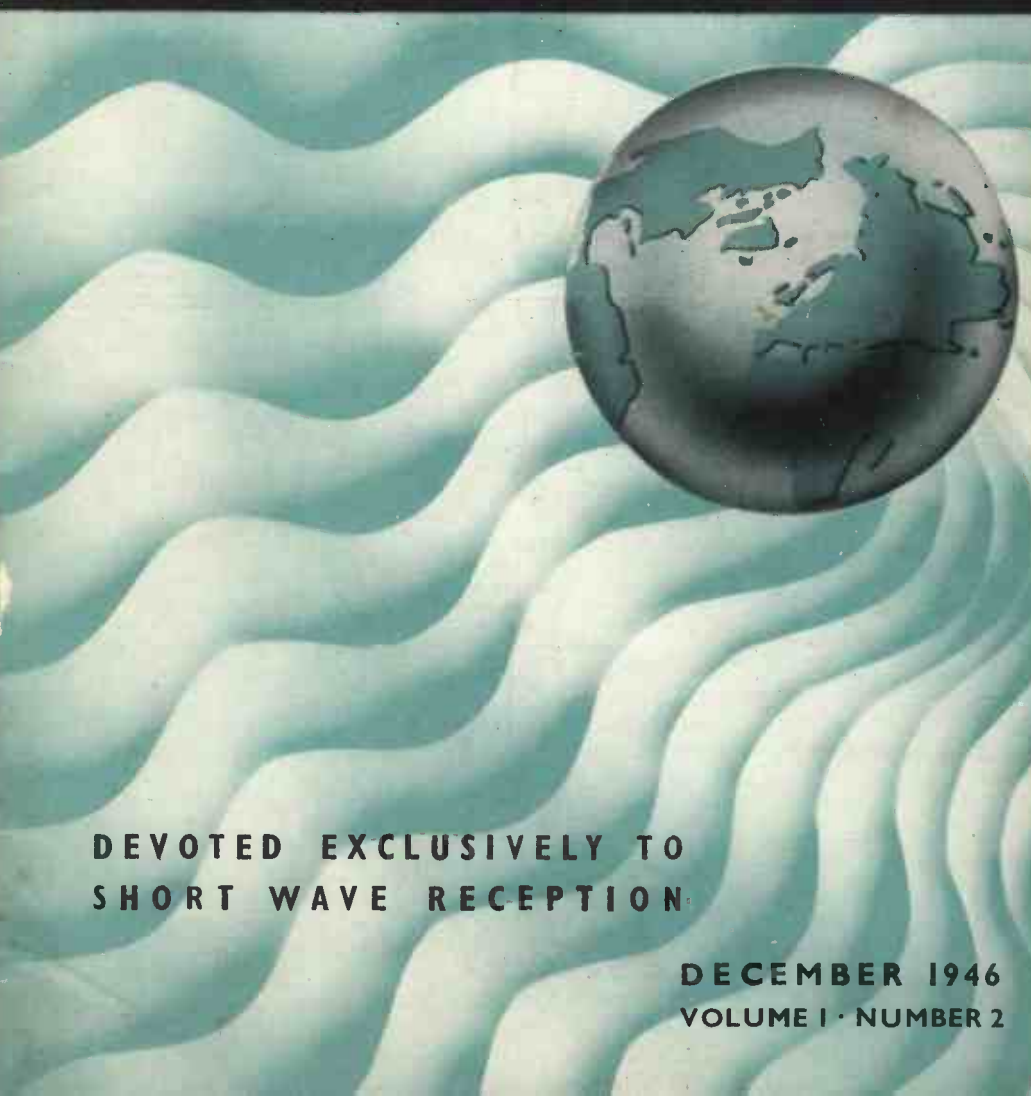


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DECEMBER 1946
VOLUME 1 · NUMBER 2

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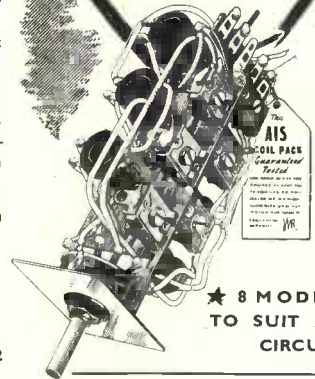
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THE SHORT WAVE LISTENER

A MONTHLY MAGAZINE FOR THE LISTENING AMATEUR

VOLUME I

DECEMBER 1946

NUMBER 2

Conducted by the Staff of
The Short Wave Magazine.

EDITORIAL

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Mushrooms

There is now a mushroom growth of so-called "national" and "international" radio clubs, leagues and societies. Some are merely American goodwill missions of obscure origin, offering membership on a no-fee basis and not pretending to provide any particular services for members. In other cases, fees are so low that it is difficult to see what services members can expect. For let it be said that an organisation seeking to give any service at all costs money, which must come from somewhere.

Most of these formations exploit the identifica-tion-number-and-beautiful-certificate-of-member-ship idea to attract members. The truth is that there is now so much of this sort of thing going on that the distinction apparently conferred by becoming a member of this or that society has become worthless and no longer carries the weight it undoubtedly did at one time—but that was fifteen or twenty years ago!

It is, however, true that there does exist ample scope in this country for one or, at the most, two well-managed and representative radio societies, organised on a national basis, providing adequate services for members, and run by individuals of standing with a sound grasp of the needs and interests of radio enthusiasts. In other words, those who while being keen on the thing for its own sake, know what they are doing.

This is a very different conception from the confused and confusing situation prevailing at the moment. Our advice to readers thinking of joining any sort of "national" society is that they first obtain what they feel to be satisfactory answers to these questions—If I join, how can I help? Who do I help? What help do I get? How is the organisation managed? Is a balance sheet published? An organisation which can give service has nothing to fear from such questions.

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TRY THESE CIRCUITS

TWO DESIGNS FOR THE EF50—FOUR STAGES WITH THREE VALVES

by

JUSTIN COOPER

WHILE doing some development on forthcoming *Short Wave Listener* and *Short Wave Magazine* receiver designs, the circuits described in this article were built up and tested in order to obtain performance data for the types, for future reference.

They are discussed here because, in their various categories, they are well worth the attention of readers who want to provide themselves with receiving equipment which, while involving the minimum of complication, is yet capable of giving good results on all bands.

The Pre-Selector

Years ago, what we now call a "pre-selector" would have been described as a tuned HF amplifier.

A pre-selector—which is a tuned RF stage used as an additional unit between the aerial and the receiver proper—confers many worth-while advantages: It will give a good degree of gain up to at least 30 mc with any type of receiver, straight or superhet; it will improve selectivity; and with superhets, or communications-type receivers with only one, or no, RF stage it will reduce second-channel interference to a marked degree.

If the receiver already has *two* tuned RF stages, as in the case of some of the better communications superhets, there is usually no great advantage in employing a pre-selector. The reason for this is that the noise input to the first detector (which is one of the critical factors in superhet design) will probably be increased out of proportion to the gain in signal strength. This is because in the ordinary way the signal-to-noise ratio is worsened as RF gain is increased.

It can in fact be shown that with valves of the normal types there is a practical limit to the degree of RF amplification that can be allowed before the first detector.

So much for some of the practical pros and cons of pre-selection. Suffice it to say that if you have only one, or no, RF stage in your receiver (whether straight or superhet), the use of a pre-selector is a safe bet.

A Regenerative Pre-Selector

Now look at Fig. 1. This is a *regenerative* pre-selector built round the Mullard EF50, an excellent valve for HF and VHF work which, after distinguished war service, is finding many useful amateur applications.

The particular merit of this circuit is that it is a little more than a tuned RF stage. By making the valve regenerative—that is, bringing it near but not *to* the point of oscillation—a large gain can be achieved with much improved selectivity.

The disadvantage of the arrangement is that the tuning on C1 becomes more critical; however, by setting R4, the regeneration control, at a convenient value, normal tuned RF operation can be obtained without regeneration. This need only be employed for extra gain and selectivity, and on most signals will not be necessary. In practice, it will be found that the regeneration feature is a very useful adjunct when trying to bring up weak signals, though it will tend to overload the first detector with the general run of stations.

The EF50 performs excellently in this circuit, all values for which are given in the appropriate table. Coils L1/L2 can be as normally used for the bands required, and should be of the same electrical dimensions—or cover the same tuning range—as those in the receiver itself.

The main point to watch in regard to L2 is the cathode tap, which should not have to include more than about 10 per cent. of the total number of turns on the grid winding. Under these conditions, oscillation should be obtained with R4 slider well up towards the HT+ end of the resistor. If more tap, or higher HT on the screen, is called for, then the aerial coupling is probably too tight.

To get the most out of the pre-selector, it should be built in a shielded box (to minimise inter-action with the main receiver), and be provided with a good slow-motion dial for C1. The aerial lead should be kept well away from the main receiver (to eliminate direct pick-up) and the aerial connection marked Rx in Fig. 1 taken to the receiver aerial terminal using

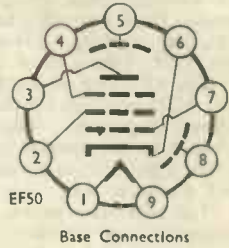
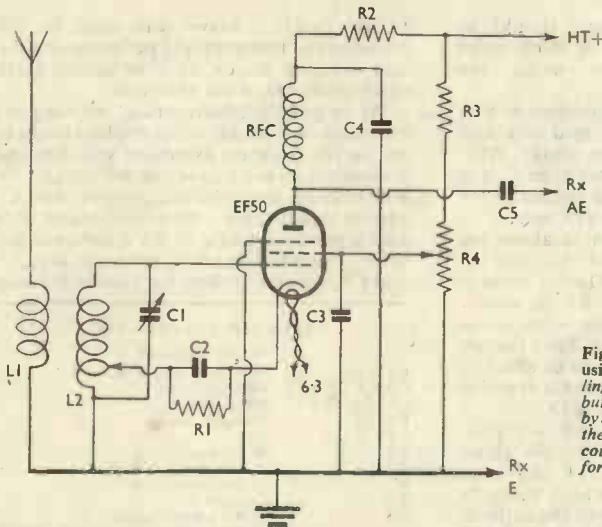


Fig. 1. A regenerative pre-selector using a Mullard EF50. Direct coupling to the main receiver is shown, but performance could be improved by incorporating a tuned circuit in the plate of the EF50, and link-coupling to the receiver. See text for discussion and table for values.

the shortest possible length of wire (to reduce input losses).

In most cases, the feed for the EF50—which has a 6.3 volt heater and requires 130-150 volts HT in this circuit—can be taken off the main receiver.

Operation of the pre-selector is as follows: A signal is tuned in on the main receiver and the pre-selector dial then adjusted till a peaking effect is obtained. The regeneration control is advanced till the pre-selector is near oscillation and C1 then retouched. The result will be a big increase in signal strength (and noise), with improved selectivity and a high degree of image suppression.

A 58 mc Circuit

At Fig. 2 is an RF-and-detector straight circuit which can be rated good for 5-metre work—provided reasonable precautions are taken with its construction.

Though it is true that converters and superhet-type receivers should give better results and are easier to handle than "straights" at these frequencies, a 1-V-1 is much easier to build and get going. Moreover, if carefully constructed, a 1-V-1 will give excellent results, serving well as an introduction to the fascinations of five metres. In any case, a reasonably good straight set will find any signal that can be heard on a more elaborate receiver, though on the latter it may well be louder and easier to tune.

The present arrangement is, and has been for many months, in active use. By now, familiarity has made it perfectly

TABLE OF VALUES—Fig. 1

Regenerative Pre-Selector	
L1/L2	Usual values for bands required.
C1	100 $\mu\mu\text{F}$ for 1.7-28 mc; 65 $\mu\mu\text{F}$ for 7-28 mc only.
C2, C3, C4	.005 μF .
C5	.0002 μF .
R1	500 ohms, 1 watt.
R2	10,000 ohms, 1 watt.
R3	25,000 ohms, 1 watt.
R4	50,000 ohms, rated 3-watt for noiseless operation.
RFC	Standard short wave RF choke.

simple to operate, and when conditions are right, much of the 58 mc GDX reported in the *Short Wave Magazine* has been heard.

Referring to the circuit, the EF50 is again used, and in both stages; it could also be employed (triode or pentode connected) as a high-gain audio amplifier. But the LF side is a matter for individual choice; in any circuit for 5-metre work, it is the RF stages that are important—the audio amplifier can follow standard practice. This particular receiver operates with a general-duty LF amplifier, with several combinations of stages, which is used for a variety of purposes on the bench.

The circuit has intentionally been drawn with the two stages shown as separate units, since it is *essential* to bring the earthy side of each circuit element to one point on the chassis in each stage. There is nothing either new or clever about this—it is just obvious common sense at these frequencies. It will also hardly be necessary to say that all leads must be kept as short and as direct as possible, even if they are on the earthy side. With wire-ended fixed resistors and condensers, the length

of wire on these components should be more than enough—and in most cases require cutting down—to make the necessary connections.

The RF valve should be mounted so that the plate lead *via* C5 to the grid coil is as short as possible, and the choke RFC should be the special 5-metre type; it is often a good thing to put an ordinary SW RF choke in series, on the HT side.

The two main points to note about the detector stage are the cathode tap and the condensers C10 and C11. One of these is for silencing the slider of R6 to ensure noiseless adjustment, and the other is for RF by-pass, since C10 would have far too high an impedance at 58 mc to be effective for the latter purpose. The same remarks as before apply to the choke RFC.

The cathode tap is best found by experiment—smooth oscillation with R6 about two-thirds up towards the HT end—and from a half to a quarter of a turn is usually enough for this. The setting of the cathode tap should be done with L2 loaded (C5 connected), otherwise a false adjustment will be obtained, as the detector will oscillate far more easily with the preceding stage disconnected.

Even if a metal chassis is used (as should

be the case), a heavy wire must be run between the two earthing points in the RF and detector stages, and the actual earth connection taken off this wire.

As to general construction, the simplest is chassis-and-panel, with variables brought out to the front on extension spindles and a separate screen round the RF stage. C6 will require slow-motion control, but C1 can be direct drive. As a refinement, it is also a good plan to give R6 a slow-motion drive. Another point to notice is that C3 and C8, which are there for hum reduction,

TABLE OF VALUES—Fig. 2

	58 mc Receiver
C1, C6	15-20 μ F variables.
C2, C4, C9, C11	.0005 μ F mica.
C3, C8, C12	.006 μ F mica.
C5, C7	.0001 μ F mica.
C10	2 μ F.
R1	500 ohms, 1 watt
R2	30,000 ohms, 1 watt.
R3	25,000 ohms, 1 watt.
R4	3 megohms.
R5	10,000 ohms, 1 watt.
R6	50,000 ohms potentiometer, 3-watt rating for quiet operation.
L1	4 turns No. 14 tinned copper, 1-in diam., slightly spaced. Aerial winding, 2 turns $1\frac{1}{2}$ -in diam. surrounding L1 at earthy end.
L2	4 turns as above, tapped $\frac{1}{2}$ -turn from earthy end (but see text).

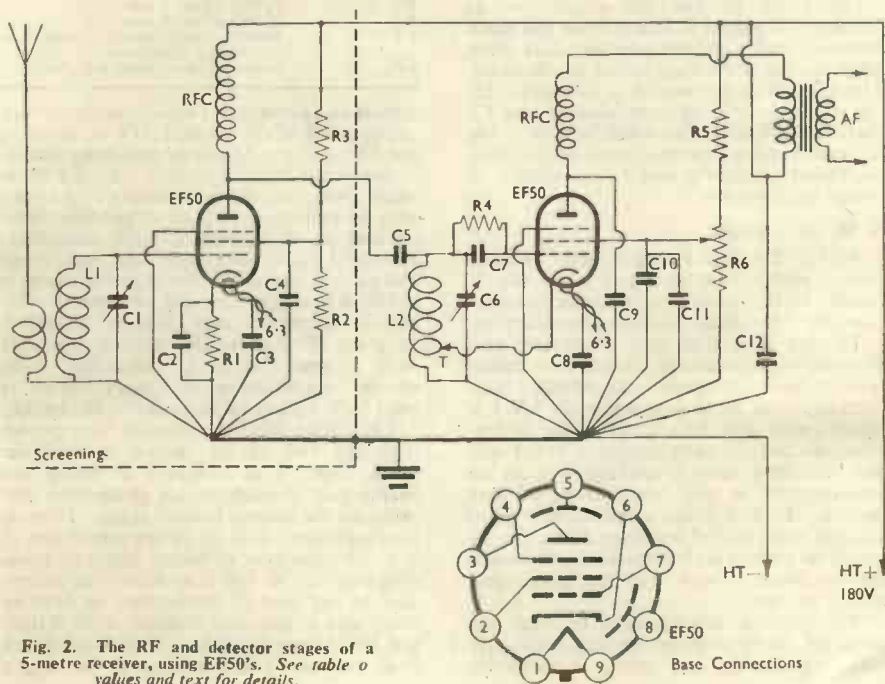


Fig. 2. The RF and detector stages of a 5-metre receiver, using EF50's. See table of values and text for details.

should be tried on different sides of the heater line.

Operation

The operation of the set is easy, but requires a little practice. The initial adjustments are as follows: With the detector just oscillating, fish round for a signal (any sort of signal, so long as it is coming in on the aerial), and then back off reaction on R6; this may involve slight readjustment of C6. Now swing C1; a point will be found at which the signal on tune peaks, showing the RF stage is in resonance. This will also have the effect of increasing regeneration on the detector stage, and will necessitate a further backing off of R6.

Reduce regeneration till swinging C1 produces a distinct "oscillation peak" as it sweeps through resonance with the detector.

It will now be found that only a very slight movement of R6 (hence the slow-motion control) is required to take the detector in and out of oscillation, which should be smooth. If it is not, the cathode tap needs resetting—towards the earthy end of L2 if reaction is plumpy and towards the grid end if the valve is reluctant to oscillate.

The receiver is now adjusted to its most sensitive condition, and the original signal tuned in should be several times louder than when first heard. With reaction just off, a breathing sound will come up as the RF stage tuning C1 is swung through resonance with C6. A slight touch on R6 produces smooth oscillation.

Searching is then on C6, with R6 kept near oscillation (or just at it for CW), C1 being brought to resonance to peak up the signal.

The observant (and experienced) will not have failed to notice that in fact the initial adjustments can be made without a signal at all—simply by peaking C1 with the detector and working on the RF stage noise.

The values given in the table are right for the band, but may well vary in individual cases so far as the coils are concerned. Since 58 mc activity is now much more general than earlier in the year, in all but the most remote districts there is a good chance of hearing a 58 mc station after 2100 almost any evening.

Once the first signal has been found, identified and safely logged, the capabilities of this receiver will be appreciated. But it is often difficult to find that first signal—and that's half the fun of five metres, which is *not* a beginner's band.

Four Stage 1-V-1

Turning now to a straight receiver for general short wave reception, Fig. 3 is a good, well-tried circuit capable of giving very satisfying results over the range 10-200 metres.

The central idea is the use of a twin-triode, a Mullard PM2B, as a combined detector and first LF amplifier. Many pre-war readers of the *Short Wave Magazine* will recognise this as an adaptation of the famous "Class-B One Valver," of which many thousands were built and are still giving good service.

The PM2B is preceded by an SP2 as RF amplifier, and the fourth stage, the second LF amplifier, is a PM202; this is a hefty battery output valve which will take all that the PM2B can deliver. These three valves are all standard Mullard types, and should be readily obtainable almost anywhere.

Though 'phones are shown in the output stage, this receiver will work a small speaker on the stronger signals. The RF stage will give gain up to at least 15 mc (20 metres), and beyond that will contribute to the stability and ease of handling of the receiver at frequencies up to 30 mc (the 10-metre band). Below 15 mc, gain will increase as the frequency is lowered.

The circuit is quite standard. Reaction is by control of C4, with direct coupling between RF and detector stages through C6. Resistance coupling is used on the LF side after the detector (mainly to simplify the circuit) and if desired the 'phones can be inserted in place of R8, which would cut out the second audio stage. The purpose of condensers C9 and C10 is to keep HT out of the headphones; C10 is not essential, and may be replaced with a direct wire.

Construction

A metal panel-and-chassis assembly, with a screening compartment for the SP2, is the best arrangement. The plate lead of the SP2 being the top cap, this valve can be mounted sideways so that the cap just protrudes through the screen, ensuring a short connection to L3.

The controls should be brought out to the front panel, with slow-motion on C3 and C4; it will not be necessary on C1. C3 should be regarded as the main tuning dial, and can be marked up for calibration purposes as, with an RF stage, there will be very little variation.

Coils can be home-constructed for the bands required, or a set of Denco or Eddy-

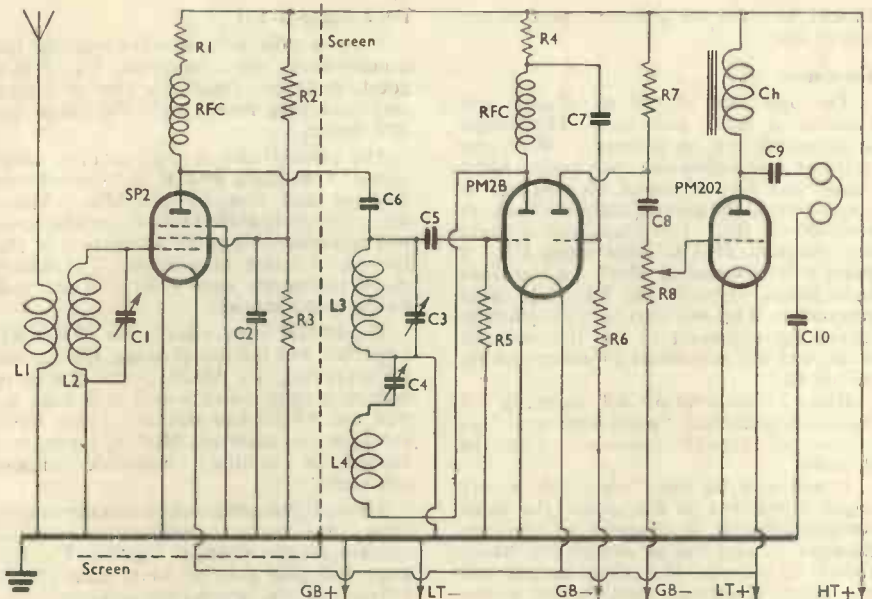


TABLE OF VALUES—Fig. 3

Four-Stage 1-V-1	
L1/L2	RF stage coils; home-made, or Eddystone or Denco plug-in type.
L3/L4	Detector stage coils; as above.
C1, C3, C4	100 μ F.
C2, C7	.01 μ F.
C5, C6	.0003 μ F.
C8	.05 μ F.
C9, C10	1 μ F.
R1, R4, R7	10,000 ohms, 1 watt.
R2, R3	25,000 ohms, 1 watt.
R5	3 megohms.
R6	100,000 ohms, $\frac{1}{2}$ -watt.
R8	0.25 megohm volume control.
Ch	LF choke, 15 mA.
RFC	Standard short wave RF chokes.
Valves	Mullard SP2, PM2B, PM202.

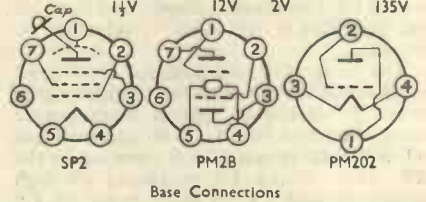


Fig. 3. Circuit for a general-purpose short wave receiver, using a PM2B twin-triode as detector and first LF.

stone plug-in coils used. All values are given in the appropriate table.

Operation

Plug in a set of coils at L1/L2 and L3/L4—say, covering the 40-metre band—and tune in a signal on C3 with C4 near the verge of oscillation. Then swing C1; this will bring up the signal when C1 and C3 are in tune, and probably involve readjustment of C4.

The tuning on C1 will always be flat in relation to that on C3, but a marked peaking effect will be obtained when these two circuits are in resonance. Having found the relative settings of C1 and C3 to tune across the band, C3 can always be used as the main control, with C1 "following round" as required to peak up the signal on tune.

THE SHORT WAVE MAGAZINE

The *Short Wave Magazine* is a 64-page monthly and is the only public journal in this country entirely devoted to Amateur Radio. Articles in the October and November issues included VFO-Controlled Remote Transmitter Tuning, More About the Franklin, A Home-Constructed Communications Superhet, A 7/14 mc Transmitter, The R.A.F. T.1154 Transmitter, Grounded-Grid Technique, First Steps on Five, Crystal-VFO Mixing, and the End Fed Single Wire Aerial—all practical articles of considerable value and interest. Regular features include "DX Commentary" and "Five Metres", now established as the most informative, authoritative and up-to-date articles on their subjects appearing in print to-day. Sections of the *Short Wave Magazine* are also devoted to New G OTH's (upwards of fifty are printed each month), Calls Heard, Club News and Station Descriptions.

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CALL SIGNS AND THE CALL BOOK

THE CALL-SIGN SYSTEM AND INDIVIDUAL IDENTIFICATION

by

L. H. THOMAS, M.B.E. (G6QB)

Assistant Editor, The Short Wave Magazine

SO far as we know, no reliable figures have yet been published on the total number of licensed amateur transmitters in the world; and such figures would not mean much unless one also knew how many of them were active. At all events, we can say that there are several thousand in this country, and quite a few scores of thousands in the U.S.A. and Canada. Add to this the fact that British amateurs have already succeeded in working more than 100 countries since licences were re-issued early this year.

What we are getting at is that there are a lot of amateurs, spread over a lot of countries—just that and no more! And some sort of order and method of identification is absolutely essential. Thus we have the internationally-agreed allocation of call-signs and prefixes.

In the old days British amateurs were just 2OM, 2NM, 2KF, 2TP, and so on; French amateurs were 8AB, 8BV, etc.; and when Holland first burst upon the ether the Dutchmen used the figure "0." Belgians were 4's, Danes were 7's, and after that things became a little out of hand. When the Americans were heard over here they were just plain 1CMP or 2AXA, but everyone knew they were Americans because of the time of night and the weakness of signals.

Nationality Prefixes

Shortly after, however, when Amateur Radio found its feet as a means of international communication, all countries were given a letter with which to prefix their call-signs. Great Britain was "G," France was "F," Denmark was "D," U.S.A. was "U." All delightfully simple, but unfortunately there were more countries than letters in the alphabet, and so the whole thing was turned inside out again. The next move was the Continental prefix, with "E" for Europe, "O" for Oceania, and so on. The full prefix then became EG (Britain), EF (France), OA (Australia), and NU for North America. This all happened about 1927.

International Allocations

Eventually, however, at the famous Cairo Conference, the whole question of prefixes was tackled on a world-wide basis; not merely for amateurs, of course, but for radio stations of all types that used call-signs for identification. Each country was given a block or blocks of letters, and from these the Government decided which letter or letters its amateurs should use as a prefix to their call-sign. These new prefixes came into general use in 1929 and have not materially altered since.

In passing, it might be mentioned that three-letter call-signs (GKU) are fixed land stations, non-amateur; four-letter call-signs (GBSS) are usually ships, and five-letter call-signs (GADJK) always aircraft. The first one or two letters indicates the nationality.

Nearly all amateur call-signs consisted, apart from the prefix, of a number followed by one, two or three letters. Nowadays all amateur call-signs take that shape, and very few others do. So if you take a look round the amateur bands and hear call-signs like W1BB, W6LEE, OZ7M, ZS6FN, VK2ADT, you will notice that although each one of those is a differently proportioned unit, all of them consist of a one- or two-letter prefix, followed by a number, followed by one, two or three letters.

One additional complication arises nowadays with so many amateurs coming in the category of "displaced persons." These D.P.'s are allowed, in many cases, to use their "home" call-sign followed by an oblique stroke (— . . — in Morse) and the prefix of their adopted country. Thus the well-known G6CU, when he was operating from the Cocos Islands, quite properly signed "G6CU/ZC2"; and an American amateur on Guam has been signing "W0NVF/KG6." With these call-signs, you will note, the sting is in the tail. In other words, wait for it!

The Figure Meanings

Now in many instances the figure, as well as the prefix, tells a story. Some

countries are divided into call-sign areas or districts and the figure identifies the particular district. In our own case (Great Britain) the figure does not mean anything, and the different parts of the British Isles use different prefixes—GM for Scotland, GW for Wales, and so on. But if you work or hear an Australian, his figure tells you whereabouts he is, thus :

- VK2 : New South Wales
- VK3 : Victoria
- VK4 : Queensland and Papua
- VK5 : South Australia and Northern Australia
- VK6 : Western Australia
- VK7 : Tasmania.

There used to be a VK8 district, but this has now been merged in VK5.

Canada is another instance of a Dominion split into districts, like this :

- VE1 : Nova Scotia and New Brunswick
- VE2 : Quebec
- VE3 : Ontario
- VE4 : Manitoba
- VE5 : Saskatchewan
- VE6 : Alberta
- VE7 : British Columbia
- VE8 : Yukon and North-West Territories.

The U.S.A. is divided into ten districts, but the listing of the States concerned would take more space than we have available. Sufficient to say that Districts 1, 2, 3 and 4 run down the East Coast ; 5 embraces Louisiana, Texas, etc. ; 8 and 9 the "East Central" States ; 0 the "West Central" States ; 6 California ; and 7 Oregon, Washington, Montana, and so on.

American Variations

The U.S.A. presents a special problem, however, because it has extended its district numbers to cover the nearest U.S. territories and possessions, which formerly used the prefix "K" instead of the home "W." So Porto Rico, being near the 4th Call-sign District, used to be K4 ; Alaska, nearest to the 7th, was K7 ; Hawaii (though not very near the 6th) was K6. Now these possessions have been allotted their own prefixes, but fortunately they have kept the old numbers and still sound familiar. Here are some of them :

- KP4 : Porto Rico
- KV4 : Virgin Islands
- KZ5 : Canal Zone
- KG6 : Guam
- KH6 : Hawaii
- KL7 : Alaska.

Unfortunately the new prefixes are not officially allocated to amateurs until their licences are renewed, and that is why you hear call-signs like "K7JDS/KL7"—he will shortly be KL7JDS, but isn't yet. The full list appears with the up-to-date list of International Amateur Prefixes elsewhere in this issue.

British Possessions have produced their own special problem, and in this difficult case it is the combination of the prefix and the number that tells the story. "ZC" in itself does not tell you anything except that the person using it is in one of a large selection of British possessions. But when you hear the number you know the whole story—ZC2 for Cocos Islands, ZC4 for Cyprus, and so on.

So far, then, all amateur call-signs have this one thing in common : That the

QSL direct whenever you can. Do not QSL at all unless you are sure a report will be useful. If you do not know the full QTH of the DX station, use the "Short Wave Listener" QSL Bureau.

"prefix" (i.e. the letter or letters before the number) together with the number itself tells you where the owner comes from.

The Call Book

Obviously that is interesting, but you still don't know exactly where he lives, and for this you need a directory. Fortunately there is such a thing, in the shape of the "Radio Amateur Call Book Magazine," which is published quarterly in the U.S.A., and may be obtained over here as advertised from time to time. This is a gigantic volume—the Summer, 1946, issue ran to 268 pages—and is the accepted authority for the addresses of amateur stations anywhere in the world. The lists of "New QTH's" in the *Short Wave Magazine* each month are compiled directly from letters from the actual holders of the call-signs, and these, by arrangement, are automatically incorporated in the Call Book from time to time.

Since American amateur transmitters outnumber the rest of the world by about 20-to-1, 90 per cent. of the Call Book, naturally, is concerned with addresses of U.S.A. amateurs, the rest being devoted to all other countries. Great Britain will probably occupy about ten pages in the next issue. The Call Book also contains a list of prefixes, and a world map with every country marked with its prefix and districts.

The whole thing is now well organised, and it may truthfully be said that identifying an amateur (provided that he is not a pirate!) is quite a simple matter.

One or two other facts are worthy of mention. If you hear an American with a call like W9YXY/6," he is a 9th District amateur operating a "fixed portable" (i.e., temporary) station in the 6th District. If you hear a British station with a call like "G6QB/P," that is a portable—duly licensed and not just invented! And certain British stations who have a permit to operate from more than one location are licensed to use the suffix "/A" after their call when they are at the second location. But note that none of these tricks affects the identification of any station by (i) his prefix and (ii) the number which follows.

The Russian amateurs need a little sorting out at present, because although they are divided into numerical districts, they seem to use different prefixes—UA, UB, UC, etc.—as well; but as soon as we have the official pronouncements on this we will put that one straight in the list. For the moment, whatever the prefix and number, if the first letter is "U" the station is in the U.S.S.R.

PSE QSL

The operators listed below will acknowledge, by card, SWL reports on their transmissions:—

- G2CUR** Capt. V. H. Thomas, 13 Benacre Avenue, South Wigston, Leics. 1909 kc transmissions.
- G2DHV** G. V. Haylock, 28 Longlands Road, Sidcup, Kent. 1825, 3580, 7200 kc CW, operating periods 1900-2300 daily. Input 7 watts: reports appreciated from any distance.
- G3AWQ** D. R. Hill, 81 Rye Hill Park, Peckham Rye, London, S.E.15. 7 mc CW, reports from SWL's over 200 miles.
- G4AY** R. Pluck, 9 Prospect Road, Southborough, Tunbridge Wells, Kent.
- G4QC** T. W. Carney, 9 Gladeville Road, Aigburth, Liverpool, 17. 7 mc CW, overseas SWL reports. Home SWL's, please report DX calling but failing to raise G4QC. Operating hours 2100 onwards daily, calling DX.
- G8UO** H. Beadle, 13 Chandos Street, Keighley, Yorks. 1900 kc, from anywhere outside Yorkshire and Lancashire; operation Saturdays and Sundays. 7152, 7166, 7175 kc, outside 50-mile radius; operation most evenings. 14146 kc, reports from anywhere; operation most evenings.

★ ★ ★

EXETER READERS

E. G. Wheatcroft, 7 Mount Pleasant Road, Exeter, would like to hear from anyone in the district interested in regular meetings for the discussion of SWL matters.

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Have you heard?

YOUR Scribe is glad to be able to report another outstanding month of **DX** for the short-wave listener—quite possibly the best month so far in the history of radio. From the time that the last issue was published until the time of writing this, there has not been one single day when conditions have not been good, very good or excellent, and there have been many days in the “freak” category, particularly on the 28 mc band.

This feature has received lots of support from readers, and we much appreciate the many letters containing interesting news, encouragement and grumbles—yes, even the latter are gratefully received!

But why so little support for the Set Listening Periods? That is the one fly in

B Y T H E D X S C R I B E

an otherwise smooth and fragrant ointment! They represent only 25 per cent. of the total logs published in this month's Calls Heard. Can it be that short-wave listeners *can't take it*? Are you shy of sending in your Calls Heard list for an SLP in case you have not heard as much as the other fellows? The whole point of SLP's, as explained last month, is to produce Calls Heard lists that really show something.

We arranged them on 1·7 and 28 mc, to make them a little different. Now it is obvious that an SLP on 1·7 mc in daylight will produce more or less localised lists, but why the shortage of lists covering 28 mc on a Saturday afternoon? And what a Saturday afternoon it was, too, for DX conditions.

Your Scribe was only able to listen for five minutes during that 28 mc period, but these are the calls jotted down in the log for those five minutes, exactly as heard: ZS6EQ, VQ3TOM, SU1HF, VK2RA, VE1DW, VS7PW, ZS1AX, ZS1T, CN8BI, LU7AZ, HB9CX. Please note there is an “HAC” concealed there, which probably came in about three minutes!

Perhaps it is 28 mc which is unpopular, rather than the SLP idea? At all events, quite unrepentantly, we have arranged another 28 mc SLP for this month—and don't blame us if conditions are not so good this time!

AMATEUR BAND COMMENTARY

Good News

Elsewhere you will see the announcement that the 7 and 14 mc bands are now fully opened again. This, of course, gives twice the width in each band that we have been enduring up till now. Perhaps the 'phone/CW business will begin to straighten out at last. The chief attraction of 28 mc hitherto (apart from its marvellous DX possibilities) has been that the USA 'phone band is such as to leave us a whole 500 kc outside it—more space, mark you, than the

entire width of the 14 mc band. This 500 kc, from 28000 to 28500, is a DX-hunter's paradise, and practically all the CW is concentrated in the 28000-28100 stretch, leaving the rest free for 'phone from all over the world.

To return, however, to the other bands; 7000-7300 kc should now show up with some really interesting DX during the hours of darkness, and 14000-14400 kc should be much easier to cope with than the former truncated band of 14100-14300.

7 mc

Your Scribe has been hotly taken to task for his rude remarks about 40 metres. L. J. Le Breton (Bridport) only wants a card from Asia for his 7 mc HAC; he has several cards from VK and ZL, and he recalls that pre-war QSL's for reports on this band frequently used to state “first report from Europe,” “first from outside USA,” and so on. In other words SWL reports to DX stations on 7 mc mean more than they do on 14 and 28. He puts in a nice 7 n c log, which you will see in “Calls Heard.”

O. Mason (Southend-on-Sea) reports hearing GC3GS calling G2HB, “Portable in the Hebrides.” Several other stations called the latter, whose frequency was 7169, and later, 7270. Apparently the calling stations were unsuccessful.

E. H. Trowell (G2HKU, Sheerness)



Some typical American SWL report cards. In two of them, the appropriate call area prefix is used as an indication of origin. In the Gozens' card (SWL-W2), the reception data is given on the back.

agrees that 7 mc is a mess, but only at times, he says. He uses 20 watts on 7179 kc and has maintained daily contact with USA during a month. He has also heard ZL, VK, South and Central America, and pleads for more recognition of the band. Well, now that the full band is available, things should be very much better, particularly at the LF end, and we have no doubt that many more G stations will start using it. We have asked some of the 7 mc enthusiasts to be our watch-dogs for the band, and hope to report next month that the state of things is much brighter.

In view of the uncertainty of the behaviour of 7 mc, we have not included it in the DX Forecast this time, but we have arranged a 7 mc SLP, which should bring interesting results.

14 mc

One hardly knows where to begin on this subject. Practically everyone does the bulk of his listening on this band, and the Calls Heard lists speak for themselves. There is usually a fine burst of DX between 1400 and 1800 on 14 mc, but of course not many readers are home on weekdays to hear it; on Sundays it is apt to become "a bit much." Several readers heard the Super Fortress "Dreamboat," but no one has yet been lucky enough to report a QSL from her.

R. H. Gammons (Kidlington, Oxford) mentions that he heard a real G9BF on

14 mc, but long before licensing recommenced! He was on a ship in the South Atlantic at the time, and he comments on the number of fine amateurs active round about the Rio de la Plata. He says that the following LU's, all on 14 mc 'phone, will certainly appreciate SWL reports: LU2BU, 2DM, 4DD, 6MV, 6PB, 7EO, 8MC. A long list of recent 14 mc DX follows, with a strong South American flavour, but interesting exceptions are W9LYL/XU (China), YI3C, KB6KY, HZ2YY (Saudi Arabia), and FA8JD. Mr. Gammons would like to hear from *local* readers interested in forming a Club, or just with a common interest in DX—his address is 133 Banbury Road.

N. A. Phelps (Fortis Green, N.10) starts the "short-term HAC" claims going with two on 14 mc. On October 5, 2020-2026 GMT, he logged G2NP, UA9CB, ZL4CK, ZS1CI, PY1DC and KZ5AG (six minutes). A little later, 2046-2051 GMT, he logged G3KP, UA9CF, VK3JA, OQ5BR, PY9AC, WIAQT (five minutes). Another little feat of his was the logging of 62 countries on 14 mc during 24 hours; actual listening time, 6 hrs. 20 mins.

Any advance on these, please? Put these down as two records waiting to be shot at:—

- (i) HAC in five minutes;
- (ii) 62 countries in 24 hours.

N.A.P.'s total of countries since mid-

April is 117. His equipment is a 1-V-1 receiver with a 25-ft. indoor aerial. Good going, and it shows what can be done with simple gear.

O. A. Good (Oswestry) mentions the remarkable conditions on the band towards the end of October. In the early morning of the 27th it had virtually faded out, but after 1000 he found it full of Russians and ZL's. A Russian he mentions was "UNIAO"—any information on QTH, please? Later still, the band suddenly opened up for Asia and he logged W2OUB/C7, W5KGI/C7, J2ATO, J2AAO, VK2ZC. In the evening Africa was predominating, and round about midnight the band suffered another fade-out. He asks what conditions could have been prevailing to produce these two fade-outs with a lively DX session in between.

D. R. J. Adair (Londonderry) mentions a rare one in the shape of VR5BY (Tonga or Friendly Islands). He would very much like the QTH if anyone knows it. VR2AB (Fiji) has been heard quite a lot, but this is the only report we have yet had on VR5BY.

R. Goodwin (Putney) mentions XAEX (Caserta) and XAAX (Corsica)—QTH's in list. He also queries YPIAA, who is almost certainly Roumanian.

Another good claim for Countries Heard comes from F. W. Lindley (Didsbury, Manchester) with 112 up to date. This is also on a 1-V-1 receiver. The big superhets hardly seem to get a look-in these days.

28 mc

Some of the 28 mc diehards have produced wonderful logs this time, and without belittling their performance in the least it may be said that it has been an incredibly good month. L. F. Worssam

(Quorn, Leics.) mentions reception of U.S. police cars round about 31.2 mc on several occasions. He has also been exploring down as far as 45 mc, hearing FM stations and others.

A. E. Hardman (Manchester), producer of the longest "general" 28 mc list herewith, has heard all States in the 5th and 7th Districts, and most of the States in the new Ø District. He brings up the interesting question of what exactly is happening when one hears, say, a WØ talking to a W2—are there two skips, one for the "2" and one for the listener in Great Britain? The answer is probably that there are several more than that. Often when the W6 and W7 stations are roaring in, one can also hear VE1 and possibly Moscow or Italy at full strength at the same time. A.E.H. finds that when 28 mc is wide open it puts 14 mc in the shade completely.

F. A. Herridge (Balham, S.W.12), who listens to 28 mc CW on a 0-V-0, also sends a fine log. He wants to encourage those who cannot put up a good outdoor aerial by telling them that with a small one in the loft he frequently hears VK's.

Practically every letter about 28 mc comments on the incredibly strong 'phone transmissions from VE7AJN (New Westminster, near Vancouver). He certainly has been the outstanding VE7, although the month has produced several days which have been ideal for W7 and VE7. Your Scribe worked VE7AJN several times during the month, and on the last occasion he mentioned that the mail had just arrived with thirty cards and letters, twenty-five of which were SWL reports!! This is a case in which you had better enclose reply coupons if you want a card back, because it is obvious that a station like this, heard by practically every SWL in Great Britain, cannot foot the postage

QSL BUREAU RULES

- (1) Use of the Bureau is open only to readers who obtain either the *Short Wave Listener* or the *Short Wave Magazine* from us on direct subscription.
- (2) The Bureau can only handle cards for amateur stations (as distinct from broadcasters), but is prepared to accept cards for amateurs throughout the world.
- (3) Cards should be forwarded to us in fully stamped envelopes addressed QSL Bureau, *The Short Wave Listener*, 49 Victoria Street, London, S.W.1. The words "QSL Bureau" must appear in the address.
- (4) When sending the first batch of cards, enclose three stamped self-addressed envelopes of a suitable size for return QSL's.
- (5) All such return envelopes must be marked "QSL Bureau" in the top left-hand corner.
- (6) No communications of any kind, other than the cards, return envelopes and certain printed forms that will be supplied to users, should be contained in packets addressed to the QSL Bureau.
- (7) Cards inwards to the Bureau can be forwarded as frequently as may be desired. Cards outwards to Bureau users will be cleared fortnightly.

bill if they *all* do their stuff ! It also lends point to the suggestion that it is the *weak* stations that will appreciate QSL's the most.

The pattern on ideal days on 28 mc has been something like this : 0900-1100, VK and ZL, both 'phone and CW, with rarities like VR2AB as well ; 1100-1500, W1, 2, 3, 4, 8, 9, Ø, VU, VS9, ZS ; 1500-1700, W6 added ; 1700-1830, W7 and VE7 added. Sometimes VE6 is heard as well. All the "local" VE districts, with South America and South Africa, have been audible all day from about 1100. In addition VP3, VP4 and VP6 have been there in the morning and early afternoon, often with PZ1A (Dutch Guiana) putting in a consistent 'phone transmission as well. VP6YB (Barbados) has been outstanding, often peaking well above S9. Several W7's and VE7's have been above S9, fading rapidly down to about 6 or 7.

General

C. G. Pfaff (Nth. Wembley) has received a QSL from ET3Y (Addis Ababa) depicting the operator, complete with headphones, flying through the air on the back of Pegasus !

D. Parker (Huddersfield) mentions some interesting items from his log, such as ET1JJ (14945), VQ5FM (14150), VP2GP (14365), VP2MY (14380), VP4TE (14325) and YN1LB (14345). He, also, asks whether we could straighten out the confusion surrounding the Russian numbers and prefixes. Several readers ask for this—but we have no more "gen" than they, at the moment. Up to date we have had reports of UAØ, UA1, UN1, UQ2, UA3, UB5, UA6, UD6, UI7 and UI8. We presume that the district numbers follow the pre-war scheme (see list of prefixes elsewhere) but what the prefixes themselves mean, we just do not know.

W. B. Whitham (Whitstable) reports hearing an "American" station (but probably a D4) on 14 mc solemnly suggest to the station he was working that they could QSO 100 per cent. if they got just outside the band, and suggested that the other station should get a crystal between 14300 and 14350 ! Pretty cold-blooded law-breaking, this, but of course they will now be well inside the band again !

F. A. Mawby (Clapham, S.W.4) sends an interesting log (just too late for Calls Heard). Unusual ones picked out from it include K6PLZ, VP5RC, OA4M, ZB3Q (QTH ?), SU5TB and CO7VP. He also includes "HP1FG"—almost certainly a "misread" for the well-known HC1FG in Ecuador.

QSL's Received

We have not yet received enough information on this subject to make a "feature" of it, but there are one or two items of interest. R. Twidale (Scunthorpe) has a card from LH2A—possibly the only station using the LH prefix. LH2A is Norwegian, but is licensed by the authorities both for amateur and broadcast transmission—hence the strange prefix.

D. L. McLean (Yeovil) has received post-war QSL's from CE3CT, CO8MP, EA9AI, LU1JC, 5CK, PY2AY, OA4M, YI3R (Turkey), XACP (Sardinia) XAEF (Sicily), VP5EM, ZB1E, ZB2A, ZD4AC and a host of more commonplace stuff. While on the subject of QSL's, we had better mention that G2CUR invites reports

WINKW of East Lynn, Mass., on the air since spark coil days in 1920. *His transmitter now is a 6L6 CO only! The receiver is an HRO, and WINKW is very interested in G's. As he is so QRPP, SWL reports would undoubtedly be welcome.*



	DX QTH's
CN8MA	P.O. Box 50, Casablanca, French Morocco.
D2AR	No. 2 Field Broadcasting Unit, BAOR.
"Dreamboat"	W3QR, 4418 N. 15th St., Philadelphia, Pa., U.S.A.
HEICE	Portable in Liechtenstein (QSL via HB9CE).
HH3L	Roger Lanoix, RCA, Port au Prince, Haiti.
KP4AJ	Base Signals Officer, A.P.O. 845, c/o P'master, Miami, Florida.
OX1BC	A.P.O. 55, P'master, N.Y.C., U.S.A.
OY3IGO I.	Olsen, c/o Ing. F. Willejus, Thorshavn, Faroe Islands.
PY1ABB	Jose Mariz, Box 4022, Rio de Janeiro, Brazil.
PZ1A, PZ1GL	Box 679, Paramaribo, Dutch Guiana.
VE7AJN	Noel Brittain, 228 Osborne Ave., New Westminster, Brit. Columbia.
VE8MF	East Arctic Patrol, Ontario (Stn. at Clyde River, Baffin).
VO6L	c/o P'master, Goose Bay, Labrador.
VP4TB	Bob Wilson, PAA, Trinidad, B.W.I.
VP4TK	74 Duke Street, Port of Spain, Trinidad, B.W.I.
VQ3EDD	P.O. Box 166, Dar-es-Salaam, Tanganyika.
VS1BU	Korean Camp, ALFSEA Sigs, Singapore.
W5KGI/C7	Lt. Glen Simpson, A.P.O. 912, U.S. Army, China.
W9BNB/KL7	A.P.O. 729, Seattle, Washington, U.S.A. (Stn. in Alaska).
W9VIP/J2	Lt. P. A. Rockwood, 329 Q.M. Bn., A.P.O. 181, c/o Postmaster, San Francisco, U.S.A.
XAAX	747 AAFBU, A.P.O. 749, c/o P'master, N.Y.C., USA.
XAEX	977 SSC, APO 512, c/o P'master, N.Y.C., U.S.A.
XE1KR XZ2AA XZ2AB XZ2AF XZ2DA	P.O. Box 544, Mexico City. AHQ, RAF Burma, SEAAF. RAF Signals Section, Rangoon, SEAAF.
XZ2DN	RAF Signals Section, Mingaladon, Nr. Rangoon, SEAAF.
YR5X	Box 326, Bucharest.
YV5AEY	M. Rodriguez, 1246 N. 5th Ave. 71, Caracas, Venezuela.
ZA2D	Durazzo, Albania (QSL via ARRL).
ZB1AB	Port Radar Centre, H.M. Dockyard, Malta (ex-ZB1A).
ZC6AN	Accra Radio Club, 6th Airborne Div., MELF.
ZE1JI	P.O., Shabani, S. Rhodesia.
ZP6AB	Salvador Guanes, Caballero 26, Asuncion, Paraguay.

on his 1909 kc transmissions—to Capt. V. H. Thomas, 13 Benacre Avenue, South Wigston, Leics.

From Overseas

Harold Owen (Tafo, Gold Coast) in a long and newsy letter raises the vexed question of how to count countries. For instance, should the Leeward Islands count as one group, or should each separate island be counted? Should Sardinia and Corsica be allowed to count as "countries"? And he suggests that we should prepare a full list. Unfortunately, such a job is by no means straightforward, and various bodies are liable to do the same thing, with different results.

The "DX Century Club" is an international affair, and no one can state arbitrarily that so-and-so counts as a separate country from now on. We don't even know for certain which of the mysterious areas of the USSR can count as separate countries. But we will do everything that we can to clarify the situation, and to produce a comprehensive list, both by countries and prefixes, of those that we *know* to be separate countries. Anyone then wanting to sub-divide them further is welcome! Harold Owen says he would very much like to be a supporter of SLP's but owing to the time-lag it would not be feasible; he does, however, suggest that we should stress the value of a general log, as indicating what DX is, or has been, on the air. He goes further and asks that listeners specialise a little—for instance, those who can listen in the mornings might compile a special log of VK's; those who are only on late at nights might concentrate on South Americans, and so on. This sort of thing does happen in any case, but we never know whether one listener's log is full of South Americans because his location or aerial are specially good for them, or just because he always happens to be on at that time.

Well, the hint is there, and we suggest that when you send in Calls Heard for next month you might well specialise in one particular continent and leave out some of the "bread-and-butter stuff" from the others.

Calls Heard

In any case, we are going to ask readers to do one or two things to their Calls Heard lists in future. First, please leave out all Europeans from 14 mc and 28 mc lists. Secondly, unless you happen to specialise in the USA, please delete all W1, W2, W3 and W8 calls; these become so numerous that they mean very little. W6

DX FORECAST FOR DECEMBER 1946 (All times GMT)

	14 mc	28 mc
NORTH AMERICA :		
East and Central USA, Canada, Newfoundland, etc.	1300-0600	1200-1700
West Coast	1600-1900	1500-1800
CENTRAL AND SOUTH AMERICA :	2300-0800	1200-2200
AFRICA :		
North of Cancer	All day	1000-1600
South of Cancer	1600-2300	0900-2000
ASIA :		
West of 75° E.	All day	0800-2000
East of 75° E.	1200-1900	1000-1600
OCEANIA :		
Australia and New Zealand	0900-1200	0830-1030
Dutch East Indies, Malaya, Philippines, etc.	1400-2000	0830-1400

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.

and W7 are always worth logging, and W4, W5, W9 and W0 are quite interesting. Thirdly, although we much appreciate additional information such as frequencies, times, and DX QTH's, please do not mix them up with the lists of calls, which should look exactly like the lists as they are printed. If the other information is there, someone only has to spend a lot of time and trouble extracting it—but it would be greatly appreciated on a separate sheet!

Set Listening Periods—November

November 29, 2000-2359 GMT—7 mc.

November 30, 1500-1900 GMT—28 mc.

Logs for these periods, Calls Heard lists, and all letters dealing with "Have You Heard?" should be addressed to the DX Scribe at 49 Victoria Street, S.W.1, to reach him not later than December 3. Please read the instructions in the Calls Heard pages regarding the form in which they should be sent in.

Acknowledgments to all whose names are mentioned in the text and in the Calls

Heard pages—and please keep it up for next month. Finally, please let us have more support for the Set Listening Periods—alternatively, suggestions for the setting of SLP's.

Though our contributor may be unable to reply direct to all letters received from readers, he welcomes a large volume of incoming mail. In general, queries and all other matters of DX interest raised by SWLs will be dealt with in "Have You Heard. . . .?" Thus, readers will in effect receive a reply in print.

Correspondence, addressed DX Scribe, "The Short Wave Listener," 49 Victoria Street, London, S.W.1, should reach us not later than the 5th of the month for notice in the issue dated the month following. Calls Heard lists should always be sent in as early as possible.

Will readers please make a particular note that the DX Scribe is responsible solely for "Have You Heard. . . .?" and Calls Heard. He should be addressed only on subjects directly connected with DX reception on the amateur bands.

*If you are interested in Amateur Transmission,
read the Short Wave Magazine*

CALLS HEARD

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

GENERAL

1-7 mc

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

'Phone: G2FIX, 2WT, 2ZB, 4GJ, 5BZ, 5RO, 5UH, 5ZT, 6GU, 8VP, GW2BG, 4FW.

3-5 mc

L. F. Worssam, Quorn Hall, Quorn, Loughborough, Leics.

'Phone: G2DY, 2GL, 2MI, 2VO, 2WQ, 2XQ, 2XS, 3AEX, 3DH, 3MT, 3NT, 3PD, 3PH, 3PN, 3QS, 3YK, 4BU, 4FD, 5AK, 5BC, 5BG, 5FK, 5KG, 5RN, 5UA, 5WB, 5WW, 5XM, 5YN, 6BW, 6NB, 6VD/A, 6YP, 6ZH, 8CZ, 8MU, 8RW, 8TG, 8TR, 8UG, 8GM6UU, 8W5TJ, 8SO, 8HB9C, 8N4DN, 4LV, 8OZ3HR, 8AØDN, 8ØNG, 8ØQR, 8ØVH, 8MSUM.

7 mc

L. J. Le Breton, 38 Bridport Road, Dorchester.

CW: CM2CT, 7AB, D4APW, F3AD, 3RD, 3RG, 3RH, 8AF, 8GH, 8LX, 8OE, 8ZW, HASEW, HB9CX, 9EF, 9EU, 9FG, 9FP, H2JB, I1AT, I1C, 1PS, 1RN, 1UE, KP4BK, LA1VA, 3EA, 6U, LU8HM, OKIDS, 6A, ON4HRD, OZ2NU, 2UA, 4AP, 5XY, 7HM, PAOFB, ONG, ORC, OSY, PY4NB, SMS1R, 5YH, UA1KBA, VE2HR, WIADC, 1AEH, 1AW, 1BSS, 1EFN, 1FEF, 1GMR, 1GPZ, 1HNN, 1JHN, 1JRA, 1KQG, 1LAL, 1LWA, 1MFO, 1INDC, 1OER, 1ONZ, 1OPM, 1PMR, 2BO, 2CHN, 2CVT, 2EEN, 2FDK, 2FOJ, 2GP, 2HRP, 2IOP, 2ITD, 2IAJ, 2IWS, 2KHT, 2MOV, 2NCL, 2NUU, 2OAG, 2OQZ, 2OYJ, 2PIC, 2QDI, 2SRN, 3FLY, 3GOL, 2GPP, 3GVs, 3GYB, 3HH, 3INX, 3ITX, 3JBB, 3JEV, 3KBX, 3LSG, 3SCB, 3WNN, 4ADN, 4DNR, 4DXH, 4FMR, 4FTS/I, 4GOG, 4IND, 4ITK, 4IZI, 4JHC, 8HCO/I, 8RT, 8SQW, 8TKE, 9JTY, XAEY, XF3A, YU3ZX, YV5AP, ZLAGA. (All 2315-2345 GMT or 0700-0730 GMT; Receiver: 0-v-1).

14 mc

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

CM3BR, CO2BZ, CP4AO, CX2CO, 2HX, 4PS, EL5B, 3A, FY7ADU, J4AAB, KA1CB, 1RC, KH6GF, KL7AD, 7FQ, KP4CC, LU1AR, 1JB, 2FC, 2MB, 3LD, 4BH, 5CB, 5DB, 6AJ, 7EO, 8AK, 9AX, 9EV, 0Q5BA, 5WF, 0X2MJ, PK1HX, PY1DC, 1FM, 1GM, 1GO, 2AL, 2FNM, 2OE, 2QZ, 3YS, 4JG, 4ND, 6AC, 6AG, 6AJP, 6AP, UA3AW, 3KAE, 3KAH, 9CF, 9KAA, ØKAA, UB5AB, 5AK, 5KAE, UN1AO, UQ2AB, VE3AF, 3AFY, 3AEX, 3AH, 3AJX, 3IJ, 3QD, 3YDX, 4KV, 4LH, VK2ACX, 2DB, 2DW, 3TR, 3AMP, 3JE, 3JP, 4EL, 4JU, 4PX, 4QA, 4WY, 5BC, 5FL, VO6L, 6O, VS18B, 7ES, W5EVR, 6JX, 6TXL, 6VK, 8B8H, 8BKP, 8ELP, 8FJN, 8FEX, 8HHU, 8III, 8K W, 8LEC, 8LT, 8RHP, 8UVE, 8WZ, 8ZCD, 9ABU, 9DO, 9GCV, 9GKU, 9POM, 9QVS, 9SR, 9YKB, ØJRI, ØMUS, W3GZT/J9, W6VBG/KW6, W9CAC/TF, ZD8A, ZLIAC, 1BY, 1GB, 1MR, 2CU, 2FA, 2GO, 3AC, 3CA, 3GU, 3IF, 4CK, 5CK, ZSICI, 6CH, 6DO.

J. Webb, 54 Gloucester Road, Wolverton, Bucks.

D2AS, 2GQ, 2HU, D4AMX, 4A0J, D05B, F3QC, 8JJ, 9BE, G2DU, 2MF, 3SC, 5DO, 6XR, 8AO, 1IKW, 1RZ, 1XX, LAK7, 0X2BC, 2MJ, 0Z2EA, 3J, 5Q, PK2AW, 2CB, 4GT, SL7SU, SM7QC, SU1CX, TI2EV, UI2UQ, VE7SU, V57FF, W2MDQ, 2AQK, 2BMB, 5YQ, 8KML, XAAW, CJ, EK, ER, ET, EU, EV, YP5EM, ZC4NX, ZP5AA, ZS6C.

A. Baldwin, 28 Wallwood Road, Leytonstone, London, E11

'Phone: C N 8 A B, 8 M A, CO2LMW, 2MA, EA1D, EK1AD, OA4AT, OX1EO, 2PA, SU1CX, TF3A, TI2OA, 2MJ, 2RC, 4JE, VE1FO, 2DD, 3AIX, 3HB, 3HC, 6KY, VK3HD, 3LA, VO4PE, VQ4ERR, VS9AR, W4AIT, 4FPK, 4HIU, 4IPE, W2MMO/Marine, W9CAC/TF, ZBIAB, 1L, 2A, ZS6CH.

CW: CM2BA, CO2JJ, FA8RT, FM8AN, HE1CE, HK3CX, OE2XN, OQ5CE, 5DR, PY1BC, 4JG, UA1AR, 1KBA, 3AW, 3BH, 3KC, UB5AB, VE1EV, 1NW, 1TL, 2BDX, 3AFY, 3AHV, 4KU, VK2JA, 3JE, VU2FM, 2PR, W4AKH, 4ITO, XE1N, YR5V, ZL2CU, ZS1M, 6DO, 6GX.

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

'Phone: CO2GY, CN8AB, 8BA, 8MI, CX1VD, 2AX, 2CO, 4CN, "Dreamboat," EA9AI, EK1AD, FG3FP, FT4AI, HK3BI, 6CKGK, KH6CT, LU6AJ, OX1BC, 1WB, 1Z, 2MJ, PY4NG, 6AG, 6AO, PZ1A, JJ, 1W, RJKE (Mediterranean), SU1CX, 1KE, TI2OA, UA1KBA, VE1FO, 1PO, 2DD, 2EM, 3HC, 4GE, 4IF, 4LH, 8AK, 8MW, VK2AGU, 2ALR, 2GU, 2TI, 2WS, 2XG, 3BZ, 3HV, 3JE, 3LA, 3NF, 3ZL, 4JT, 6DD, VQ6F, 6G, 6H, 6L, VQ4ERR, VS1AC, 1BV, VS7FF, VS9AR, VU2JD, 2PG, W5JWN/KL7, 5LEF/KL7, 9BNB/KL7, W9CAC/TF, XE1AC, 1CQ, XZ2AA, YPIAA (Black Sea), YR5A, 5X, ZBIAB, 1L, ZS2AX.

CW: CN8MI, EA9AI, FA8WH, HA3X, 5EW, KP4AE, OE2XN, 3FC, ØH2PK, ØK1DX, 1FF, 1KY, 1LM, 1PN, 1WX, 1WY, 2HK, 2NR, PY1AZ, 4JG, UA1AF, 1KBA, 3AM, 3AS, 3AW, 3BM, 3CA, 3DA, 3DAA, 3GI, 3KAE, 3KAH, UB51B, UØ6BM, VE1KF, 6CT, 6SM, 7AA, 7OU, 7ZM, 8AK, 8AY, 8ME, VK2AM, 2DO, 2ML, 2NP, 3AB, 3AMP, 3HT, 3JE, 3KX, 3OP, 3UJ, 3VJ, 4EL, 4ER, 4JU, 4KS, 4TY, 7LJ, VS7ES, VU2AM, 2FM, YR5R, 5V, 5W, 5X, ZL1BY, 1DS, 2QM, 3CA, 3CN, 3CX, 3GU, 3IS, 3MR, 4CK, ZS1CI, 1CN, 6J.

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

'Phone: EA1D, 9AI, EK1AD, EL4A, 5B, FG3FP, HH5PB, HK1AG, 1DZ, 1EP, 3AB, 3BI, 4A1CB, KH6A1, 6CT, KP4BG, 4CE, 4CF, OA4M, OX1AS, 1BC, 2MJ, PZ1G, 1GB, 1J, 1UD, 1W, TI2OA, 2PA, 4JG, VE2SZ VØ6, 4IF, 8MF, VK2AGJ, 2AGU, 2BZ, 2GU, 2HK, 2JE, 2ZC, 3BZ, 3KX, 3GM, 3WC, 3ZL, 4EK, 4JP, 6DD, 6KW, VO2D, 6G, 6L, 6H, VP2GB, 4TB, 4TE, VQ4ERR, W6LSO, 6NAN, 6RL, 8MOL, 9LNN, 9JPF, 9QIB, 9RUK, ØHN, ØNNF, ØPAL, ØZBB, W2MMO/Marine, W3QR, "Dreamboat," W5LEF/KL7, W6OCA/J3, W8QEN/CT2, W9BMB/KL7, W9CAC/TF, W9DGM/VP9, XAAX, GB, CP, EU, XE1AC, 1CQ, 1LE, YN1B, ZB1A, 1AB, 1E, 1L, ZD4AB, ZS2BJ, 6GV.

B. W. Malabre, 11 St. George's Drive, London, S.W.1.

CE1RA, CN8AB, 8MA, F3RT, 3TW, LUSAL, OX1Z, 1BC, 2MJ, PY2HE, SU1CX, TI20A, VE1GG, 3HC, V06H, 6L, WIADM, IEAP, 1FJN, 1GKK, 1JXC, 1LYH, 1MBJ, 1OCI, 1CW, 1ZT, 2EL, 2KG, 2XU, 2AFU, 2BEI, 2BYR, 2CZO, 2DNI, 2EGN, 2GIC, 2GIZ, 2HMA, 2HYT, 2IXY, 2LMH, 2MBQ, 2MRO, 2ODL, 2OOL, 2PPS, 2QAA, 2QCP, 2QSP, 3BL, 3HN, 3PV, 3AXT, 3BET, 3DNK, 3FUJ, 3IYQ, 3KAU, 3KCE, 3KXU, 3LLH, 3UIP, 4AIT, 4CXO, 4DGV, 4DSY, 4EYV, 4HU, 4HUW, 4IPA, 4IPZ, 4IYC, 4RPF, 8CUO, 8HGW, 8IXP, 8MQV, 8RFE, 8RHP, 8RQL, 8UDI, XAAJ, ER, ZBIL, 1AB, ZD4AB.

N. B. Greenall, 31 Wood Lane, Prescot, Lancs.

CW: CN8MI, 8MZ, DR8VL, ELSB, F9AG, 9AK, FA3LH, 8CR, 8H, HB9DO, 9FE, 9GA, 9UH, H18X, LU3DH, 8EE, NY4CM, OKISV, OQ5BR, SCE, 5LL PYIAZ, 1DC, 2AL, 2OE, 2OS, 4IG, 7AD, 9AC, UA1AA, 1AR, 3AJ, 3AR, 3AS, 3BM, 3CA, 3GI, 3KAE, 3KBC, 5AB, 9CF, UD6DBA, VE1CD, 1DB, 1EP, 1OK, 1PQ, 1TL, 8AW, 8MF, VK2QL, VP8AD, 8RD, VQ4KTH, VS1BX, 7ES, 7JB, WIDTS/CT2, 2CZ/KL7, 3GJB/3, 7EAZ, 7BD, 7IVI, 9MZP, 0YXO, YRSV, 5W, 5X, ZB2B, ZS1CD, 1CI, 6DW.

*Phone: "Dreamboat." EA1B, CN8AB, F7AH, SU5TB, V06H, (Labrador), VS9AR, W8GWP/2, 9CAC/TF, ZB1A, IL. (Receiver: "Sky Chief.")

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

CW: H18X, J2AAJ, 2RBC, 4AAB, K6CGK, KH6GF, W0NVF/KG6, KL7AD, 7FQ, KP4BK, 4CC, 4KD, KZ5AA, 5AG, 5AW, NY4AB, 4AF, 4CM, OX1JZ, 2MJ, PKIHX, 1RI, 1VHN, VESGF, 7ZM, 8A, 8AW, 8AY, 8MF, 8MQ, VK2AI, 2PM, 2ANJ, 2BC, 2DI, 2HI, 2KP, 2NP, 2OI, 2PX, 2LI, 2OP, 2VN, 2VQ, 2ZC, 2ZH, 3AE, 3AM, 3CX, 3HT, 3JA, 3KL, 3PG, 3OR, 3VJ, 3VR, 3WL, 3XU, 3YL, 3ZR, 4AB, 4DO, 4EL, 4FE, 4GE, 4KS, 4TY, 5BC, 5FM, 5HN, 5JU, 5WR, 5XJ, 6OM, 7CW, 7DW, 7NC, VP3JM, 4TB, 8AD, 9D, V06GH, VS1BO, 1BU, 1BX, 2BG, 7ES, 9AN, VU2EG, 2EH, 2FY, XG2VA (VQ4), XZ2KM, ZB2B, ZC6AN, ZD8A, ZE1JI, ZP6AB, 8CN, ZS1CI, 2X, 4D, 6DW, ZL1BY, 1HY, 1KJ, 1NG, 1NT, 2CU, 2DK, 2KS, 2FA, 2GO, 2MG, 2QA, 2QM, 2US, 3AB, 3CX, 3FH, 3GU, 3IS, 3JA, 3JD, 4BQ, 4CK, 4GM, 4GO.

*Phone: O44AT, OXIAS, 2MJ, ZB1AB, IL. (Receiver: 1-v-1).

D. W. Waddell, 26 Wallfields Road, Nantwich, Cheshire.

*Phone: CN8BA, CX2AX, 3EM, KP4KD, LU6AJ, TI20A, V06H, VUZAM, ZB1L.

CW: CN8MI, 8MZ, CO2JJ, CX1DZ, 4CZ, EA9AI, EK1AA, 1AZ, FA8C, 8CR, 8ES, 8H, HK3CX, KP4AN, 4AO, 4CC, LU1WC, 3DH, 4AJ, 7EN, 7EO, 9EV, OQ5AV, 5BR, SCE, OX1Z, 2K, PY1BC, 1DNN, 1GJ, 2AL, 4KT, 4BR, 4JG, 9AC, SUIUS, TI2RC, VE3ACS, 3ADP, 3AFY, 3AHV, 3BCU, 3BDK, 3BLT, 3IJ, 3TD, 4AE, 4KU, 4RO, 4XO, 5CZ, 6UE, 7ZM, 8MF, VK2IO, 2TG, 3ABW, 3AE, 3EO, 3HG, 3OP, 3VJ, 3YH, 4EL, 5FM, VPATB, VS9AN, W4ABI, 4ABO, 4AKH, 4BGR, 4DKA, 4EYU, 4EZZ, 4FPK, 4FU, 4HOT, 4HVQ, 4IQV, 4ITR, 4ITW, 4IYW, 4JIH, 4JXM, 4ML, 4UCP, 7BD, 9ABU, 9EHU, 9FKH, 9GAE, 9GNV, 9VHV, 9VND, 9YKS, 9YNB, XE1A, Y16C, YV2GP, ZB2B, ZL2CU, 2FA, ZS1B, 1CI, 4D.

A. Poklewski, Coppins Cottage, Iver, Bucks.

CE3AJ, CM2BA, 2CT, CO2BC, 2JJ, 2LX, CN8AB, 8BA, 8MA, 8MI, CR9AG, CX2AC, 2AD, ELSB, EK1AF, F7AE (Casablanca), HK3CM, KP4CE, LU2MB, 3EQ, 4AJ, 4BH, 4OQ, 5DB, 5DS, 6JB, 9EO, OQ5AV, 5BR, OX1DC, 2MJ, PY1DH, 2HN, 4JG, 6AA, SU1CX, TI20A, VE1IP, 3HC, VK2VJ, 4HA, V06K, VQ4ERR, VS9AN, VU2FM, 2WS, ZB1AB, IL, 2A, ZD4AB, 4AE, ZL2FA, 3GU, ZS1CN, 1M. (Receiver: 1-v-1.)

T. Cooper, 5 Bishop Street, Accrington, Lancs.

*Phone: D4AAE, 4AKC, 4AKQ, 4ANB, 4ANR, 4AOB, 4APG, E1S1, F3WV, 8ZW, HB9BR, 9CV, 1IBI, 1KK, 1ST, LA2A, 3C, 5H, 9O, LX1AY, ON4CA, OX1BC, 2MJ, OZ3HR, 7MC, 7KH, PAOMM, SMSWE, 5WK, 7PY, 7QC, TI20A, VE1CD, 4KU, WILTQ/TF, W2CYP, 2CZO, 2DY, 2LMH, 2MGQ, 2MI, 2QA, 3IYQ, 3KCE, 8LO, XAAT, CJ, EN, ER.

W. A. Hennessy, Birchgrove, Merthyr Mawr Road, Bridgend, South Wales.

*Phone: GW6BI, OZ3HR, VE2DBE, W1CH, 1FH, 1GSK, 1JCX, 2AFR, 2ASU, 2EL, 2EYJ, 2IBQ, 2JIH, 2QFZ, 3IYQ, 2KCE, 4AIT, 4BSY, 8HGW, 8IDG, 8KVS, 8RHP, 9EZ.

CW: F3JR, 8NV, TF3A, UA1AL, 1KBA, WIDHD, 2QCP, 3CVJ. (Receiver: G.E.C. Radiogram).

J. E. Alfrey, 45 Rusthale Avenue, Bedford Park, Chiswick, London, W.4.

CE1AO, CO7CX, CX2AC, 3BL, "Dreamboat," FT4AI, HK3BI, 3TX, KH6CT, OA4AI, 4F, OX1AS, 1WV, 2MJ, PZ1K, SU1CX, 1KE, TI20A, 2PA, 2RC, 4JG, U1KA, VE1FQ, 1GE, 1GG, 2AF, 2TH, 3HC, 4GE, 4IF, VK2AGU, 2XG, V06H, VS1BV, VU2HI, 2JD, W8SIR/VP9, XE1AC. (Receiver: SH5 with indoor aerial).

J. P. Mitchell, 94 Arundel Avenue, Sanderstead, Surrey.

*Phone: C1PL, CE1AO, 1AR, CO2LW, 7AX, CX2AX, 2CO, 4CX, HK1DZ, KAIKJ, 1AL, 1AW, 1CB, 1SS, LU3AK, 3JA, 3DH, 4BH, 4HI, 7AZ, OA4BF, PY4BU, 4MB, 6AG, PZ1A, 1G, TI2JG, 2OA, 2PA, 2RC, VE4IF, 8MF, VK2ACB, 2AGC, 2AGU, 2JP, 2XG, 3YH, 3ZL, 4JG, 4JU, 4KM, 6DD, VS1BF, 1BG, 1BV, 1BZ, 7FF, 9AP, 9AR, VU2GP, 2WS, W6OCA/J3, W9BNB/KL7, W9FEZ/J5, XZ2AA, YV5ABX, 5AC, 5AN, ZB1A, 1AB, 1J, 1L, ZD4AB. (Receiver: 0-v-1.)

28 mc

A. E. Hardman, 14 Burtinshaw Street, Cross Lane, Gorton, Manchester.

*Phone: CE1AH, CN8BA, J9ANA, 9AND (Okinawa), KH6FD, KP4AJ, 4LW, 4UG, LU3DH, OK3D, OQ5BL, PY1FO, 2KD, VETABV, 7AEZ, 7AJN, 7EL, 7VP, VP9F, VQ2FR, VQ3EDD, 3TO M, VS7FF, VU2AQ, 2LR, 2PK, W0AGS, 0BJV, 0DMQ, 0EXP, 0HGV, 0HTE, 0JCB, 0OUI, 0PJX, 0RGT, 0SIE, 0VAT, 0VSK, 0ZKM, 0ZRA, 0ZSP, 5AKI, 5ASG, 5BDG, 5BFX, 5BMM, 5BMQ, 5DHR, 5DYL, 5EEF, 5EGU, 5EHR, 5GCS, 5GVY, 5GWR, 5GZK, 5HAD, 5HCR, 5HGT, 5HVP, 5HYF, 5HYT, 5DK, 5IDO, 5IJB, 5IZW, 5JFF, 5JFZ, 5JUT, 5IOT, 5KBP, 5KI, 5KID, 5KMD, 5KMR, 5KPV, 5KZX, 5LGS, 5LVB, 5LWV, 5YJ, 6AOE, 6BPT, 6DSS, 6EEV, 6ENV, 6ERT, 6FET, 6FVQ, 6GKC, 6GMU, 6GRL, 6HLX, 6IDY, 6JTT, 6KQZ, 6LIP, 6LZV, 6MUZ, 6NNR, 6OKQ, 6OZC, 6PCK, 6PF, 6PFD, 6POA, 6PYO, 6RCN, 6QZA, 6SET, 6SGE, 6SGP, 6SHW, 6TAN, 6PUP, 6UVF, 6UXY, 6VFF, 6VRC, 6VTS, 6WUI, 6WUN, 6WVP, 6ZZ, 7BKC, 7DL, 7DTB, 7DXT, 7EMP, 7EWP, 7FTO, 7FXO, 7GTA, 7GVR, 7HIQ, 7HLB, 7IGI, 7IIX, 7IJX, 7ILL, 7IMM, 7IYG, 7JG, 7NIV, 7NPU, 7PBD, XZ2YT, YR5V, 5X, ZE1JB, 1JX, ZS1AX, 1P, 6FN, 6S. (Receiver: 1-v-1.)

28 mc

(Contd.)

F. A. Herridge, 95 Ramsden Road, Balham, London, S.W.12.

CW: CN8MZ, FA3JY, FM8AC, KZ5AB, LU3DH, 3EQ, 7BH, 8AK, PYIDE, 2OE, PZ1RM, TF3A, TG9J, UA1AA, 3CA, 3KBC, VE1CU, 1DZ, 1EP, 1PF, 1PX, 1QZ, 2GA, 2WW, 3ACS, 3AJA, 3BCO, 3IJ, 3QB, 3QU, VK3KX, 5KO, VQ3TOM, VU2AQ, 2LJ, W4AIS, 4BBP, 4CDU, 4DIJ, 4EAA, 5HYW, 4IEO, 4IKL, 4IYB, 4KAL, 4MR, 4NH, 4PDT, 4RI, 5ADZ, 5CEW, 5DBE, 5EGA, 5EWZ, 5HFD, 5KZG, 6ALO, 6IWS, 6LEE, 6PUZ, 6SAI, 6SIG, 6VBY, 6VFR, 6WLY, 6WNX, 7BDW, 7EAZ, 7HZG/6, 9NWX/4, ZD4AB, ZS1BM, 1CN, 2AL, 5BS, 5CU, 5U, 6GO, 6ID, 6IH. (Receiver: 0-v-0).

Alfred H. Sommer, Waffenplatzstrasse 3, Zurich, Switzerland.

VE3BBZ, 3BFK, 3QO, W1BFB, 1KGE, 1SI, 2FGV, 2FSG, 2GX, 2QF, 2UAT, 2UJR, 2WMU, 4ABS, 4FT, 4GMP, 4INF, 4KAV, 4NY, 6QZA, 8AHV, MWL, 8UAG, 9FNH, 9GVP, 9KVE, 9MAP, 9MO, 9MWR, 9OOY, 9OLM, 9PPO, 9QHR, 9QPO, ØCIB, ØVUC. (Receiver: SX 25')

C. R. J. Francis, 33 Kembal Street, Ipswich, Suffolk.

'Phone: J9AAK, 9ANA, KP4AJ, LU3DH, OQ5AR, 5BL, PY1FO, SU1CX, 1HF, VE2OS, 3AIB, 3AIU, 3AMB, 3AY, 3BKL, 3LC, 3LT, 3OO, 7AJU, VK2ADC, 2DI, 2YL, 5HR, VP9F, VQ2FR, 3EDD, 3TOM, VS7FE, 9AB, W1KGE, 2OEC, 3UGG, 4JIC, 5IDO, 5GH, 7ILL, 7IYW, 8DJJ, 9WCD, XACW, XZ2DN, 2YT, ZB1L, ZL3GN, 3KR, 3KZ, 3LC, 3LE, ZS1P, 2AF, 5BS, 5DE, 6DK, 6EB, 6EJ, 6EU, 6FU.

CW: TF3A, UA3BH, VE3BDX, VK2ADT, 2AGD, 2RA, 2OE, W6PUZ, YR5R, ZE1JU, ZL3LB, ZS1BM.

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

'Phone: CN8BA, 1PB, 1XX, KP4AJ, 4BP, OQ5BL, PY2KG, 2QK, SM3JK, 3IL, SUIHF, VE7AJN, VK2DI, VO2M, 2RM, VP6MR, 6YB, 9F, 9R, W5AHA, 5AKI, 5GBF, 5GCS, 5HPV, 5HYT, 5IRO, 5JFC, 5JJA, 5KC, 5KMD, 5KZL, 6AOT, 6AXI, 6GSV, 6IDY, 6MBD, 6QBL, 6VVA/I, 6WUI, 7JHP, W1OKQ/Marine, W2ODH/Marine, W2IEV/Marine, W2PRW/Marine, W6OPQ/Marine, XACW, DW, YR5V, ZB1E, ZS1AX, 1CN, 1P, 1T, 5BE.

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

'Phone: CN8BA, CR7AV, EA1D, HK3ID, HR1MB, KA1ABA, KH6AR, KP4AJ, LUSVK, OA4AK, OQ5AE, 5AR, 5BH, 5BL, 5BO, PK1AM, PY1DE, 6AG, 9AT, SUIHF, 1HM, 1RC, TI2RC, VE1DW, 1NX, 1PB, 1TA, 2BG, 2DD, 2JJ, 2NK, 2OG, 2RA, 2SA, 2TZ, 2UC, 2XS, 3AIU, 3AJS, 3AXW, 3BDH, 3BDI, 3BER, 3BKL, 3EI, 3KE, 3MT, 3OO, 3PW, 3QL, 3TW, 4MJ, 7AFA, 7AJN, 7AJU, 7VP, VO1I, IS, 2N, 2R, VP9F, VQ1HL, 2PL, 3EDD, 4ERR, VS9AB, VU2AJ, 2AK, 2AQ, 2CO, 2LR, W6GFE, 6IDY, 6MMD, 6PDB, 6POZ, 6TNZ, 6VCO, 6WVI, 7CJU, 7KT, 7NZE, 7QNC, TZO, XE2HY, XZ2AB, 2AD, 2DA, 2DN, 2RK, 2YT, YR5X, ZB1L, 2A, ZD2K, ZS1T, 2AF, 2CI, 2CS, 5BZ, 6CN, 6FU. (Receiver: Sky Buddy).

L. F. Worssam, Quorn Hall, Quorn, Loughborough, Leics.

'Phone: NY4AB, VE1CM, 1DW, 1ET, 1HI, 2BBD, 2WF, 3AIU, 3MYA, VU2AQ, WIAB1, 1ADR, 1APQ, 1UASN, 1CS, 1ECX, 1EHV, 1FNL, 1GOU, 1HDQ, 1HFN, 1JXN, 1KHM, 1KJT, 1MRJ, 1MWO, 1NPE, 1OAE, 1OHR, 1ONZ, 1PFJ, 1PHQ, 1QI, 2AFQ, 2CDH/Marine (Indian Ocean), 2EIE, 2GFH, 2GK, 2GSN, 2JCG, 2KDX, 2NQR, 2RYT, 2WOH, 3FDH, 3IUZ, 3MGY, 3RWA, 3RWL, W3M/4, 4AB, 4AZD, 4BCO, 4CBN, 4EFL, 4EFS, 4EIV, 4FPI, 4GFC, 4HOS, 4HRH, 4HXI, 4JOW, 4JTF, 4JZG, 4KLF, 4MWR, 4VV, 5BUZ, 5LCM, 8CJT, 8HUD, 8KSL, 8UAS, 8WCC, 8ZII, 9BBC, 9DPI, 9EAP, 9HB, 9PUV, 9QHR, ØNFM, ØNKW, XACW (Greece), YR5X, ZS1T.

1-7 mc

SET LISTENING PERIOD

October 27, 1000-1300 GMT

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

'Phone: G2KT, 2OO, 3AMD, 3HG, 3LM, 4BY, 4CW, 4FN, 4OU, 5DW, 6AB, 6FV, 6GG, 6NU, 8BR. (Receiver: Modified R.1155.)

L. F. Worssam, Quorn Hall, Quorn, Loughborough, Leics.

'Phone: G2AK, 2DRR, 2FNW, 2IX, 2VQ, 3ACR, 3QQ, 4BI, 4FP, 5PK, 6WF.

CW: G2YS, 4DU, 8JK.

C. J. R. Francis, 33 Kembal Street, Ipswich, Suffolk.

'Phone: G2KT, 3BY, 4BY, 4CW, 4FN, 4GA, 4OU, 5DW, 6AB, 6HG, 6QB, 8BR, 8WN.

CW: G2JV, 2SA, 3AHE, 3OA, 3WP, 5UM, 6HU, 6VC, 8JR, 8UL. (Receiver: 1-v-2.)

G. V. Haylock, 28 Longlands Road, Sidcup, Kent.

'Phone: G2BCX, 2PX, 2WI, 2XB, 3ACB, 3AEX, 3AMD, 3NG, 4AG, 4DC, 4DD, 6HG, 6LD, 6TL, 8JM.

CW: G2CYV, 2FBG, 2SA, 3AAF, 3AHE, 3AHU, 3ANW, 3BFR, 3OA, 4DC, 4GA, 6HU, 6JA, 6VC.

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

'Phone: G2BG, 2FIX, 2ZB, 5BZ, 5UH, 6GU, 8VP, GW4FW.

28 mc

October 26, 1500-2000 GMT

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

'Phone: FA8DX, HR1MB, OQ5AE, OXIZ, TI2RC, VE1CM, 1DW, 1FI, 1NX, 1PB, 2IJ, 3AJS, 3AYE, 3BBZ, 3BCL, 3MT, 3QO, VOIS, 2N, 2RM, VQ3EDD, 3TOM, VU2AQ, WIADR, 1AQ, 1BA, 1CF, 1CS, 1DHS, 1EHV, 1EJL, 1GOU, 1HDH, 1HDQ, 1HON, 1HVS, 1JUI, 1JXZ, 1KJT, 1MKK, 1MMD, 1NAK, 1NCX, 1ONZ, 1PFI, 1PFJ, 1PHQ, 2AEA, 2AFQ, 2CFS, 2CRY, 2CVF, 2DCO, 2EIE, 2FC, 2FSK, 2GFH, 2GSN, 2GX, 2JCG, 2JJI, 2JHL, 2JO, 2KDX, 2LHQ, 2NNT, 2NQR, 2OBC, 2OFM, 2PFZ, 2PGG, 2PHB, 2PMQ, 2QF, 2QFB, 2QJZ, 2RYT, 2STF, 3ANH/2, 3FDH, 3IMV, 3LHO, 4FT, 4HRR, 4KPG, 5GFR/1, 5KC, 5KGX, 5KJE, 5LCA, 5LEL, 5LHC, 5LVD, 6MJA, 8AJJ, 8BVN, 8CVU, 8KQC, 8LIO, 8QDZ, 8RNC, 8TCH, 8VMI, 8YCV, 9HB, 9JRJ, 9QUV, 9RAR, ØGHE, ØSKZ, ØWHZ, ZB2A, ZS1DH, 2CS, 6EJ, 6W.

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

'Phone: OQ5BL, VE2DPH, 2MP, W1FUW, 1TFJ, 2AOP, 4FT, 8CVU, 9BBC, ØFP, XACW, ZE1JD.

QSL BUREAUX ADDRESSES

Use these addresses only if the QTH of the distant station is unknown. Send cards to individual stations direct whenever possible. The Short Wave Listener QSL Bureau handles cards for amateur stations throughout the world. Use it if you are in doubt.

Keep this List for reference.

Alaska : J. W. McKinley, Box 1533, Juneau.
 Antigua : A. Tibbits, 27 St. Mary's Street, St. Johns.
 Argentina : Radio Club Argentino, Av. Alvear 2750, Buenos Aires.
 Australia : W.I.A., Box 2611 W, G.P.O., Melbourne.
 Belgium : U.B.A., Postbox 634, Brussels.
 Brazil : L.A.B.R.E., Caixa Postal 2353, Rio de Janeiro.
 Br. Honduras : D. Hunter, Box 178, Belize.
 Chile : L. M. Desmaras, Casilla 761, Santiago.
 China : K. L. Koo, P.O. Box 409, Shanghai.
 Colombia : L.C.R.A., P.O. Box 1266, Bogota.
 Costa Rica : F. Gonzalez, Box 365, San Jose.
 Cuba : J. D. Bourne, Lealtad 660, Habana.
 Czechoslovakia : C.A.V., Vaclavske Nam 3, Prague II.
 Denmark : E.D.R., Box 79, Copenhagen, K.
 Eire : R. Mooney, Aughnacloy, Killiney, Co. Dublin.
 Finland : T. Kolehmainen, Kasarminkatu 25.C.12, Helsinki.
 France : R.E.F., 1 Rue des Tanneries, Paris 13.
 Germany : (D2's only) Capt. J. T. Blackwood, D2TG, P & T Team, R.P.D., 609 Mil. Govt. HQ, Hamburg, B.A.O.R.
 (American Zone D4) Signals Division, HQ USFET, APO 757, c/o Postmaster, New York, N.Y.
 Great Britain : QSL Bureau, *Short Wave Magazine*, 49 Victoria Street, London, S.W.1.
 Greece : C. Tavaniotis, 17a Bucharest Street, Athens.
 Guam : Box 30, Staff Com. Marianas, c/o FPO, San Francisco.
 Guatemala : W. P. Boycer, c/o PAA Communications, Guatemala City.
 Holland : V.E.R.O.N., Postbox 400, Rotterdam.
 Italy : A.R.I., Viale Bianca Maria 24, Milan.
 Japan : (J2-J6 Zones) Major J. M. Drudge-Coates, J4AAC, Brindlv Signals, British Commonwealth Occupation Force, Japan.
 Luxembourg : W. Berger, 20 Louvigny Street, Luxembourg.
 Mexico : L.M.R.E., Av. Juarez 104-22, Mexico, D.F.
 Morocco : C. Grangier, Box 50, Casablanca.
 Newfoundland : N.A.R.A., Box 660, St. Johns.
 New Zealand : N.Z.A.R.T., P.O. Box 489, Wellington C-1.
 Nicaragua : R. Argenal, P.O. Box 78, Managua.
 Norway : N.R.R.L., P.O. Box 898, Oslo.
 Panama : R. D. Prescott, P.O. Box 32, Panama City.
 Panama Canal Zone : Signal Officer, KZ5AA, Quarry Heights.
 Paraguay : R.C.P., Palma 310, Ascuncion.
 Peru : Radio Club Peruano, Box 538, Lima.
 Philippine Islands : G. L. Rickard, 48 Ortega, San Juan, Rizal.
 Porto Rico : E. W. Mayer, P.O. Box 1061, San Juan.
 Salvador : J. F. Mejia, 7a Calle Poniente 76, San Salvador.
 South Africa : S.A.R.R.L., P.O. Box 7028, Johannesburg.
 Soviet Russia : Central Radio Club, Box N-88, Moscow.
 Sweden : S.S.A., Stockholm, 8.
 Switzerland : U.S.K.A., Postbox 196, Berne-Transit.
 Uruguay : R.C.U., Casilla 37, Montevideo.
 Venezuela : R.C.V., Apartado 1247, Caracas.

DX BROADCAST—CALLS HEARD

P. W. Muxlow, 40 Oxford Street, Grantham, Lincs.

1. Oct. 17	1330-1430	KNBA
2. Oct. 24	1445-1600	KZRH
3. Daily	2030-2100	ZRK
4. Daily	1330-1700	S.E.A.C.
5. Daily	2000-2300	VLQ

San Francisco,	11790 kc. S5.
Manila,	9640 kc. S4.
Cape Town,	5880 kc. S4.
Colombo,	15120 kc. S6.
Brisbane,	7240 kc. S3.

R1155. Com. SH7—Inv.L.

H. Tomlinson, 18 Gidlow Houses, Nr. Wigan, Lancs.

1. Oct. 25	1330-1500	WGTR
2. Oct. 21	1600	W2XHM

Boston,	45 mc (approx.). S9.
New York,	35.42 mc.

6K8G Convert.—Inv.L.

A. Frost, 18 Beechwood Avenue, Thornton Heath, Surrey.

1. Oct. 20	0030-0052	ZFY
2. Oct. 20	0015-0010	CJCX
3. Oct. 21	1000	VUD7
4. Oct. 23	1115-1145	EPB
5. Oct. 24	1445	HVJ

Georgetown, Br. Guiana,	6000 kc. S4.
Sydney, Nova Scotia,	6010 kc. S6.
Delhi,	15160 kc. S6.
Teheran, Iran,	15100 kc. S9.
Vatican City,	15100 kc. S9.

Eddystone 504.—Inv.L.

THE READER CIRCLE

NEW QTH's

The object of this feature is to facilitate personal contact between readers. All addresses listed are published only at the request of the reader concerned. For the present, entry in this column is strictly confined to those readers who are obtaining the "Short Wave Listener" on direct subscription from us. When applying for your subscription, please state clearly whether you wish your name and address to be entered in the Reader Circle. Publication will take place as requests are received, up to the limit of the space allowance, which will not normally exceed one page each month.

- Birmingham :** N. Shirley, 14 Manor Road, Stechford, 9; R. Coulson, 17 Yockleton Road, Lea Hall, 26.
- Buckinghamshire :** A. T. Burdett, Vividon, Bull Lane, Gerrard's Cross; N. V. Davies, 42 Cranbourne Road, Salt Hill, Slough.
- Cambridgeshire :** A. Cowley, 6 Bull Lane, Fore Hill, Ely.
- Devonshire :** J. R. Wordsworth, Glenhaven, Cliff Road, Wembury.
- Dorset :** L. J. Le Breton, B.E.M., 38 Bridport Road, Dorchester.
- Durham :** J. S. Tempest, Old Hall, Hutton Henry, Castle Eden.
- Essex :** D. G. Abel, 15 Wykeham Green, Dagenham; L. Newland, 14 Hardley Crescent, Squirrels Heath Lane, Romford; M. M. D'Arcy, 27 Theydon Grove, Woodford Green.
- Gloucestershire :** A. R. Poulston, 68 Kipling Road, St. Mark's, Cheltenham.
- Hampshire :** A. Chappell, 19 Harding Road, Gosport.
- Huntingdonshire :** J. F. Wort, R.A.F., Upwood, Ramsey.
- Kent :** R. Miller, 84 Mayfair Avenue, Bexleyheath; H. R. Ambidge, 234 Luton Road, Chatham; P. F. Govier, 25 Dynes Road, Kemsing.
- Lancashire :** E. Salisbury, High Street, Garstang, Nr. Preston; G. Dunn, 44 Barnsbury Road, Walton, Liverpool, 4; W. H. Hambourne, 16 Valencia Road, Mill Lane, Liverpool, 15; N. Fox, 75 Bedford Road, Firwood, Manchester, 16; A. E. Hardman, 14 Burtinshaw Street, Cross Lane, Gorton, Manchester, 18; E. T. Walley, 2 Mount Street, Rochdale; H. Tomlinson, 18 Gidlow Houses, Nr. Wigan.
- Lincolnshire :** L. Jones, 63 Barcroft Street, Cleethorpes.
- London :** D. Spencer, 131 The Ridgeway, Chingford, E.4; J. L. Freeman, 1 Essex Road, Chingford, N. E.4; K. F. Norvall, 16 Petherton Road, Highbury, N.5; A. C. Cheffins, 17
- London (cont.) :** Bedford Road, Alexandra Park, N.22; J. E. Hosking, 133 Edgeley Road, Clapham, S.W.4; K. I. Dodge, 12a Porchester Court, Porchester Gardens, Bayswater, W.2; J. E. Alfrey, 45 Rushhall Avenue, Bedford Park, Chiswick, W.4.
- Norfolk :** D. E. Gates, Melrose, Beccles Road, Bradwell, Gt. Yarmouth.
- Northumberland :** M. A. Thompson, Westleigh, Hexham; H. T. G. Glen-Davison, 8 Windsor Terrace, Newcastle-on-Tyne, 2.
- North Wales :** J. D. H. Jones, 19 Little Acton Drive, Wrexham.
- Oxfordshire :** R. Gammons, 133 Banbury Road, Kidlington.
- Scotland :** G. Rankin, 15 Woodburn Terrace, Edinburgh, 10; J. McGreevy, 31 Williamson Street, Parkhead, Glasgow, E.1; R. A. Reid, The Schoolhouse, Kyle of Lochalsh, Ross-shire; E./R./A. J. G. Jackson, E.R.A. Mess, H.M.S. "Forth," c/o G.P.O., Rothesay; W. J. Cain, 14 West End Terrace, Stranraer.
- Shropshire :** J. G. Pearce, Prospect House, Park Walls, Wellington.
- Somerset :** L. A. Lear, 41 Bath New Road, Radstock, Nr. Bath.
- South Wales :** B. R. Greenwood, 40 Duffryn Terrace, New Tredegar, Mon.; V. C. Munton, Sgts' Mess, R.A.F., Pembroke Dock, Pems.
- Surrey :** A. Frost, 18 Beechwood Avenue, Thornton Heath; R. H. Pounder, 20 Forester's Close, Wallington.
- Sussex :** J. Walker, 18 Cambridge Gardens, Hastings; A. D. Petford, The Grammar School, Midhurst.
- Warwickshire :** F. J. Webb, 14 Scott Road, Leamington Spa.
- Wiltshire :** M. Forrest, Queen Manor Farm, Lavenstock, Salisbury.
- Yorkshire :** M. Wild, 13 Parkside Crescent, Meanwood, Leeds, 6; A. J. Houghton, Bk. 4 Rawmarsh Hill, Parkgate, Nr. Rotherham; G. Lillyman, 179 Ecclesall Road, Sheffield; S/L H. Pain, 6 Granville Street, Skipton.



MLCCBI-001 getting a clue. He is of course Founder Member of the League of Card Collectors of the British Isles.

SHORT WAVE MAGAZINE CLUB CONTEST

This is now taking place on the 1.7 mc amateur band, using CW only. It started on November 16 and closes at midnight on Sunday, 24. Some twenty Clubs are competing and will be identifiable by the call "CQ MCC" (Magazine Club Contest). Following are some of the callsigns you may already have heard: G2BCX (Wanstead), G2BTO (Bolton), G2BUJ (Swindon), G2FWA (Surrey), GM2FZT (Hi-Q), G2JL (West Cornwall), G2YH (Grays), G2YS (Coventry), G3ADH (Liverpool), G3AFT (Grafton), G3AMW (Hull), G3ASR/A (Edgware), G3LP (Cheltenham), G3NN (Bradford), G5DZ (Salisbury), G5FN (Medway), G5WA (Stroud), G6AK (Beaumanor), G6RS (Kingston), G16YM (Belfast) and G8BM (Wirral). The name of the Club is in brackets.

BOOK FOR THE SWL

The "Principles of Short Wave Reception", a 32-page booklet reprinted from articles appearing in early issues of the *Short Wave Magazine*, is now available at 1s. 6d. from bookstalls, or 1s. 8d. post free from us at 49 Victoria Street, London, S.W.1.

Some of the chapter headings are: Fundamental Principles and Simple Circuits; Constructional Information for Two Receivers, including Aerial Design and Coupling; The Superheterodyne, and Notes on Communications Receiver Design; Short Wave Converters, and Adapting BC Receivers for SW Reception.

The treatment is essentially practical, and much data given on the construction of several different types of receiver, covering the bands down to 60 mc.

PHOTOGRAPHS

If you have any station photographs or QSL cards which you think might be of interest to other readers, send them in. Those found suitable for reproduction will be paid for and returned undamaged.

7 & 14—FULL WIDTH AGAIN!

With effect from November 7, the GPO announced the restoration of the whole of the 7 mc (7000-7300 kc) and 14 mc (14000-14400 kc) bands for amateur working. This means that substantially the G's have now had all pre-war bands reopened to them. Still not fully restored are certain VHF sections above 56 mc.

THE AMATEUR BANDS

Following are the bands now open for amateur operation:

1715-2000 kc	10 watts (A) and (B)	
3500-3635 kc	} 25 watts (A), 150 watts (B)	
3685-3800 kc		
7000-7300 kc	25 watts (A), 150 watts (B)	
14000-14400 kc	25 watts (A), 150 watts (B)	
28000-30000 kc	25 watts (A), 150 watts (B)	
58500-60000 kc	25 watts (A) and (B)	
460.5 mc	5 watts (radio control of models only)	
2300-2450 mc	25 watts (A) and (B). FM permitted.	

"A" licences are all three-letter call signs issued post-war, and are for CW operation only; licensees in this category are not normally allowed the use of telephony and full power till they have had twelve months' experience. Class "B" licensees are holders of reissued pre-war two-letter call signs, and are allowed the unrestricted use of CW, MCW and 'Phone with power as given above.

*All times given
in this article
are GMT.*

DX

broadcast

*World wide reception of
Short Wave programmes*

THE early days of October were not all favourable for long-distance listening, due to intense solar activity.

As you are probably aware, distant short wave signals radiated in the normal way pass to the ionosphere, where they are reflected towards the earth's surface. When there are sunspots, there may be an accompanying solar flare, with an associated abnormal outburst of ultra-violet light. The effect which this additional amount of ultra-violet light has on the ionosphere is peculiar in that it now acts as an absorbing layer, so preventing reflection to any part of the earth. Hence your inability to receive distant short wave transmissions on such occasions !

Australia

Listening during the past month has convinced me more than ever that Radio Australia can put out a good signal to reach this country at almost any time of the day. This should satisfy all cricket lovers, for it has been announced via VLB3 (25-49m.) that full coverage of all the Test matches will be provided by Radio Australia.

An interesting talk was heard over VLA4, 25-49 m. (11770 kc) at 2045 on October 3, when listeners were told of the activities of "Connie," Mr. Flay's home-reared platypus. It is worth while mentioning that this was part of a new three-hour broadcast to Europe, commencing at 2030 (after a fifteen-minute tuning signal) with the call of the kookaburra. The following is part of the programme schedule :—

- 2030. Light American music.
- 2045. Topical talk.
- 2100. Time signal. News from the Melbourne News Room.
- 2110. Sports feature, such as an eye-witness account of an M.C.C. game.
- 2120. A.B.C. Breakfast Session.
- 2145. Overseas news.
- 2200-2230. Musical Programme.

From 2030 to 2115, the transmission is put out via VLA4 only, but at 2115, VLB6, 19-74 m. (15197 kc) and VLC10, 13-84 m. (21676 kc), come on the air with the same programme.

Another talk on the Australian national football game was given in the broadcast to Britain on October 6 at 0715. Do you

know that (with a record crowd of 96,000) this is the most popular of all Australian games, though confined to the southern States? Is it not surprising that with eighteen players a-side, and four goal posts at each end, the writer recently heard a running commentary where the final score was 124 points all? And this is not Rugby football !

For lovers of serious music, Radio Australia has a programme for listeners in the Pacific and South-East Asia zones at 1145. It has been received at good strength here, the transmitters in use being VLC6, 31-2 m. (9615 kc), VLA8, 25-51 m. (11760 kc), VLG5, 25-25 m. (11880 kc), and VLC4, 19-59 m. (15315 kc). At midday, you will get the Australian Eastern Standard Time signal for 10 p.m. If you are lucky, you may also log the Australian Home Service concluding its daily broadcast on VLR 31-32 m. (9580 kc) with the National Anthem at 1400. News in this session is given at 1300.

Asia

On October 7, I came across a new short wave service operating on 49-3 m (6,075 kc) and on 19-84 m (15,120 kc), and both audible in this country at 1600, with a relay of the B.B.C. news from London. At 1615 came a local broadcast of old-time waltzes, and at 1630, the announcement : "This is the Forces Broadcasting Service. You are listening to Radio S.E.A.C., Ceylon."

On another occasion, a Scottish programme was rebroadcast from London at 1630, and at 1701 came the final time check : "It is one minute after 10-30 p.m. Indian Standard Time." A march and "God Save the King" terminated the transmission. The announcer may be John Smith of the Royal Engineers, but all the Services are represented in this duty.

On Sundays, there is an additional "Blighty Beam" transmission especially

designed for the United Kingdom, from 1830 to 2030. You must not miss this! It is broadcast on 19.84 m. (15,120 kc), and 41.75 m. (7,185 kc), with the following programme :—

- 1830-1920. "Yours for the Asking"—Musical requests and messages from Service men and women to their families at home.
- 1920-1930. Letter from Ceylon. On October 13, this was an account by Sq. Ldr. A. E. Smith, the Station Director, of an air trip from Ceylon to Singapore.
- 1930-2000. A Programme of Reminiscence, such as a tour of Northern Ireland and Eire.
- 2000-2030. Music from Stage and Screen.

You can expect a 100 per cent. S9 transmission on 19.84 metres ! Reports, which will be welcome by the authorities, should be forwarded to Radio S.E.A.C., c/o G.P.O., Colombo, Ceylon.

On October 13, after a long interval, the writer succeeded in logging Singapore,



The Kissantzi or Sanzi. Radio Brazzaville's native instrument for production of their interval signal.

Monthly Comment by R. H. GREENLAND, B.Sc.

just prior to its closing down at 1430, on a wave-length of 44.31 metres (6,770 kc). The speaker, a lady, said : "This is the British Far East Broadcasting Service in Singapore, operating on a frequency of 6.77 mc, in the 44-metre band." Two additional frequencies in the 19 and 25 metre bands were also stated to be in use, after which came : "Good Night, Everyone," and the playing of the National Anthem. It has since been confirmed that Radio Singapore broadcasts a programme in Chinese up to 1400, when you can hear the clock striking 10 p.m. The news in English is given at 1415 daily, and is read by a man ; you may hear the playing of the R.A.F. March Past before the final announcements and close down at 1430.

It is not known if this station is operated by the British Malaya Broadcasting Corporation Ltd., which formerly confirmed reception with a fine card depicting a brilliant Eastern sunrise breaking through clouds and palm trees over a tranquil stretch of ocean. Reports should be sent to : "Department of Broadcasting, Cathay Buildings, Singapore, Straits Settlements."

Rangoon, Burma, has been logged at varying strength on 9545 kc, during the past month : on one occasion it was heard broadcasting the news in English from 1400 to 1410, and followed by the direction : "You are tuned to the Burma Broadcasting Service operating on 31.44 metres." On Sundays, however, the

English transmission is of one hour's duration, from 1415 to 1515.

All-India Radio continues to put out excellent signals. At 1130 daily, you can hear English news intended for listeners in East Asia, Africa and the Middle East, over VUD10, 17.83 mc, VUD8, 15.35 mc, VUD5, 15.19 mc, and VUD9, 11.87 mc. News from Delhi can also be heard again on two frequencies in the 31-metre band at 1530, and at 1730, you will get the closing announcement : "This is Delhi. We are now leaving the air and will be back again at eight o'clock to-morrow morning. So good-night, everybody, good-night."

VUB2, Bombay, 4.88 mc, was again logged on October 3, at 1615, with a report on the recent Indian cricket tour in England. VUB2 closes at 1730 with the cheery remark : "That brings us to the end of to-night's programme. We hope you enjoyed listening. Good night, everybody."

XGOY, Chungking, is still a somewhat elusive station to log, but since my first article I have found it on 25.2 metres (11913 kc) at 1500. The English broadcast opens with the following pronouncement, made by a man : "The voice of China, in Chungking, China, presents the news." This is read by a lady, and is followed by announcements in Chinese at 1525.

On October 19, XGOY was putting in a loud signal on its other frequency of

9635 kc, with news in English at dictation speed from 1435 to 1455.

I am indebted to A. M. Levi (Belfast), who submits the following schedule received from Chungking recently.

Transmission	GMT	Directed to :	Frequency	Wave-Length
1	0855-1030	Australia, New Zealand, and East Asia	11913 kc	25.2 m.
2	1035-1235	East Asia and Southern Seas	9635 kc	31.13 m.
			7153 kc	41.95 m.
3	1240-1440	North America.	9635 kc	31.13 m.
			7153 kc	41.95 m.
4	1445-1550	Europe and Asia.	11913 kc	25.2 m.
			7153 kc	41.95 m.

News in English during these transmissions: Each period of fifteen minutes' duration, commencing at 0900-1100-1300-1500 G.M.T.

Another Far East country figures in the news this month, namely, the Dutch East Indies. The writer has heard a broadcast from Batavia over PMA, 15.5 metres (19352 kc) from 1600 to 1630 on several occasions. Popular recordings, such as: "Nursie, Nursie," played by Ambrose and his Orchestra, can be heard, also news in Dutch, and the proceedings conclude with the words: "Goeden morgen, goeden middag, goeden nacht, en wel te tusten." Though there are no English announcements, you will learn that the transmitters PLF and PLP are also in use for this service to the Netherlands.

The Philippines

Before the war, the Philippines figured prominently in the short-wave world. Once again, those islands which were so

closely associated with General MacArthur's gallant exploits, are in the news. Your station is KZeeRH, "The Voice of the Philippines," owned and operated by the Manila Broadcasting Company, with

studios in Down Town, Manila, and working on an announced frequency of 9630 kc (31.15 metres). The writer located it on a recent Saturday, a day on which it broadcasts its three-hour "Saturday Night Dance Party," from 1300 to 1600 (9 p.m. to midnight, local time). On the stroke of the midnight hour a gong was heard, the announcer said: "We bid you all a very pleasant good-night," and a march concluded the broadcast.

If you have had any associations with the Middle East, you may be interested in a broadcasting station in the Levant, which was very active during the war period. At 1600 daily, you can hear the following announcement on 37.4 metres (8020 kc): "You are listening to the English programme from the Lebanese Broadcasting Station in Beirut." News in English, of five-minutes' duration, is given by a male announcer, after which comes a sponsored programme comprising dance numbers of the type: "Then I'll Remember You."

Bad morse interference spoils ODE's signals sometimes, but recently the writer listened to the entire three-quarter hour programme with reasonable success. At 1645 came the final direction: "This is your announcer, Joan Edwards, saying Good Night to you all," this being followed by the playing of "Pack up Your Troubles in Your Old Kit Bag." Radio Levant can again be heard with a French talk at 1905, followed by a programme in Arabic at 2015.

Police Radio. The Eddystone 100 mc transmitter-receiver-power unit assembly mounted in the boot of a patrol car. American police cars are frequently heard in this country.



Persia and Turkey

I hope that all my readers have now discovered the Iranian transmitter's powerful S9 plus signals on 19.87 metres (15100 kc).

Please note that the time for the English news from EPB, Teheran, Iran, has been advanced by 15 minutes to 1130 GMT daily.

One of the easiest Asiatics to log is TAP, Ankara, Turkey, on 31.71 m. (9460 kc). It is learnt that though this is the only short-wave broadcasting station in operation at present in Turkey, additional transmitters are in course of construction at Istanbul and elsewhere. TAP is on the air daily with news in English from 1745 to 1800. The weekly English "Post Bag," which is obviously a popular feature with British listeners, can be heard on Sundays at 2130. It is conducted by Mr. Nazis Manyas, who has been on the job for many years; Ankara can be identified by its signature tune, a quaint old Turkish folk song. There are also topical talks in English at 2130 on Mondays and Thursdays.

Africa

I am frequently asked why it is so difficult to log the South African short-wave broadcasting stations here in Britain. The answer is that the power used is comparatively low, and that the aerials are not beamed on this country.

It is a known fact that it is difficult to identify short wave stations operated in Portuguese colonies, but the Radio Club de Mozambique has some powerful transmitters on the air. These privately owned stations are located at Lourenço Marques—a name you will hear in every announcement — on the shores of Delagoa Bay in the extreme south of the colony, and only 50 miles by rail from the Transvaal: hence the occasional English programmes sponsored by business firms in Johannesburg. You should be able to log at least one of the transmitters, namely CR7BE operating on 31.15 m. (9630 kc). Recordings of operatic works have been

heard at 1915, with announcements in Portuguese (lady) and English (man) at the quarter-hours, preceded by a gong or chimes. News in Portuguese is given at 1945, and world news in English at 1955, at the conclusion of which the speaker says "That is the end of our English news from Lourenço Marques to-day. We wish you a very good night from the Radio Club de Mozambique." No further announcements are given in English, though the broadcast is prolonged until 2030, at which time it terminates with the Portuguese national anthem. Only once in recent weeks has the writer logged CR7BU, 60.91 m. (4925 kc), this being on October 12, when dance music was heard at 1830.

The postal address is: "Radio Club de Mozambique, Caixa Postal 594, Lourenço Marques, Africa Oriental Portuguesa."

Although the Azores are not strictly part of Africa, I include their short-wave radio station here as being another link with Portugal and her colonies. It is ERA, operating on 74.26 m. (4040 kc), and situated at Ponta Delgada on the island of San Miguel. ERA opens at 2200 with the chimes of a clock, but listeners are warned that Portuguese is the only language used, though the location of the station and the slogan: "Emissora Regional Azores," ought not to be difficult to understand. The musical items offered provide good programme value, for the writer has heard the whole of Grieg's Piano Concerto from the station during an evening's listening.

McDonald Hobbly, the BBC's television announcer, in front of the camera at Alexandra Palace. The microphone can be seen suspended just overhead.



Before the war, I often heard and reported on ZRH, Johannesburg, and ZRK, Cape Town, and in return received a verification card from the South African Broadcasting Corporation. During the past month I have again logged a weak station on 51 metres (5882 kc), relaying the programmes of the S.A.B.C. Here are some of the items heard :—

- 25/9/46
1730. News in English.
26/9/46.
1745. Musical recordings (Gracie Fields).
2/10/46.
1830. Waltzes. Announcement: "And we end this programme of Strauss Waltzes with 'The Blue Danube.'"
1900. Talk.
2000. Dance music.
2030. String orchestra (Bach).
2043. Big Ben. News from London.
2100. Johannesburg City Hall clock striking eleven, followed by the Epilogue.
2110. The broadcast concluded with the playing of "Die Stem van Suid Afrika" and "God Save the King."

The last three items, including the Epilogue, are given every day.

On October 13, after the Epilogue and before the playing of the National Anthems, I was able to identify the station by this closing announcement: "This is Cape Town calling on 51 metres in the South African Broadcasting Service. Good Night, Everybody."

If you tune in at 1800, you will hear the news in Afrikaans, so do not mistake your station for a European broadcaster!

The address is: The South African Broadcasting Corporation, P.O. Box 4559, Johannesburg, but I advise you to enclose with your report an Imperial Reply Coupon obtainable from your local post office if you are particularly anxious to receive a verification card.

On a recent Thursday, the Omdurman Broadcasting Station in the Sudan was logged in the 31-metre band on 9650 kc, during its English transmission from 1730 to 1800. A communication just received from Khartoum confirms that the English programme is broadcast on this day of the week only. The 9650 kc transmitter works with a power of 350 watts, whilst on 13320 kc, only 250 watts is used.

If you are out to increase your bag of foreign stations try to catch some of the Arabic stations of the Middle East.

You will find SUX, Cairo, with a power of 10 kW nightly on 38.16 m. (7863 kc). Gong chimes can be heard at 2130.

Though not in Africa, Iraq presents programmes in Arabic through HNF, Baghdad, on 44.23 m. (6782 kc), and is a reliable signal between 1630 and 1930, when it closes down.

On a recent Sunday, English recordings, including "Isle of Capri," were heard at 1616. HNF is subject to severe morse interference.

In the same country, another good signal is put out by YI5KG after 1830 daily on 42.34 m. (7085 kc). The broadcast consists of native music—those squeaks and squeals which go hand in hand with instruments of Oriental origin—and, after a short news bulletin in Arabic, concludes with the Iraqi national anthem at 1930. A pre-war card from this station indicates that YI5KG was then owned by H.R.H. Prince Faisal, and that it worked with a power of one kilowatt.

If you are wanting a new country, I have one for you—the International Zone of Tangier. I have lately listened to popular dance music broadcasts from Radio International, Tangier, on 48.46 m. (6190 kc). The station closes down at 2300.

CORRESPONDENCE

We welcome readers' correspondence on the subject of short wave broadcast reception. Address R. H. Greenland, B.Sc., c/o "The Short Wave Listener," 49 Victoria Street, London, S.W.1, and post to reach us not later than the first of each month.

South and Central America

Peru, that South American country with a long coastline on the western side of the continent, is not an easy one to pick out on the short waves. However, its principal broadcaster, OAX4Z (pronounced Oh-Ah-Ekis-Quatro-Zed), announcing as "Radio Nacional de Peru," and providing rumbas and boleros and other entertainment typically Latin-American in character, can now be heard nightly after 2230 on a new wave-length of 51 metres (4880 kc). The only English direction from this station is at the time of closing down, when you will hear the call-sign and the words, "This is the National Broadcasting Station of Peru, in Lima, South America," usually a few minutes before 0430.

After a period of silence, broadcasts from Brazil have again been found on the short waves, but no English announcements have been heard. Your station is PRL7, operating on 30.92 m. (9700 kc), with the slogan: "La Voz de R.C.A. Victor, Radio Nacional, Rio de Janeiro."

If you are fortunate, you may hear recordings of vocal numbers in English, as Jerome Kern's "All Through the Day," around 2045.

HOXA, Radio Central America, 19-87 m. (15100 kc) can be heard with an English broadcast of request numbers from 2000 to 2200 daily. If you mention your favourite dance tune when next you write to "What's Your Favourite?" Box 1335, Panama City, Republic of Panama, it will be played for you in due course.

HOXA gives news in English at 2300 on 19-87 m., and again at 0355 on 25-4 m.

New Dominicans were logged on October 20, namely, HIT, 45-21 m. (6,635 kc), with "My Old Kentucky Home" at 0048, and H12A, 44-2 m. (6786 kc), some ten minutes earlier, with the direction in Spanish that the transmitter is located at Santiago de los Caballeros.

COCW, Havana, Cuba, 47-45 m. (6322 kc), has been heard on several occasions between 2345 and 0430. A gong precedes its Spanish announcements

On several evenings around 2245 I have logged a station on 51-41 m. (5835 kc), with dance music and the announcement: "This is the Armed Forces Radio Service," and at first I assumed that its location was somewhere in Europe. However, after 2315, announcements in Dutch only were given, and listeners in Batavia were called; a programme of church organ music followed.

As a postscript to this paragraph I will add that the station was identified at 2330 on October 28, when ascending gong chimes were heard, and the Dutch announcement indicated that it was PZX, Paramaribo, in Dutch Guiana.

Canada

At 2330 on October 19, one of the old-established Canadian stations put in an appearance on 49-9 m. (6010 kc), with its call: "CJCB and CJCX in Sydney, Nova Scotia." This was followed by an announcement of the time, 7.30 p.m. (local) and a gong heralding the News of the Day. Fifteen minutes later we heard an interesting broadcast from the King Edward Hotel in Toronto, where veteran ice-hockey "stars" were gathered to state their views on the game in Canada to-day.

Powerful signals are still being put out by the Canadian Broadcasting Corporation over CKNC, 16-84 m., CKCS, 19-58 m., and CHOL, 25-6 m., the last-named being excellent at 2130. Perhaps the most noteworthy feature was a re-broadcast of the speech made by H.E. Viscount Alexander, Governor-General, at the Founder's Day dinner of McGill University, Montreal, on October 5.

TEST MATCH REPORT

Radio Australia (13-84 metres) will broadcast a ball-by-ball description of the last half-hour of each day's play in the first Test, commencing at Brisbane on November 29. The actual time of this broadcast depends upon when stumps are drawn, but it will probably be 0800-0830 GMT.

W. L. Campbell (Cullercoats, Northumberland) points out, and I have since confirmed, that with this country's reversion to GMT, all times mentioned in connection with the CBC in my last article should be advanced by one hour. Many thanks!

North America

News in English from the States can be heard over six stations in the 19-metre band at 1100, namely

WGEO 15330 kc	WBOS 15210 kc
WRUL 15290 kc	WOOC 15190 kc
WCBX 15270 kc	WRUS 15130 kc

It can also be heard simultaneously over WRUW on 16-9 m. (17750 kc).

In the evenings, you can listen to another English news transmission at 2015 through WNBI, 16-87 m. (17780 kc) and WLWO, 16-85 m. (17800 kc).

A programme entitled "Answers from America" can be heard on Thursdays from 1830 to 1850, and promises to remain a popular feature. If you have any question about the United States which you would like answering over the air, send it to "Answers from America," Voice of America, New York, 19, N.Y. You can hear the broadcast over several stations in the 13- and 19-metre bands.

I wonder how many of my readers have been successful in logging stations in San Francisco on the Pacific coast? On October 22, news in English was heard on 16-89 m. at 2200, and at 2215 came the announcement: "Your station is KWID, San Francisco, operating on a frequency of 17760 kc."

At 2230, another transmitter in the same city opened up with the direction: "This is the Armed Forces Network. Stations KNBA and KNBI in San Francisco." The frequency given was 17-77 mc.

As a tailpiece, the United Nations broadcasting network came into being on October 23, with the opening of the General Assembly in Flushing, Long Island. The transmitters in use are WOOC (15200 kc), WNRI (13050 kc) and WNRX (9750 kc), all loaned for the purpose by the United States of America.

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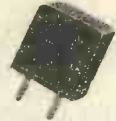
AMERICAN F7 CALLSIGNS

It seems a contradiction, but is explained by the fact that American Service personnel who are amateur transmitters and stationed in France are now being allotted French callsigns in the new series F7AA-F7ZZ. They will probably establish their own QSL Bureau in due course, as it is unlikely that their callsigns will be registered with the R.E.F., which is the organisation for French nationals. The net result is, of course, to bring those D4 kilowatts about 500 miles nearer!

CLUB NEWS

Due to considerations of space, it has been decided not to publish Club News in full in the *Short Wave Listener*. These reports will continue to appear each month as usual in the *Short Wave Magazine*. To keep readers in touch with Club activities, however, a list of active organisations will appear from time to time in the *Short Wave Listener*.

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Japan has been divided into eight callsign areas, J2-J9, and so far five calls—J4AAA, J4AAB, J4AAC, J4AAD and J4AAE—have been issued in the British zone of S. Honshu and Shikoku, of which Okayama is the principal city. You have the QSL Bureau address for all J2-J6 calls in this issue. J7-J9 is looked after by the Americans, and at the moment we have no QSL address for them.

DIRECT SUBSCRIPTION LIST

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D2 STATISTICS

As at November 6, there were 68 D2's (British Service personnel licensed to operate amateur stations) in the British Zone of Germany. Operation is allowed on all bands 58 to 1.7 mc, under the general conditions obtaining in this country. The QSL address for D2 is given in our "QSL Bureau Addresses" in this issue. Capt. R. G. Shears, D2KW (G8KW) acts as the organising secretary for Amateur Radio matters in our Zone of Germany.

The Editor Wants

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- ★ Short articles on practical problems connected with DX reception.
- ★ Photographs of short wave broadcast stations the world over.

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AR	Syria	KV4	Virgin Is.	VP6	Barbados
C	China	KZ5	Canal Zone	VP7	Bahamas Is.
CE	Chile	KB6	Baker, Howland Is.	VP8	Falkland Is.
CM, CO	Cuba	KC6	Canton Is.	VP9	Bermuda
CN1	Tangier	KG6	Guam	VQ1	Zanzibar
CN8	French Morocco	KH6	Hawaii	VQ2	N. Rhodesia
CP	Bolivia	KJ6	Johnston Is.	VQ3	Tanganyika
CR4	Cape Verde Is.	KM6	Midway	VQ4	Kenya
CR5	Port. Guinea	KP6	Palmyra, Jarvis	VQ5	Uganda
CR6	Angola	KS6	Samoa	VQ6	Br. Somaliland
CR7	Mozambique	KL7	Wake Is.	VQ8	Mauritius
CR8	Port. India		Alaska	VQ9	Seychelles
CR9	Macao	LA	Norway	VR1	Gilbert and Ellice Is.
CR10	Timor	LU	Argentina	VR2	Fiji
CT1	Portugal	LX	Luxembourg	VR3	Fanning Is.
CT2	Azores	LY	Lithuania	VR4	Br. Solomon Is.
CT3	Madeira	LZ	Bulgaria	VR5	Tonga
CX	Uruguay			VR6	Pitcairn
D2	Germany, British Zone	MX	Manchuria	VS1	Straits Settlements
D4	Germany, American Zone	NY	Panama Canal Zone	VS2	Fed. Malay States
EA1-7	Spain	OA	Peru	VS3	Non-Fed. Malay States
EA6	Balearic Is.	OE	Austria	VS4	Labuan, North Borneo
EA8	Canary Is.	OH	Finland	VS5	Sarawak and Brunei
EA9	Spanish Morocco	OK	Czechoslovakia	VS6	Hong Kong
EI	Eire	ON	Belgium	VS7	Ceylon
EK	Tangier	OQ	Belgian Congo	VS9	Aden
EL	Liberia	OX	Greenland	VU2	India
EP	Persia	OY	Faroe Is.	VU4	Laccadive Is.
ES	Ethiopia	OZ	Denmark	VU7	Bahrein
ET	Ethiopia			W0-9	U.S.A.
F	France	PA	Holland	XE	Mexico
FA	Algeria	PJ	Curacao	XU	China
FB	Madagascar	PK	Indonesia	XZ	Burma
FC	Clipperton I.	PX	Andorra		
FD	Fr. Togoland	PY	Brazil	YA	Afghanistan
FE	Fr. Camerouns	PZ	Surlnam, Dutch Guiana	YI	Iraq
FF	Fr. West Africa			YL	Latvia
FG	Guadeloupe	SM	Sweden	YN	Nicaragua
FI	Fr. Indo-China	SP	Poland	YR	Rumania
FK	New Caledonia	ST	Sudan	YS	Salvavia
FL	Fr. Somali Coast	SU	Egypt	YT, YU	Yugoslavia
FM	Martinique	SV	Greece	YV	Venezuela
FN	Fr. India	SV6	Crete		
FO	Fr. Oceanic Settlements			ZA	Albania
FP	St. Pierre and Miquelon	TA	Turkey	ZB1	Malta
FQ	Fr. Equatorial Africa	TF	Iceland	ZB2	Gibraltar
FR	Reunion I.	TG	Guatemala	ZC1	Transjordania
FT	Tunis	TI	Costa Rica	ZC2	Cocos I.
FU	New Hebrides			ZC3	Christmas I.
FY	Fr. Guiana	U, UA,	etc :	ZC4	Cyprus
G	England and I. of Man	0	Siberia (E.)	ZC6	Palestine
GC	Channel Islands	1	Leningrad Dist.	ZD1	Sierra Leone
GI	Northern Ireland	2	White Russia	ZD2	Nigeria and Br. Camerouns
GM	Scotland	3	Central	ZD3	Gambia
GW	Wales	4	Volga	ZD4	Gold Coast and Br. Togoland
HA	Hungary	5	Ukraine	ZD6	Nyasaland
HB	Switzerland	6	South Caucasus	ZD7	St. Helena
HC	Ecuador	7	North Caucasus	ZD8	Ascension I.
HH	Haiti	8	Tashkent	ZD9	Tristan da Cunha
HI	Dominican Rep.	9	Siberia (W.)	ZE1	S. Rhodesia
HK	Colombia	VE	Canada	ZK1	Cook I.
HP	Panama Rep.	VK	Australia	ZK2	Niue
HR	Honduras	VO	Newfoundland and Labrador	ZL	New Zealand
HS	Siam or Thailand	VP1	Br. Honduras	ZM	Western Samou
HZ	Saudi Arabia	VP2	Leeward and Windward Is.	ZP	Paraguay
I	Italy	VP3	Br. Guiana	ZS	Union of S. Africa
I6	Eritrea			ZS3	South-West Africa
J2-J9	Japan				

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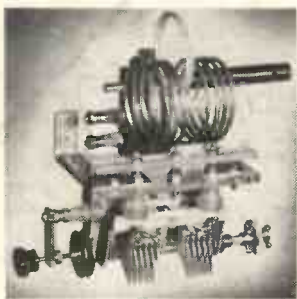
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