
7120	42.11	GRM	Daventry.	6152	48.76	CE615	Santiago, Chile.
7054	42.53	CR6RF	Benguela, Angola.	6150	48.78	VLR2	Lyndhurst, Australia.
7005	42.85	FETI	Valladolid, Spain.			VUB2	Bombay, India.
7000	42.86	HCIVT	Ambato, Ecuador.			GRW.	Daventry.
6980	42.98	FO8AA	Papeete, Tahiti.		40.00		Vienna, Austria.
6010	42.42	MIO	Moscow.	6145	48.82	HJDE	Medellin, Colombia.
6910 6870	43.42	YNQ HC4EB	Managua, Nicaragua. Manta, Ecuador.	6140 6135	48·88 48·90	HNU	Moscow.
6860	43.73	TGRB	Guatemala City.	0133	40.30	HNU	Baghdad, Iraq. Jaffa, Palestine.
6850	43 80	YNOW	Managua, Nicaragua.	6130	48-90	CHNX	Halifax, N. Scotia.
6790	44.18	211011	Jaffa, Palestine.	0130	40.30	COCD	Havana, Cuba.
6770	44.31		Singapore, Malaya.			COCD	Monaco, Monte Carlo.
6758	44.39	YNVP	Managua, Nicaragua.				Moscow.
6700	44.78	YNCNN	Managua, Nicaragua.	6125	48.94	HS8PD	Bangkok, Siam.
6680	44.91	YNMA	Managua, Nicaragua.	6120	49.05	LRXI	Buenos Aires, Argentina.
6635	45·21	HC2RL	Guayaquill Ecuador.			XEUX	Mexico City.
6630	45.25	HIT	Trujillo, Dom. Rep.			OIXI	Heisingfors, Finland.
6620	45 32	TG2	Guatemala City.	6115	49.06		Hamburg, Germany.
6548	45.81	YNBH	Managua, Nicaragua.	6110	49.13	GSL	Daventry.
6485	46.26	HI2T	Monsenor Nouel, D.R.		10.15	VUD3	Delhi, India.
6450	46.51	COHI	Santa Clara, Cuba.	6105	49.15	WLKS	Kure, Japan.
6440	46·58 46·65	TGWB HIIR	Guatemala City.	(100	49.20	HJFK .	Pereira, Colombia.
6430 6420	46 73	OAX4G	San Cristobal, D.R. Lima, Peru.	6100	49.20	ZYB7	Warsaw, Poland.
6405	46 84	TGQA	Quezaltenango, G'la.	6095	49.22	ZIB/	Sao Paulo, Brazil. Johannesburg, S.A.
6400	46.88	CR4AA	Prai, C. Verde Is.	6090	49.30	LRY1	Buenos Aires, Argentina.
6390	46.95	HI9B	Santiago, D.R.	0030	47 50	CBFW	Vercheres, Canada.
6385	46.99	HIIX	Trujillo, Dom. Rep.			021	Tabriz, Iran.
6370	47.08	CSX	Lisbon Portugal.				Luxembourg.
6368	47.11	OAX4H	Lima, Peru.	6085	49.33	VUM2	Madras, India.
6350	47.24	HRPI	San Pedro, Sula,	6080	49 36	WLWO	Cincinnati, Ohio.
			Honduras.				Frankfurt, Germany.
6345	47.28	HE12	Berne, Switzerland.	6075	49 38	SEAC	Colombo, Ceylon.
6330	47.40	OAX6E	Arequipa, Peru.	6070	49.42	CFRX	Toronto, Canada.
6325	47.43	COCW	Havana, Cuba.	6065	49.50	SBO	Motala, Sweden.
6315 6312	47·50 47·52	HIIZ	Baden-Baden, Germany Trujillo, Dom. Rep.	6063 6060	49.48		Tananarivo, Madagascar. Rome, Italy.
6280	47.77	HCJB	Quito, Ecuador.	6055	49.55	CXA14	Colonia, Uruguay.
6275	47.80	ZPA1	Asuncion, Paraguay.	0055	47 33	XLRA	Hankow, China.
6270	47.85	YSR	San Salvador.	6050	49.60	GSA	Daventry.
6255	47.96	TGRA	Guatemala City.			XRRA	Peiping, China.
6250	48.00	YSUA	San Salvador.				Moscow.
6245	48.05	HIIN	Trujillo, Dom. Rep.	6040	49.67	WRUA	Boston, Mass
6240	48.07	HJCF	Bogota, Colombia.	6035	49.71	CXA30	Montevideo, Uruguay.
6220	48.23	HJFB	Manizales, Colombia.		10 55		Rangoon, Burma.
		CE622	Santiago, Chile.	6030	49.77	XEKW	Morelia, Mexico.
6010	40.33	OAX4M		1.0		HP5B	Panama City.
6210 6208	48·32 48·3 5	FK8AA	Bucharest, Roumania. Noumea, N. Caledonia.	6028	49.77	IRF	Rome, Italy.
6204	48.35	YV6RD	Bolivar, Venezuela.	6025	49.77	PGD	Johannesburg, S.A. Hilversum, Holland.
6200	48.38	HICT	Bogota, Colombia.	0023	47.10	FGD	Brazzaville, F.E.A.
0200	40.90	LIJOI	Tangier, Morocco.			ZP14	Villarica, Paraguay.
6195	48.45	HIIA ·	Santiago, Dom. Rep.	6020	49.83	XEUZ	Veracruz, México.
6190	48.50	VUDIO	Delhi, India.	6018	49.84	HJCX	Bogota, Colombia.
1		HVJ	Vatican City.	6015	49.87	PRA8	Recife, Brazil.
			Jaffa, Palestine.	6010	49.90	CJCX	Sydney, N. Scotia.
			Saigon, Indo-China.			OLR2A	Prague, Czechoslovakia.
6185	48.50	HIL	Trujillo, Dom. Rep.			OAX4Q	Lima. Peru.
	1 1 1	LLI	Frederikstad, Norway			VUC2	Calcutta, India.
6180	48.55	GRO	Daventry.	6007.	49.94		Johannesburg, S.A.
44.55		LRM	Mendoza, Argentina.	6005	49.96	CFCX	Montreal, Canada.
6175	48.60	HI9T	Puerto Plata, Dom. Rep.			HP5K	Colon, Panama.
*****	40.00	XEXA	Mexico City.	***************************************	FO 00	77777.	Dornbirn, Austria.
6170	48 - 62	VPD2	Suva, Fiji.	6000	50.00	ZFY	Georgetown, B. Guiana.
		CXA21	Montevideo, Uruguay. Jaffa, Palestine.	5986	50.12	PR13	B. Horizonte, Brazil.
			sand, Faicsunc.	3700	30.12	LK31	Buenos Aires, Argentine.



Midget Receiver - MCR.1

The Receiver as shown is with mains operated power pack for 95-250 volts AC/DC. It is a "straight" set and the frequency is 150 kes. to 15 mcs. The wave-band is changed by one of four boxes of coils which plug on to the receiver. Each box has a calibrated scale which corresponds with the tuning scale. The output signal will work the head-phones on reception of even the weakest signals and throw-out aerial and earth lead, together with carth-connecting clip, are provided. Each receiver is brand new and packed in its original box. Price £9/15/plus 5/- carriage and packing.

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m/a, and has innumerable uses. A hand moves around a circular dial like a minute hand on a clock and "clicks" 120 times for one complete revolution. For one quarter of the scale, an exterior circuit is completed which can be used for setting off an alarm, relay, etc. Any number of these can be used in series to give multiples of 120 movements. Price is 5/- plus 1/- carriage and packing.

We still have a few of the American Aircraft Receivers made by Stromberg-Carlson for 24 volt operation and covering the medium waveband. Price £6 plus 5/- carriage and packing.

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- ★LYSTRON RECEIVERS. The famous and hitherto secret Klystron tube incorporated in a radar receiver unit, comprising 6 valves, as follows: 2 EF50, I 7475, I V1907, I Pen 46, and I CV29 (Klystron). New and unused. Specify type 192. Price only £3/12/6. Carriage paid.
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