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The SHORT WAVE LISTENER

DEVOTED EXCLUSIVELY TO
SHORT WAVE RECEPTION

JULY 1948
VOLUME 2 · NUMBER 8

THE **SHORT WAVE** LISTENER

A MONTHLY MAGAZINE FOR THE LISTENING AMATEUR

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EDITORIAL

Notebooks

In the business of keeping the station in operation and pursuing whatever particular aspect of SWL work which happens to be of interest at the moment, the importance of maintaining complete activity records is often overlooked.

It is of course quite true that what might be called the administrative side of station operation can be overdone ; then, one becomes so busy working the system that there is no time left for the job—and we are seeing quite enough of that sort of thing in some aspects of our national life !

In our own particular sphere of activity, much can be learnt by the patient compilation of data ; not that the average individual is likely to make some startling discovery in the technical sense simply because he keeps an accurate QSL card index system. But here it *is* true that much useful information can be obtained by the analysis of the QSL card position over a period.

To do things properly is well worth while for quite another reason. Keeping careful records of the results of tests, or noting conditions and, say, the general level of activity on the band of one's choice (to mention only a few of the possibilities) will all help as time goes on to add to one's general level of knowledge and experience. This in turn will teach much, and in the easiest way, to the SWL working for his licence. In other words, for the individual to re-find some of the established data by his own unaided efforts is a very valuable mental exercise.

If the station records are properly kept, it should be possible to present at any time a lucid and chronological account of activity—either in the DX reception, QSL collection or experimental fields—over any given period, with details of anything of outstanding interest experienced during that period.

These remarks will perhaps suggest a new direction in which the keen SWL can move, if he is so minded—the actual line to take is obviously a matter of personal preference and ultimate objective.

The Type 27 Converter

by **J. N. ROE (G2VV)**

(Most SWL's possess receivers which tune as high as the 28 mc amateur band. Above this range, we enter the VHF territories, and there is very little equipment available for these higher frequencies. This article discusses the conversion and operation of the RF Unit Type 27, which can be obtained as Government surplus and is adaptable as a very useful and efficient VHF front end to the main receiver.—Ed.)

LISTENERS contemplating the use of a VHF converter would be well advised to consider the general design of the Type 27 RF Unit. This piece of ex-Government equipment is beautifully made and gives excellent results on 58 mc. It should also lend itself admirably to modification for 144 mc work, although the writer has not, as yet, had time to try it out on the latter band.

Only minor coil modifications are necessary to get the converter working on 58 mc.

General Description

The unit measures 7¼ ins. × 4¾ in × 10½ in. overall, inclusive of projections, and is contained in a sturdy metal housing which can be instantly removed by the turn of one slotted screw. This screw engages with a spring clip, fitted on the rear screen, and requires only half a turn to engage, or disengage. Construction throughout is rigid, the chassis being of heavy gauge steel and the screens of thick brass. The complete chassis-screen assembly has a silver-plated finish. The front panel—finished in matt black—carries a 3½-in. handle, co-axial aerial input socket, a small vernier condenser and the main tuning dial. This 3-in. diameter slow motion dial is of a novel design and stands away from the panel by ¾ in. Behind it is fitted a two-pin ebonite block which carries the cursor and a concealed 1-in. long torpedo pattern pilot lamp. The 0-180 degree dial is made of translucent material and, in operation, the centre in line with the cursor is fully illuminated. Connections to the unit are by way of a 6-contact Jones plug and socket (Fig. 2). The plug section is fitted at the rear of the chassis and carries: HT positive, earth-HT negative and one heater (all common), remaining heater, 7 mc IF output.

Power requirements for the converter

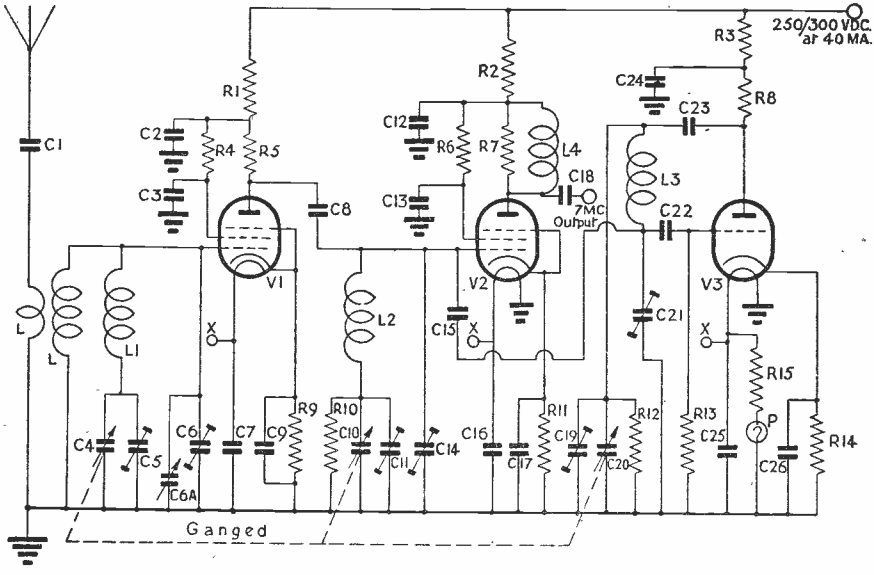
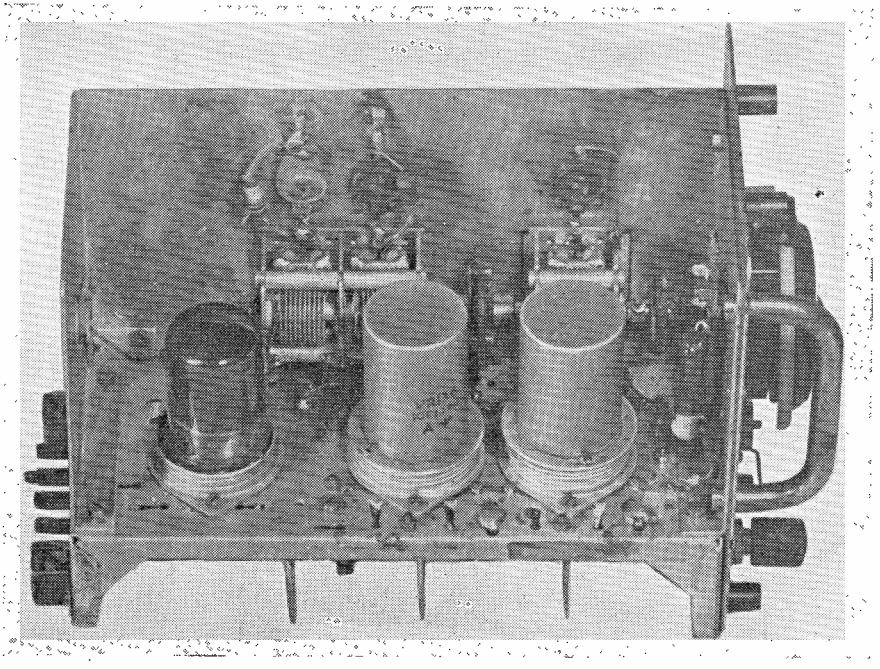


Fig. 1. Circuit of the Converter.



Side view of the Type 27 RF Unit. The valve on the left is the EC-52 oscillator.

TABLE OF VALUES

Fig. 1. The Type 27 RF Unit

C1	28 $\mu\mu$F, wax type
C2, C3, C12, C13, C24	·01 μF
C4, C10, C20	Three-gang tuning. Value not known. Miniature type with 10 moving vanes in each section
C5, C11, C19, C21	4 to 21 $\mu\mu$F ceramic trimmers
C6. C14	1·5 to 7 $\mu\mu$F ceramic trimmers
C6A	Panel mounting air trimmer. Miniature type, two moving vanes
C7, C16, C25	Value not known. Suggest ·001 μF
C8, C23	Value not known. Suggest 100 $\mu\mu$F
C9, C17, C26	500 $\mu\mu$F
C15	2 $\mu\mu$F, wax type
C18	10 $\mu\mu$F, wax type
C22	20 $\mu\mu$F, wax type
All fixed condensers, unless otherwise stated, are of he miniature moulded type rated at 350 volts DC working.	
R1, R2	2,200 ohms, ½ watt
R3, R10	47,000 ohms, ½ watt
R4, R7, R13	10,000 ohms, ½ watt
R5	10,000 ohms, 1 watt
R6	100,000 ohms, ½ watt
R8	560 ohms, ½ watt
R9	150 ohms, ½ watt
R11	1,000 ohms, ½ watt
R12	80,000 ohms, ½ watt
R14	100 ohms, ½ watt
R15	56 ohms, 1 watt
P	Dial light 2 volt 0·2 watt (torpedo type)
V1, V2	RL7 (Mullard EF54)
V3	RL16 (MullardEC52)

For details of coils L-L4 see text.

are 6·3 volts for heaters and 250-300 volts DC at about 40 mA for HT.

Circuit

One RL7 is used in the RF stage followed by another in the mixer circuit, with an RL16 in the oscillator position. The full circuit arrangement is given in Fig. 1. In the top deck photograph the valves V1-V3 number from right to left. The three-section tuning gang assembly (C4, C10, C19) together with the ceramic trimmers (C5, C11, C20) can be seen behind the valves. A resistor (R15), immediately behind the front panel, is used to drop the 6·3 volt heater supply to 2 volts for the

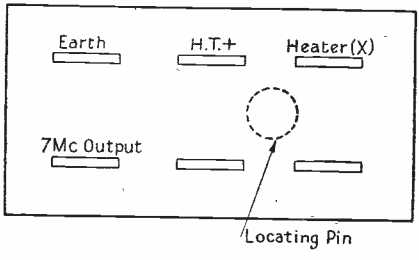


Fig 2. Plug connector terminations, underside

pilot lamp. In the underside view of the converter, looking from right to left, the first compartment contains the aerial coils (L), V1 grid coil (L1), V1 grid trimmer (C6) and the front panel controlled vernier (C6A). In the next compartment—V2 grid coil (L2), trimmer (C14). Third compartment—V2 anode output coil (L4), and part of V3 tuned circuit (L3). C21 is in the fourth compartment.

Modifications for 58 mc Operation

As supplied, the converter covers 60-80 mc and it was, therefore, necessary to dismantle and re-wind coils L1, L2, L3 for use on 58 mc. Fortunately, this did not entail any great difficulty. After removing the component connections to the coil tags, the formers—these are made of $\frac{7}{16}$-in. diameter ebonite tube—are easily taken out by releasing two 6 BA nuts and bolts which secure the bases to the chassis.

The original windings were stripped off and the coils re-wound with 20 S.W.G. enamelled copper wire; L1, and L2, 7 turns and L3, 6 turns.

The aerial coupling coils (L) require no alteration for 58 mc.

Operation

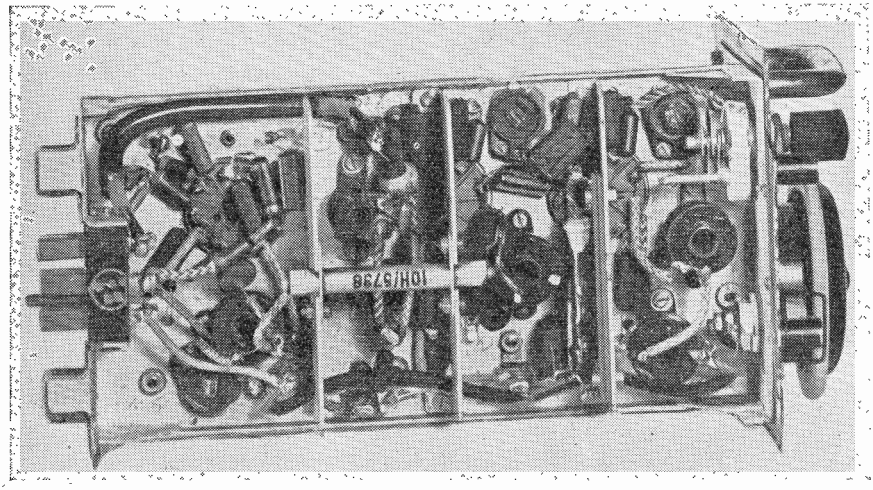
The converter may be used with any receiver capable of tuning to 7 mc. The receiver should be set to 7 mc and the aerial removed. The 7 mc output lead from the converter is then connected to the receiver aerial terminal. This lead should be screened and kept as short as possible. A long lead will result in the receiver picking up unwanted signals on 7 mc. RF and audio gain controls on the receiver are used in the normal way and tuning is carried out with the converter dial.

Circuit Alignment

It is recommended that the converter be aligned with a signal generator as the settings on the trimmer condensers are rather sharp. If, however, a generator is not available the circuits may be aligned by ear, on a signal.

First, adjust C20 and C21 to find the 58 mc band. This should not be too difficult and having set these on a known signal proceed to adjust the other trimmers for maximum gain. When correctly adjusted the 58 mc amateur band covers from about 80 degrees to 140 degrees on the dial.

On the air, equally good results have been obtained with a 68-ft. aerial and a



Under the Type 27 chassis; see text for main details.

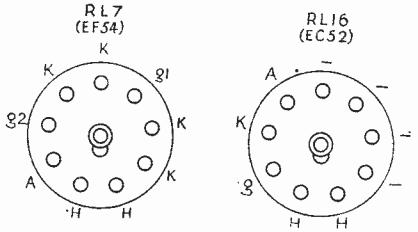


Fig. 3. Valve base connections, underside view.

small dipole but, naturally, the reader will have his own ideas about aerial arrangements.

The following voltage readings may serve as a guide in checking the converter performance but it should be pointed out that they are all a little high as the DC line input at the time of test was 350 volts.

	Anode	Screen	Cathode
V1 ..	200v	230v	1·7v
V2 ..	310v	250v	3v
V3 ..	300v	—	1·5v

Conclusion

The information given here has been entirely compiled from the converter shown in the photographs. Every effort has been made to give as much help as possible in locating components and their values and it is regretted that some values are not quoted. In these cases the parts in question bear no identification of value but, wherever possible, measurements have been taken. In the Table of Values suggestions are made for certain components. In the case of the aerial coils (L), and V2 output coil (L4), these are completely waxed over and the windings cannot be seen.

Uses for the Neon

by **S. P. MASON (G6IX)**

Few articles in the amateur station are of such varied utility, combined with low cost, as the neon bulb.

Unlike the discharge tubes used so extensively in advertising signs, which are known as "positive glow," the neon lamps used for radio are "negative glow," the glow being mainly from the cathode. Most of the so-called "neon lamps" actually contain a mixture of neon and helium, which requires a lower striking voltage than neon alone.

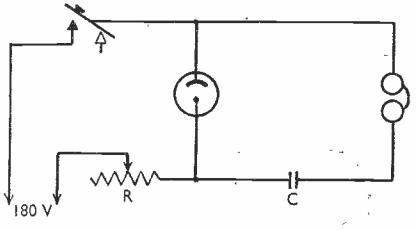
One of the best types for general use is that in which the electrodes are a wire spiral and flat metal plate respectively, the bulb being about the same size as the filament lamps used for domestic lighting. A good example is the "Osglim Beehive," which can be obtained from any electrical shop.

The transmitting amateur can use the lamp in a variety of ways. If the bulb is held near the anode end of the tank coil of a transmitter, it will glow more or less brightly, according to the amount of RF present, provided that the plate voltage is about 200 or more. Consequently it may be employed for tuning the tank to resonance, by varying the tank condenser until maximum glow is obtained. In a similar manner, the amount of RF produced by different circuit arrangements may be compared by noting the relative brightness of the lamp.

Neutralising Indicator

The neon bulb may be used as an indicator for neutralising high-power RF amplifiers. With the HT disconnected from the stage to be neutralised, drive is applied from the preceding stages and the anode coil tuned to resonance by adjusting for maximum glow. The knob of the neutralising condenser is then slowly turned until the glow in the neon lamp is extinguished and further turning causes the glow to reappear. If the neutralising condenser is now set at a point midway between the extinguishing and reappearing positions, neutralisation should be obtained.

Depth and correctness of modulation can be checked by means of a neon bulb held near the tank coil of the final amplifier. When the microphone is spoken into, the lamp should increase in brilliance. If the glow only diminishes instead of increasing, "downward modulation" is being obtained, usually due to incorrect bias, insufficient drive, or poor voltage regulation on the power supply. Under-modulation may be recognised by a slight increase in illumination only, when speaking into the microphone; full modulation causes the glow to increase



A neon-tube audio oscillator. The Osglim "beehive" is one of the most useful types of neon to have about the station. Several applications are discussed in the text.

almost to double its normal intensity upon peaks.

It will be noticed that it takes more RF energy to "strike" the bulb than to keep it glowing. In consequence, when using the bulb for detecting weak RF, it is best if possible to strike it first near a strong RF source and slide it to the point to be tested, without allowing the glow to go out. This principle is used when checking the operation of an end-fed Hertz aerial. First strike the bulb on the aerial coupling coil and then gradually slide it along the wire. If the aerial is correctly cut to resonance, the glow will be kept going for several feet along the wire.

Audio Oscillator

The circuit shown in the diagram illustrates another application of the neon bulb : as an audio oscillator for morse practice. The values of the components are not critical. The fixed condenser may have a capacity of about ·001 μF. And for the resistance approximately 1 meghom is a suitable value. By making either or both of these components variable, the pitch of the note may be altered as desired. The HT necessary will vary somewhat according to the type of bulb used, but 180 volts should be sufficient. The current flow in this practice set is almost infinitesimal, so that it is very economical in operation.

A pilot lamp across the secondary of the power pack transformer is always an advisable precaution to guard against accidental shocks. A neon lamp can be used for this purpose with the advantages of low current consumption and no liability to sudden failure as with filament lamps. The life of a neon bulb when used as a pilot in this way will, of course, be shorter than when employed only for testing purposes, but warning is usually given of its approaching demise by a tendency to flicker, such as is often noticed in advertising signs under similar circumstances.

The above by no means exhausts the possible uses of the neon lamp. Among other things, it may be used for measuring the capacities of condensers, partial rectification of high tension alternating current, and even as a detector of radio signals. Lastly, if you would like to demonstrate your "electric" personality to non-technical friends, try rubbing a neon lamp on the skin of your hand in a dark room.

PSE QSL

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

G3CGD 30 *St. Luke's Road, Cheltenham, Glos.* Reports wanted on QRP propagation experiments. On 7 mc, from areas East, South and West of QTH ; all reports welcomed on 7 and 14 mc from anywhere outside England.

G3DNY 37 *Beechwood Avenue, Thornton Heath, Surrey.* QSL's 100 per cent. for reports on 3524 and 7047 kc CW, operating 1800-2030 BST.

I1HOE *Via Naviglio Grande* 17, *Brescia, Italy.* Reports requested on CW and 'phone transmissions on all bands except 3·5 mc.

I1RC *Strada Guardiella* 29, *Trieste.* Operating 'phone on 14200, 14320 and 14355 kc, during periods 0500-0700 and 2000-0001 GMT.

OH6NZ *Lars Anderssen, Bennas, Finland.* Reports requested on VFO-controlled CW and 'phone on 3·5, 7, 14 and 28 mc bands.

OH8NV *Elmo Ketola, Kemi, Kivikko, Finland.* Operating CW and 'phone on 3520, 3550, 7017, 7040, 7100, 14028, 14080, 14200 and 28056 kc, during periods 0400-0600, 0900-1000 and 1700-2000 GMT.

ON4EF 21 *Rue de l'Eparsgne, Grivegnee, Liege, Belgium.* Reports requested on 14 and 28 mc CW and 'phone.

ON4WR 41 *Cruybeekstr., Bazel-Wass, Belgium.* Operating VFO-controlled CW in band 3515-3550 kc, during periods 1300-1700 GMT, and 0700-1100 on Sundays.

OQ5CA *Robert Jerome, Monglwalu, Belgian Congo.* Reports requested on 14 and 28 mc VFO-controlled 'phone, operating from 1730 GMT on 14 mc.

OZ3WP *Sundholmsvej* 1, *Copenhagen S, Denmark.* Reports wanted on 3·5, 7, 14 and 56 mc 'phone, operating on 56 mc from 1900 GMT ; 14 mc, 1600-1700 GMT ; 3·5 or 7 mc, from 2230 GMT. 100 per cent. QSL station, and would welcome SWL visitors.

OZ7IB *Spodsbjergvej* 80, *Runkobing, Denmark.* Reports wanted on 7 and 14 mc VFO-controlled CW and 'phone ; operating periods irregular.

OZ7SM *Sønderport* 47, *Aabenraa, Denmark.* Operating VFO-controlled 'phone and CW on 3·5, 7, 14, 28 and 56 mc bands, during period 1300-2200 GMT.

PAØWSS 26 *Berkenlaan, Zeist, Netherlands.* Reports wanted on VFO-controlled 14 mc CW and 'phone, operating during period 1630-2130 GMT.

SM6VA *Vastra Langgatan* 47, *Alingsas, Sweden.* Operating CW and 'phone on 3540 and 7080 kc, also on 14 and 28 mc bands.

SM7QY *Skolgatan* 10, *Karlskrona, Sweden.* Reports requested on 3·5, 7 and 14 mc CW. Operating periods : 3·5 mc, 1700-1800 GMT ; 7 mc, 1300-1500 GMT ; 14 mc, 2000-0001 GMT.

SM7GI *Jornvagsgatan* 23, *Trelleborg, Sweden.* Reports on 7000-7200 kc CW, operating after 0001, 0700 and 1730 GMT.

SM7MY *Skanegatan* 3, *Nybro, Sweden.* Operating VFO-controlled CW on 3·5 and 7 mc, after 1600 GMT.

SM7MZ *Angatan* 10, *Landskrona, Sweden.* Reports requested on VFO-controlled 14 mc CW and 'phone, and 28 mc 'phone ; operating 1000-1100 and 1900-2000 GMT.

VE2WY 515 *Victoria Avenue, Montreal, Quebec, Canada.* Operating 'phone on various frequencies in 28 mc band, during period 1230-1630 GMT.

VE3JA *G. B. Gillies, Braeside, Ontario, Canada.* Requests reports on VFO-controlled 28 mc 'phone.

VE7ABB 605 *Dickens Street, Upper Warfield, Trail, B.C., Canada.* Operating VFO-controlled CW and 'phone on all bands—reports wanted.

VK2PX 76 *Market Street, Bankstown, New South Wales, Australia.* Operating CW on various frequencies in 14 mc band, during period 1800-2000 GMT.

VP5MU 14 *Lexington Avenue, Kingston, Jamaica, B.W.I.* Reports requested on CW operation on 7069, 7083 and 14138 kc.

VP9E *Box* 11, *Mangrove Bay, Bermuda, B.W.I.* Operating CW in bands 7011-7024 kc, and 14022-14048 kc, during period 1700-0600 GMT.

VS6AY *Box* 541, *Hong Kong.* On various frequencies in 7, 14 and 28 mc bands, CW only, from 1100 GMT onwards daily.

W1AWE 25 *Phillips Street, Providence* 6, *Rhode Island, U.S.A.* Reports requested on CW and 'phone operation on various frequencies in 7 and 14 mc bands.

W1BKF 20 *Velander Street, Worcester* 5, *Massachusetts, U.S.A.* On VFO-controlled CW in band 14000-14200 kc.

W1CDX 219 *Concord, Portsmouth, New Hampshire, U.S.A.* Operating CW and 'phone, as applicable, on 14006, 14012, 14101, 14294, 28012 and 28588 kc.

W1GPU *Box* 163, *Saunderstown, Rhode Island, U.S.A.* On CW and 'phone on all bands, but usually 14000-14100 kc CW, operating during period 2100-0300 GMT. Reports also wanted for K1NAA, similar schedule at same QTH.

W1PRR 4 *Ivory Street, Boston* 32, *Massachusetts, U.S.A.* VFO-controlled CW in band 14005-14200 kc, during period 2300-0400 GMT.

W2AX 20 *Sterling Place, Roosevelt, Long Island, New York, U.S.A.* Operating CW on 14024 kc, 1600-2200 GMT.

W2KCX 1 *Parade place, Brooklyn, New York, U.S.A.* Operating VFO-controlled 'phone in band 28500-29000 kc, during periods 0001-0400 GMT on week-days and over week-ends. 100 per cent. QSL station.

W3ILD 4912 *Quebec Street N.W., Washington* 16, *D.C., U.S.A.* Operating CW on 7160 and 14104 kc, and 'phone on 14204 kc, 0100-0700 GMT and during week-ends.

W3JGL 2319 *Valley Road, Harrisburg, Pennsylvania, U.S.A.* Reports requested on 'phone operation in band 14205-14298 kc.

W4KWG *Lt.-Col. G. E. Branch, Gunter Air Force Base, Montgomery, Alabama, U.S.A.* Reports wanted on CW on 14012, 14066, 28024 and 28132 kc, operating durign period 2200-0500 GMT and over week-ends.

W5COK 2224 *Hillcrest, Fort Worth,* 7, *Texas, U.S.A.* Reports wanted on 'phone and CW operation on 14, 28, 50 and 144 mc bands.

W8BTI *Box* 36, *Cincinatti* 30, *Ohio, U.S.A.* Operating VFO-controlled CW and 'phone on 3·5, 7, 14 and 28 mc bands.

W8NBK 307 *Hanna Street, Dennison, Ohio, U.S.A.* VFO-controlled 14 and 28 mc CW, and 28 mc 'phone, operating during periods 2200-0300 GMT daily, and 1100-1600 GMT on Sundays.

W8RNC 25986 *Hope Avenue, Detroit* 23, *Michigan, U.S.A.* Reports wanted on 'phone operation in 28·7-28·8 mc band.

W9IJM 1220 *West Charles Street, Champaign, Illinois, U.S.A.* Reports requested on 'phone operation in 3·5, 14 and 28 mc bands, and on 7 mc CW ; operating periods irregular.

Have you heard?

AMATEUR BAND COMMENTARY

by the

DX Scribe

Here we are once more, with yet another excellent month to report. There *are* one or two pessimistic types, it is true, who say "DX has gone at last!"—but lined up against them are the far greater number who consider that May and early June have yielded marvellous results.

The SLP's met with an excellent response this time, and I think the thirty lists received for the 14 mc period constitute a new record. Keenness on 1·7 mc is also increasing, as witness the lists for the evening period on that band.

14 mc SLP Analysed

Once again, I managed to carry out some sketchy research on the 14 mc lists before they were rushed off to the printer, and, as usual, some interesting results emerged. As there were comparatively few CW lists I worked on the 'phone ones only, of which there were 27.

During the period 22 DX countries were heard by the various entrants, although, rather remarkably, no single listener reports hearing more than 11 of them. The countries, in order of "popularity," were: VK (heard by 23); LU (19); FT4 and ZL (12 each); W6 (11); PY (10); NY4 and OA (8 each); HC (5); CO and TI (4 each); CN, KH6 and VP3 (3 each); FA and XE (2 each); and the rare ones, ET, VE6, VE7, VR2, YN and YS (all heard by only one). So I suppose you can consider that if you heard anything from about HC onwards in that list, you can call yourself a real DX-hound. If not, keep your "L" plates up a little longer!

So much for the analysis of countries; now for the same treatment applied to the listeners themselves. No names, no pack-drill—but one heard 11 countries, one heard 10, one heard 8, after which five heard 7 countries and five more heard 6. The rest were either (*a*) unlucky, (*b*) not trying, (*c*) working under great difficulties or (*d*) have what the Americans call a "tin ear." Seriously, though, it is a very surprising result. You would imagine that if 22 countries come through during the space of an hour and a half, one or possibly two listeners would bag the whole lot—or at least about twenty of them. But no one got further than half-way. It all goes to show—what?

More New Prefixes

Each time we begin to think we have caught up on all the changes, another batch hits us. This month's additions are quite interesting, and are as follow:

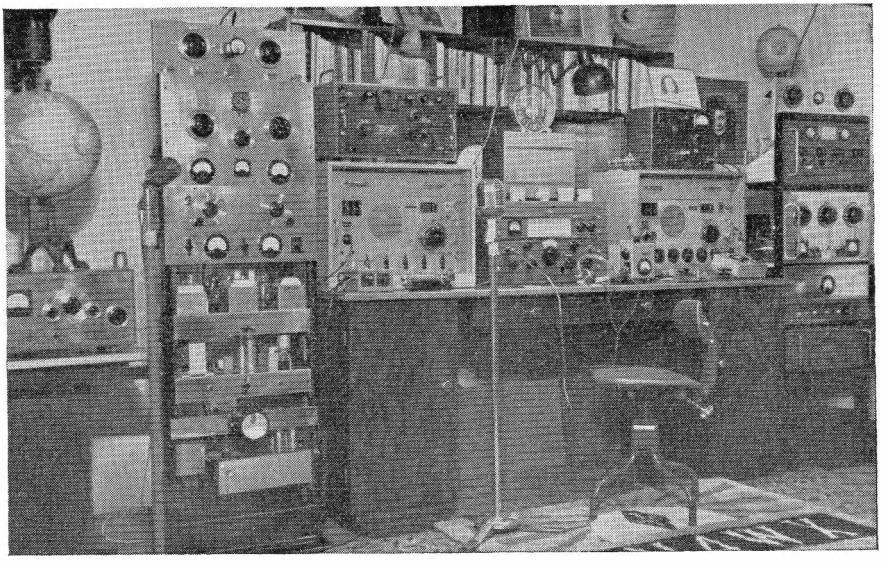
KR6:	Ryukyu Islands (Okinawa)
KG6IA-6IZ:	Bonin Islands (Iwo-Jima)
KX6:	Marshall Islands
ZS7:	Swaziland
ZS8:	Basutoland
ZS9:	Bechuanaland.

The last three will be welcomed; hitherto one has never known whether a ZS4 has been in Basutoland, or whether a ZS6 has been in Bechuanaland. From henceforth they will stand out. Thanks, by the way to the various readers who have called my attention to these changes, which were all announced in the May issue of *QST* and in *Radio-ZS* for April.

Incidentally, don't go claiming K2UN as a new country! It is the UNO station at Lake Success, N.Y. "K" will be cropping up more and more frequently as the second prefix for U.S. amateurs from now on.

Super-DX

This heading has caught on with so many readers that it is here to stay. A certain amount of super stuff has been heard this month, too. I have not been through every individual letter to pick out every single callsign mentioned, but here are some of the more interesting arrivals, dealt with in a slightly different form from the usual. I have checked carefully through some 80 letters, and there are 20 listeners who can claim to have contributed something in the "super-DX" category. They are SWL's Baldwin, Bazley, Beckett, Bovey, Braithwaite, Bruce, Collis, Emery, Goldsbrough, Good, Graham, Hawley, Lyon, Martin, Parvin, Robertson, Shear-



ON4WX has this fine outfit at Courtrai, Belgium—and this is his QSL card, too !

law, Singletary, Skelton and Willies. Between them they mention quite a number of calls, as one might imagine. Of the rarer ones, we find the following : On 14 mc 'phone, nearly everyone logged FQ8SN, HI6EC and HP1LS. Less popular were HC2KM, HH2X, ZS3F, YS3PL, CP1AP, FF8FP and YN1AC. Getting quite rare were PK3GA, PK3WG, PK4PQ, PK4VD, NY4ZQ, ZP2AE, HR1CE and the three Guatemalans, TG9AD, 9JK and 9RV. Definitely at the rarefied end of the scale were F8NE (Corsica), MD4JG (Somalia) and . . . yes, AC4YN. The latter was reported only by R. A. Hawley (Goostrey), who heard him at 0730 one morning working W3FII.

Now I will leave you a little breathing-space to digest that concentration of DX ! It shows what can be dug out in the way of 14 mc 'phone during a month which is not normally too good for that band. FQ8SN (Brazzaville) was very popular, and was also logged by quite a number of listeners on 28 mc. MD4JG (QTH in list) was also received by many 28 mc stalwarts but only reported once on 14 mc.

Star Turn of the Month

Notwithstanding all this fine 'phone reception, I think the best of the month has been ZD9AA (Tristan da Cunha) who is perfectly genuine and has been working CW only at the LF end of 14 mc. A number of you have heard him, but he remains a rarity and is, of course, a brand-new country on the air. Other outstanding CW DX, all on 14 mc, has been about ; such stations as KS6AS, KB6AD, KM6AH, KP6AE, FE8AB, FK8AB, ZK1AM, YA3B, ZD1LQ, VR1AP (or AD ?), ET3Y, W6JIM/C3 (Formosa), and HP2X and HP1BR. (Incidentally, I understand that there will be quite a lot of HP stations up from now on.)

Well, having disposed of all that super-DX (I might add, from all those super-listeners !) it seems that the rest of this Commentary might fall a little flat. After all, mere VK's and W6's wouldn't even keep one awake at the receiver after hearing ZD9AA, KS6AS and AC4YN. So, before we cover the more regular DX, let us digress on to the evergreen subject of

Calls Heard

Once again I fear that many of the General lists have been squeezed out—chiefly owing to the enthusiam for the SLP's. I have received many comments on this subject, including some from ex-tremists who say that they can't see why we don't cut out practically everything else and devote 20 pages or so to Calls Heard ! The answer to that is that the

ZONES HEARD LISTING

Listener	1948		Post-war	
	Zones	Countries	Zones	Countries
'PHONE and CW				
M. H. Preston (London, S.W.12)	40	179	40	200
M. E. Bazley (Birmingham)..	40	176	40	178
N. A. Pheps (London, N.10)	40	175	40	200
D. W. Bruce (Eltham) ..	40	172	40	191
A. Baldwin (London, E.11)..	40	168	40	180
L Collis (Banstead)	40	162	40	175
W. J. C. Pinnell (Sidcup) ..	40	132	40	154
C. S. S. Lyon (Liverpool) ..	39	152	40	176
O. A. Good (Oswestry) ..	39	148	39	183
L. N. Goldsbrough (Wirral)..	38	139	40	175
A. W. G. Boulton (Faringdon)	38	139	40	167
R. S. Stott (Upminster) ..	38	137	38	137
F. N. Baskerville (Southport)	38	126	—	—
R. A. Hawley (Goostrey) ..	38	125	39	162
W. N. Sandeman (Rudyard)..	38	124	38	129
T. W. Jones (Birmingham) ..	38	123	39	146
G. P. Watts (Norwich) ..	37	112	39	154
G. Curtis (South Harrow) ..	37	110	40	160
N. S. Beckett (Lowestoft) ..	37	110	38	132
A H Onslow (Hove) ..	37	92	39	156
A. W. Robertson (Cranford)	35	102	36	124
D. A. Pullen (Colchester) ..	35	87	37	108
J. G. P. Butler (Portsmouth)	31	97	34	112
D. G. Martin (Cheltenham)..	31	75	32	79
'PHONE ONLY				
E. J. Logan (Hertford) ..	39	127	39	163
D. W. Bruce (Eltham) ..	38	136	38	158
B. Needham (London, W.11)	38	132	38	137
L. Collis (Banstead).. ..	36	127	36	143
A. Bannister (Manchester) ..	36	126	36	135
D. L. McLean (Yeovil) ..	36	121	36	141
G. Braithwaite (Belfast) ..	36	119	36	128
D. Kendall (Potters Bar) ..	36	117	36	129
R. A. Hawley (Goostrey) ..	36	112	37	146
L. N. Goldsbrough (Wirral)..	36	109	37	137
N. S. Beckett (Lowestoft) ..	36	101	36	118
J. M. Graham (Glasgow) ..	35	117	—	—
O. A. Good (Oswestry) ..	35	114	36	130
A. Levi (Belfast)	35	111	35	125
E. W. B. Aldworth (Ashford)	35	110	36	127
T. W. W. Dearlove (Frimley Green)	35	107	35	107
K. R. Toms (Boreham Wood)	35	92	35	106
C. S. S. Lyon (Liverpool) ..	34	115	35	133
K. Parvin (London, W.1) ..	34	98	—	—
A. W. Robertson (Cranford)	34	96	35	118
G. P. Watts (Norwich) ..	34	94	35	131
D. W. E. Powell (Wilton) ..	34	87	35	100
R. S. Craig (London, S.E.1)..	34	85	35	118
T. W. Jones (Birmingham) ..	34	83	36	122
N. A. S. Fitch (London, E.10)	33	103	34	115
F. L. Rogers (Shaftesbury) ..	33	83	33	83
L. Shearlaw (Camberley) ..	32	86	35	117
C. H. P. Verrinder (Blandford)	31	106	—	—

Short Wave Listener caters for all types, and is, we think, nicely balanced at present. If there were no shortage of paper, you would have more of Calls Heard — *and* more of everything else.

So what can we do to improve the *quality*—as we can't do anything about the quantity? Personally, I think the best suggestion yet has come from N. A. S. Fitch (London, E.10), who pleads for "General" lists covering only a particular period, with the number of hours' listening stated at the end. He would like to see "Zoned" lists back again, but also makes this suggestion that "timed" lists would be a good thing—*e.g.* 14 mc lists covering only 2100-2200 for any day of the month.

It is true that those long general lists don't tell anybody very much except the sum total of stations that have been working on the band. They give no indication of the listener's capabilities, since they may represent 120 hours' listening or twelve.

So be it, then ! We will have yet another go at rationalising these Calls Heard, and we will do it thuswise. For next month's "General" lists, will each reader please limit himself to a maximum period of *two hours* each day—the same two hours every day. (All right, there—this doesn't mean that you can't listen whenever you like ! But only jot them down for "Calls Heard" during your chosen period.) State the two-hour stretch at the bottom of your list ; so every "General" list next month will cover a period of two hours, *chosen by yourself.* Over this chosen two hours you may listen

General view of G2CXO, London, S.E.9. An extended description of this station will appear in the "Other Man's Station" series in our parent *Short Wave Magazine*.

every day of the month, or one day per week, or just one or two days—to suit yourself.

If this doesn't show anything else, it will at least tell us which two-hour period is the most interesting—if you don't *all* choose 2000-2200 GMT !

Queries

Chief query of the month concerns PA4ZQ (with a YL operator) who has been heard working MB9TR practically every day on about 14150 kc. No one offers any solution—neither do I !

Several readers, casting envious glances at the position of E. J. Logan (Hertford) at the head of the 'phone list with 39 Zones Heard, have written in to ask which one he's short of. The answer is Zone 18 —so if any of you have heard 'phone from Zone 18, cheer up. It means you have a chance of scoring 40 eventually.

The 28 mc Band

Strange thing about the 28 mc band is that those who have really good receivers on the job insist that it is still wide open. Others just dismiss it as "finished." T. W. W. Dearlove (Frimley Green) says that 28 has given him the bulk of his extra countries during the past month ; it has been closed for USA but wide open in most other directions. D. L. McLean (Yeovil) heard XZ2KN on the band on May 17, but otherwise didn't find much outside Africa.

L. Tombs (Swindon) disagrees with those who say the band has folded up ; in a few days he heard VQ2, 3 and 4, ZC6, CX, KP4 and OQ5. On 28 mc 'phone, R. L. Skelton (London, S.E.12) logged ZD4AH, KA1AD, FF8WP, MD4JG, with several VQ's, lots of MM's and SHF1X. J. M. Graham (Glasgow) cashes in with HI6EC and YN1AC, among others like HH2X, C7TY, VS7GR and FF8FP. (Did someone say that band was dead ?) C. S. S. Lyon (Liverpool) surprised even himself by logging VK3CP at 2315 GMT (May 28)—coming the long way round, of course.

So you see, my friends, if you leave 28 mc alone too soon you miss a whole lot ! If it *really* opens up next season we will certainly run a Zones Heard competition for 28 mc only. We haven't done it before because it would have been too easy ; but next autumn and winter it will probably mean something.

Competitive Dept.

Since N. A. Phelps (London, N.10) admitted to logging 35 Zones and 68 Countries in one day we have had various counter-claims in. The first one to beat

DX QTH's

AP2N	Norman Henry, Police Training School, Karachi.
C6ATE	Postal Bank, Sian, China.
CR7MB	Box 12, Quelimane, Portuguese East Africa.
EQ2L	Ray Ball, American Embassy, Teheran, Iran.
HP1LS	Stanley Lawrence, Box 1616, Panama City.
K2UN	United Nations Amateur Radio Club, Lake Success, N.Y.
KG6CB	Utility Squadron No. 9, Saipan, c/o FPO, San Francisco.
M1B	Geom. Mario Graziani, Repubblica di San Marino.
MD4JG	Maj. J. R. Farr, King's African Rifles, c/o PM, Mogadishu, Somalia, East Africa.
MT2E	H. T. Orrell, Cables and Wireless Ltd., Box 400, Tripoli.
OA4BW	K. R. Wille, Box 681, Lima, Peru.
RV2/FO8	Roland d'Assignies, Isle de Raivavae, *via* Tahiti.
VE8MI	Negus Gold Mines, Ltd., Yellowknife, N.W.T.
VE8OY	Fort Smith, N.W.T.
VP6SJ	Box 252, Bridgetown, Barbados, B.W.I.
VQ4DFF	Box 3015, Mombasa, Kenya Colony.
VS1CR	Cpl. R. S. Baldwin, Signals Centre, RAF Changi, Singapore.
VS2CH	J. C. Harvey (*ex-G2CQJ*), Dublin Estate, Karangan, Kedah.
VU2FL	A. C. Watson, Gayaganga P.O, Siliguri, Assam.
W4MCI/KG6	Amph. Trac. Coy., 1st Marine Brigade, c/o FPO, San Francisco.
W6JIM/C3	APO 909, c/o PM, San Francisco
ZC1AZ	RAF Amman, Transjordan.
ZC1CL	F/O D. E. C. Lockyer, Officers Mess, RAF Amman, Transjordan.
ZD1LQ	Lungi Airport, Freetown, Sierra Leone.

him in numbers is D. W. Bruce (Eltham) who quietly points out in the course of a long letter that on February 19 he logged 33 Zones and 78 Countries "at odd times between 0600 and 2300" on 14 and 28 mc. And A. Bannister (Manchester) sends a list detailing one day's listening to '*phone only*, which yielded 18 Zones and 41 Countries. Any further offers ?

Frequency Checks

How many listeners are in a position to give an accurate frequency-check when they send their nice SWL cards out ? I hear from E. A. Bovey (Dartmouth) that he has an ex-Service Type D wavemeter and that he always gives a frequency reading with his reports. As he says, with so many VFO's about these days it is probably appreciated more.

Miscellany

There's no doubt about it ; to enjoy short wave listening as a hobby you have to put something into it yourself. Either you put in some really deadly concentration on one band, or you improve your gear until you can work efficiently on several of them. One of these all-rounders is C. S. S. Lyon (Liverpool), who covers all bands from 1·7 mc to 28 mc. He finds the Top Band interesting, as yielding a new kind of DX (*e.g.*, G2ND in Exeter, using 1 watt). He says it needs a brave spirit to persevere with DX on 3·5 mc nowadays, the QRN being shocking at times. But he logged PY4QE again, as late as May 28. On 7 mc he heard PY2JQ on 'phone, *plus* CT2AG, TA1UQ, UC2AD and W5BQA on CW. 14 mc yielded ZD9AA, and 28 mc FQ8SN and MD4JG (see what I mean about using all bands ?).

D. F. Willies (Holt) is Another Good Man Going Wrong, since his brother has his "ticket" and they have been on the air on 7 mc together. But D. F. W. promises to keep up his SWL activity. N. S. Beckett (Lowestoft) unearthed an interesting one on 7 mc, to wit EA6CP in the Balearic Islands. He would like to know whether the 14 mc station on Ocean Island, working a G at 1840 on May 9, was VR1AP or VR1AD. But no one else seems to have heard him, or I should doubtless have been told about it !

L. N. Goldsbrough (Wirral) continues to enthuse about CW listening, and quotes F8NE (Corsica), UI8AA, UI8KAA, UL7BS (at last), VS9GT, ZA2TZ and other nice ones. He heard ZD2RGY and ZD9AA being called, but didn't find them underneath the swarm of VFO's.

Several readers seem to have heard all the Russian prefixes except UM8. As a matter of interest, I have heard them all myself during May, except that UM8. UJ8AD is a fairly rare one, but he turned up again ; and UN1AO bursts out from time to time. UF6KAB and 6KAC have both been very active on 14 mc. UQ, UR and UC are quite frequently heard, and UA3BD/UP2 made one of his rare appearances.

T. W. Jones (Birmingham) was fortunate in logging YA3B, working a W6 on CW, and nearly swamped out by others calling him. He also heard FK8AB. A. Baldwin (London, E.11) has added 30 countries to his list this month, a feat which he puts down

to his having spent several hours roof-hopping and tree-climbing to get up a decent aerial. The Pacific has succumbed to his entreaties at last.

M. E. Bazley (Birmingham) says that of his 176 countries heard this year, 174 were on CW. He hasn't even listened to 'phone for the past two months. H. M. Graham (Harefield) comments on a remarkably complete fade-out on May 21 at 1225, when even 7 mc packed up completely.

The Old-Timers Return

By a strange coincidence two real old-timers have written this month to say that they have started again by becoming SWL's once more ! The first is L. C. Snowden (Weybridge), who was G6XP some 20 years ago. In the last two months, listening for not more than six hours a week, he has logged 104 countries. The second is A. Studley (Harrow), who was G5TD in 1923-26. Using a 1-V-2, he says that in the last week or so, without long sittings, he has logged 30 Zones and 80 Countries, and is amazed at the change in conditions since he was last on the air. It is nice to see these old hands coming back—and it is obvious that they will not be content to remain listeners for long ; I can almost see those call-signs at the foot of their next letters !

Those Foul Notes

P. W. Bowles (Hove) heard a signal sounding rather like the erstwhile "Resonant Sink" but found that it was sending morse. He was astonished to decipher the fact that "it" had a G3 call-sign, but charitably concludes that it must have been a pirate. (I'm not quite so generous-minded myself.) Not all the bad notes come from Russia and Italy, although they provide a very high proportion of them. I have been rather pained recently to hear some real stinkers from OZ and SM—countries I always looked upon as providing a wonderfully high standard of notes and operating.

O. A. Good (Oswestry) has heard most of the super-DX available this month. He put in 43 hours' listening and logged 38Z, 112C (33Z, 87C on 'phone). He was surprised at the number of loggings in Zone 10, with six HC stations and five OA's. He sends some useful QTH's for the list.

L. M. Singletary (Honiton?) mentions that VE 'phones can still be heard in the small hours on 3·5 mc, and adds that there is so much interesting "ragchewing" going on on that band that he can seldom get to bed until after 0100. G8VB, who worked all States on 3·5 mc 'phone, is described as "Chief Night Owl" on the band.

L. Collis (Banstead) mentions an interesting call — ZC1AL/ZC6 — presumably operating now with the Arab Legion in Palestine. L. C. was also lucky in hearing UF6KAB change over from CW to 'phone, thus giving him another 'phone zone.

Re-cap—Calls Heard

From time to time we have to put things straight again, so let's repeat the rules, *applicable to SLP's and General Lists alike :*

28 mc :	No Europe ; no W or VE except W6, W7, VE6, 7 and 8.
14 mc :	As 28 mc.
7 mc :	No Europe.
3·5 mc :	No "near Europeans."
1·7 mc :	Anything outside your home town !

And, for this month's General Lists—choose your daily period of two hours, and stick to it throughout the month. Don't forget to state it at the bottom of your list, together with the total number of hours' listening.

Set Listening Periods, June

June 26, 1700-1900 GMT : 14 mc CW and 'Phone.

June 27, 1000-1200 GMT : 1·7 mc CW and 'Phone.

Please do all you can to get off your lists, claims, logs and so on in plenty of time for the deadline, which will have to be first post on June 30. I am sorry that the dates are so tight again, but we have to allow a little time *before* the SLP for the *Short Wave Listener* to get round, for the benefit of those readers who do not get their copy on publication day by direct subscription from us. And then we have to go to press early next month, as the third Thursday is rather sooner than usual—the 15th.

All letters, lists, claims and news notes, as usual, to the "DX Scribe," *Short Wave Listener*, 49 Victoria Street, London, S.W.1. Repeat, June 30, *first post* ! Until then, Good Listening.

THE NEW CALL BOOK

The Spring 1948 Edition of the *Radio Amateur Call Book* is another monster production, and testifies to the rapid growth of Amateur Radio activity all over the world.

The G listings, in 34 columns of small print, now comprises about 4,000 addresses, but even at that the G figure is about two-thirds only of the number of British licences in issue. This lag is of course inevitable and a publication like the Call Book can never be right up to date.

CALLS HEARD

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

SET LISTENING PERIODS

14 mc

May 30, 0630-0800 GMT

W. E. Bachell, 24 Hill Road, Prittlewell, Essex.

HC2KN, 7KD, LU6AJ, NY4BA, OA4AP,PY2JG,TI2OA, VK2AGU, 2AGW, 2ALO, 2NG, 2WB, 3GM, 3ND, 3RV, 3WX, 4UL, 7AJ, 7TR, W6EZP, 6UYS, YN1EG, ZL2BT, 2GX, 4FO. (*Rx : Hambander.*)

R. W. Emery, 21 Brighton Road, Bristol 6.

'*PHONE:* MF2AA, LU6AJ. *CW:* VK2AI, 2ZS, 7NC. *Rx : Battery 0-V-2.*)

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

FA8JK, HC2KM, KH6CS, LU4CN, 6AJ, MF2AA, SV1AH, TI2JV, VK2NG, 2YF, 2AGW, 3OP, 3WX, 3AWN, 7KR, W6NO, 6ANJ, 6CGP, 6EZP, 6KFC, 6KSE, 6PXH, 6YHR. (*Rx :* 14 *Valve Home-built Double Superhet.*)

R. S. Craig, 38 Grange Walk, London, S.E.1.

'*PHONE:* ET3AJ, LU2BS, 2FN, 4DD, 4DJ, 5AE, 6AJ, OA4AI, VR2AB, VK2GW, 2WD, 2AZO, 3WX, 4RW, 4UL, ZL2BS, 2BT, 2GX, 4FO.

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

'*PHONE:* LU4CN, 6AJ, NY4BA, PY2AK, VK2AGW, 2ALO, 2JP, 2NG, 3OP, 3WX, 3XD, W6CGP, 6EZP, 6KSE, ZL3BV, 3FV, 4FO. (*Rx : CR*100.)

E. C. Clarke, 884 Scott Hall Road, Leeds, 7.

CW: VK2BC, 2NB, 3ADX, 3DO, 7NC, ZL3AL, 3KR. (*Rx : R*1155*A.*)

J. Bagshaw, Sunlea, Saltash Road, Callington, Cornwall.

'*PHONE:* FT4AI, LU4CN, OA4AP, VK2AGW, 2NG, 2OQ, 3AC, 3ND, 3OP, 3RV, 3UT, 6DD (*Rx : SX*24.)

L. C. Snowden, Sandy Bank, Mayfield Road, Weybridge.

CW: OA4DX, VE6MZ, VK2AIB, 2NB, 2ZH, 3ADX, 3KE, 3TX, 3XQ, 4VW, 5AF, 5BZ, 5JS, 7KB, ZL2QY. (*Rx : Eddystone* 640).

E. G. Dommett, 38 Yonder Street, Ottery St. Mary, Devon.

'*PHONE:* FT4AI, KH6GS, LU6AJ, MF2AA, OA3AB, PY2AK, TI2OA, VE7ZM, VK2ADV, 2OQ, 2SE, 2TA, 2WV, 2ZF, 3AH, 3HW, 3JT, 3RV, 3WX, 7AJ, XE1CQ, YS3PL, ZL3FV, 4FO, 4GA. (*Rx : RME* 69.)

E. Nottingham, "Lyndhurst," Upper Poppleton, York.

'*PHONE:* CN8MI, FT4AI, LU6AJ, PY2AK, SV1AB, VK2AGW, 2NG, 3JT, 3OP, 3WX, 7AJ, VP3MCB. (*Rx : Eddystone* 640.)

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

'*PHONE:* LU6AJ, MF2AA, OA4AI, 4AT, PY2AK, VK2AGW, 2ALO, 2NG, 3WX, 3XD, 7TR. (*Rx : Murphy A*122.)

N. A. S. Fitch, 79 Murchison Road, London, E.10.

'*PHONE:* FT4AI, VK2AGW, 3HW, 3KU, 3JT, 3RV, 7TR, W6EZP, ZL4FO. (*Rx : Mains* 1-*V*-1.)

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

'*PHONE:* CO2SE, FT4AI, LU6AJ, MF2AA, NY4BA, PY2AK, 2AV, 4CV, VK2HJ, 2MV, 2PW, 3HW, 3JT, 3KU, 3WX, 4PR, 7AJ, 7TR, W6BYS, 6EAB. (*Rx : Phillips P.C.R. (SH7).*)

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

CW: VK2JT, 2NB, 2RX, 2ZS, 3DQ, 4KH, W6MUC, 6NJZ 6PUY, 6WDF, 6ZSZ, 6ZUI, ZL4AW, 4GA.

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

'*PHONE:* VK2TC, 3AWN, 3HW, 3JT, 3RV, 7AJ.

P. W. Bowles, 47 Braemore Road, Hove, Sussex.

'*PHONE:* LU6AJ, ZL4AK, 4FO. (*Rx : Eddystone* 640.)

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

'*PHONE:* CO2SE, FT4AI, SVØAB, TI2OA, VK2JP, 3AWN, 3JT, 3KU, 3OP, VP3MCB.

CW: KP6AE, VK2BO, 2ZH, 3DQ, 3NC, 5BZ, 5JS, W6HRB, ZL2LB, 4AW, 4GA. (*Rx : 1-V-2.*)

M. W. R. Halls, 19 Compass Road, Leicester.

'*PHONE:* FT4AI, LU4CN, 6AJ, MF2AA, NY4BH, SVØAD, VK2NG, 3AWN, 3JT, 3OP, 3RV, 3WX, 3XD, 7AJ, W6EZP, 6NO, 6YHR, ZL4FO. (*Rx : 1-V-3.*)

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

'*PHONE:* VK2AGW, 2NG, 2OQ, 2WC, 3AWN, 3OP, 7CR, ZL4FO.

CW: VK2DA. (*Rx : 0-V-1.*)

P. E. Woolmer, 30 Swinegate, Grantham, Lincs.

'*PHONE:* FT4AI, LU6AJ, W6EZP. (*Rx : MCR*1.)

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

'*PHONE:* FA8JK, FT4AI, HC7KO, LU4CN, 6AJ, OA4AT, VK2AGW, 2NG, 2OQ, 2SE, 2TR, 3AWN, 3HW, 3JG, 3JT, 3OP, 3RV, 7AJ, ZL4AK. (*Rx : R*208.)

J. D. Boatwright, 37 Grant Street, Norwich, Norfolk.

'*PHONE:* HC7KD, LU4CN, MD1H, MF2AA, NY4BA, OA4AT, PY2AK, SVØAB, VK2AFV, 2AKW, 2HW, 2NG, 2TU, 2US, 3OP, 7AJ, W6ABM, 6EZP, 6UYX, ZL3FV, 4HA. (*Rx : Hallicrafters S.*40.)

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

'*PHONE:* VP3MCB, W6EZP. *CW:* FT4BM, KG6DG, VK2AIB, 2ZH, 3DQ, 3FO, 3UJ, 3VW, 3WW, 4DA, 4KH, 5FL, 5JS, 7NC, W6AUT, 6ABA, 6BIL, 6CG, 6EFM, 6WDF, 6ZUI, ZL2LB, 3JA, 3KR, 4GA. (*Rx : Modified R*1155A.)

D. Garrard, 178 Hill House Road, Ipswich, Suffolk.

'*PHONE:* CN8MI, CO2SE, FT4AI, HC7KD, LU6AJ, MF2AA, NY4BA, VK2AAW, 2AWG, 2SE, 2VC, 2WD, 3AWN, 3HW, 3JT, 3NG, 3CP, 3WX, 3XD, 6DD. (*Rx : BC*-342-N.)

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

'PHONE: CN8MI, FT4AI, LU6AJ, NY4BA, VK3HW, 3JT, 3OP, 3WX, W6EZP, 6PXM.

CW: FA8WH, VK2IV, 4KH, W6ONX. (*Rx : Eddystone* 504.)

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

CW: FA8CR; FK8AB (?), FT4BM, VK2ZH, 3DQ, 5FL, 5JS, ZL2QY, 3KR. (*Rx : V55R.*)

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

'PHONE: FT4AI, LU4CN, 6AJ, VK2AGW, 3JT.

CW: FA8WH, FT4BM, KG6DG, VK2AIB, 2BO, 2DA, 2RX, 2ZH, 3ADX, 3DQ, 3PL, 3VW, 4AP, 5JS, 6DJ, W6JK. 6PFD, YU7AF, ZL1BQ, 1MB, 3JA, 4CK. (*Rx : O-V-*1.)

L. M. Singletary, Honiton, Devon.

'PHONE: PY2AK, SVØAB, VK2NG, 3AWN, 3HW, 3XD, 7AJ, XE2IS.

CW: SV1RX, UR2AA, VK2AIB, 2DA, 2ZH, 3DQ, 3NC, 3PL, 4DA, 6DJ, 6GA. (*Rx : O-V-*1.)

L. Tombs, 31 Little Avenue, Swindon, Wilts.

PHONE: PY2AK, VK2AGW, 2AWN, 2NG, 3AW, 3HW, 3JT, 3RV, 7AJ, 7TR, W6CGP, 6EZP, 6NO. (*Rx :* 12 *-Valve Superhet.*)

A. Studley, 274 Kings Road, Harrow, Middx.

CW: KZ5AK, 5MB, TI2EXO, UF6KAB, VK2AIB, 2BC, 2HW, 2NB, 2ZH, 3ADX, 3EA, 3DQ, 3KB, 3KY, 3NQ, 3TX, 5FM, 5JS, 7NC, W6EFM, 6ONZ. (*Rx : 1-V-*2.)

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

'PHONE: CO2SE, KH6GS, LU6AJ, NY4BA, PY2AK, SVØAB, VK2AGU, 2AGW, 2JP, 2OQ, 3ADR, 3JT, 3KU, 3NB, 3OP, 4VD, 7HJ, 7TR, ZL4AK/P4. (*Rx :* 208.)

1·7 mc

May 30, 2100-2230 GMT

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

'PHONE: G2CZH, 2FLK, 2GS, 4FQ, 4GJ, 5FY, 5MM, 5SK, GM6SR. (*Rx : R.C.A. AR88LF.*)

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

CW: G2ASY, 2BK, 2FIS, 2QN, 3AZI, 3CET, 3CNN, 3DOM, 3GW, 3MD, 3PS, 5JM, 8QJ, 8QW.

E. Nottingham, "Lyndhurst," Upper Poppleton, York.

'PHONE: G2FLK, 2HAI, 2JG, 2KO, 3ABR, 3ARS, 3ART.

J. Bagshaw, Sunlea, Saltash Road, Callington, Cornwall.

'PHONE: G2FLK, 2HAI, 2VJ, 5LC, 5MM, 5SK, 5XM. (*Rx : SX*24.)

L. R. Hutchings, 145 May Lane, Kings Heath, Birmingham 14.

'PHONE: G2AKI, 2ATK, 2FLK, 2HAI, 2HAT, 3ART, 3BQB, 5SK. (*Rx : Hallicrafters Sky Champion.*)

L. M. Singletary, Honiton, Devon.

'PHONE: G2FLK, 2HAI, 3ART, 3BU, 3PS, 4IC, 5SK, GM6SR.

CW: G2BK, 2FIS, 2JF, 2QN, 2SC, 3ARS, 3AZI, 3CNN, 3DJL, 3NZ, 3PS, 3TA, 6UJ, 8QJ. (*Rx : O-V-*1.)

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

CW: G2ASY, 2DOM, 3AQM, 3GPG, 3MD, 3NN, 5JM, 5LC, 6FA, 6ZR, 8LN, 8QJ, 8SM, ON4APC.

'PHONE: G2AJI, 2AZW, 2BJ, 2BQY, 2FLK, 2JG, 2WI, 3AEX, 3ARP, 3AYZ, 3BNI, 3CO, 3JQK, 3LY, 4AK, 4DC, 4IC, 5MM, 5SK, 8RH, GM6SR. (*Rx : Hambander.*)

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

'PHONE: G2AKI, 2AZW, 2CZH, 2FLK, 2GS, 2JG, 2WI, 3AEX, 3ART, 3AWA, 3CO, 3JKQ, 3LY, 3PS, 4DC, 4DH, 4IC, 5MM, 5SK, 6HD, 6IO, 8LN, 8RH/A.

CW: G2ASY, 2CZH, 2DOM,, 3AZI, 3CAC, 3CET, 3CLA, 3DNJ 3GW, 3MD, 3PS, 5PY, 8QJ. (*Rx : 1-V-*2.)

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

CW: G2BK, 3DJL, GM4GK, 6SR, ON4APC.

'PHONE: G2HAI, 3ARS, 3ART. (*Rx : Hallicrafters S.*20.)

W. W. Evans, 59 Oxford Road, Wokingham, Berkshire.

'PHONE: G2FLK, 2HAI, 2ML, 3AJI, 3ART, 3BMZ, 5JM, 5SK, 5XB, 6MB, 8RH/A, GM6SR. (*Rx : Eddystone* 504.)

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

'PHONE: G2BID, 3ART, 3AZI, 3BBU, 3BGU.

CW: G2AUF, 2BVU, 2CZH, 2QNK, 3CNN, 3ZY. (*Rx : Eddystone* 504 *and Pye BS*6.)

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

'PHONE: G2HAI, 2JG, 3AKW, 3ART, 3BOP, 3DQJ.

CW: G2AUF, 2BVU, 2JF, 2QN, 2SC, 3AQX, 3AZI, 3DNF/A, 3DNJ, 3DQJ, 3NZ, 3PS, 5BM, 6FA, 6ZR, 8QJ, 8SM, GM4GK, ON4APC. (*Rx : 0-V-*1.)

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

'PHONE: G2FLK, 2FLR, 2HAI, 2HAR, 2JH, 2RH, 3ART, 3BSM, 3GW, 3RQ, 4FN, 4GT, 5MM, 5SK, 5XB, 5XV, 6AB, 6HP. (*Rx : BC-*342*-N.*)

GENERAL

28 mc

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

(Africa & Far East.)

'PHONE: EQ1RX, FF8FP, HL1AR, KG6CP, MD1H, 5AK, 5GW, 5OV, PK2RK, ST2AM, 2CH, 2MP, UI8AA, VU2BG, 2CA, 2ET, 2GB, W4MCI/KG6, ZD4AH, ZS1AX, 1P, 1T, 2CI, 4H, 6GI, 6U. (*Rx : CR.*100.)

N. A. S. Fitch, 79 Murchison Road, London, E.10.

'PHONE: AR8AB, CX2CN, 4CS, LU3DH, 4FU, MD5AK, 5GW, 5OV, PK2RK, PY1ACQ, 2AC, VK6DD, 6FW, 6HL, VQ4ASC, 4ERR, 4HRP, VU2BF, W5AXI/MM, 7RNT/MM, ZE1JB, 1JO, ZS1EL, 2CI, 5BZ. (*Rx : Mains 1-V-*1. *Time* 3½ *hrs.*)

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

'PHONE: AP2D, 4B, CE1AH, FF8FP, HP1FG, KP4AJ, 4USA, OA4AK, OQ5BQ, SHF1X, TG9AD, VK2OT, 3JD, VP3TR, 4TT, VQ2HC, VS7PW, VU2ET, 2GB, W2YMB/MM, 3NKS/MM, 4MCI/KG6, 5AXI/MM, 5OFO/MM, 6YYT/MM, 8ZXH/MM, ØIAX/MM, ØMNI/MM, XZ2KN, YN1AJS, ZL2QS, 4BN, ZS1AC, 1CN, 1P, 1T, 2AQ, 2AV, 2CI, 5D, 6EK, 6FD, 6LF.

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

'PHONE: AR8AB, CN8BA, 8EK, 8MI, CX2CL, 4CS, 5AP, EL2A, 6A, FF8FP, FQ8SN, HC2OA, KP4CI, 4ES, 4FN, KZ5MB, LU2DM, 3BR, 3DH, 4EB, MD1H, 3MB, 4JG, 5AK, 5DA, 5EW, 5GW, 5HJ, 5KH, 5KW, 5OV, 5PS, MF2AA, OA4AB, OQ5AR, 5BQ, 5BR, 5CK, 5HL, PK2RK, PY1GQ, 4HV, SHF1X, ST2AM, 2CH, 2FU, 2MP, TI2OEC, VK6HL. VP4TV, 6CDI, VQ2DH, 3ALT, 3HGE, 3JMT, 4ASC, 4HRP, 4NSH, 5PBD, W1PPH/MM, 3NKS/MM, 4LCF/MM, 5AXI/MM, 6YYT/MM, XZ2KN, ZE1JB, 1JR, 2JO, ZS1AX, 1BV, 1CN, 1DO, 1EO, 1GG, 1KH, 1P,

CALLS HEARD—(*contd.*)

1T, 2AQ, 2CI, 5BS, 5DA, 6DY, 6EK, 6FN, 6FU, 6IR, 6JV, 6JW, 6LW. (*Rx : RCA AR88LF.*)

R. L. Skelton, 87 Riddons Road, London, S.E.12.

AP2B, 2D, 2G, 5TM, AR8AB, CR9AG, CE1AH, 5BH, CX2CO, 3BT, 4CS, 5AER, 5AP, J2AZA, 2CDJ, 2DND, KA1CF, 1AZ, KG6AD, 6CP, 6CS, KP4AA, 4AJ, 4FM, 4GP, 4HA, 4HE, 4TU, MI3ZJ, OA4BE, PK2RK, TI8GD, TG9RV, OQ5AR, 5CK, VK6FL, 6MB, VP4TZ, 6CDI, VQ4HRP, VS1AC, 1CO, 7PS, 7RF, W3NKS/MM, 3RWF/MM, 4JZN/MM, 4MCI/KG6, 5OCN/MM, XE2KV, ZS1AX, 1B, 1CN, 1DO, 1P, 1T, 2DG, 6JI, 6LW.

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

'*PHONE:* CE3AB, FQ8SN, KP4BM, KZ5MB, MD4JG, 5KW, OQ5HL, VE2NP, VK3CP, 6RU, VQ3HGE, 4ASC, 4HRP, VU2GB, W1QWU, 3GWR, 4KPQ, ZC6JP, ZS1P, 1T, 5CU, 6CT, 6U. (*Rx : 0-V-1.*)

1·7 mc

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

'*PHONE:* G2BSU, 2CUI, 2CY, 2CYF, 2CZH, 2DOH, 2DQ, 2FLK, 2FNW, 2GS, 2NR, 2NV, 2RH, 2SC, 2TZ, 3AQM, 3ARJ, 3ARK, 3ART, 3ATW, '3AYL, 2BSX, 3MT, 3PU, 3RQ, 3YT, 4FQ, 4GJ, 5LO, 5MM, 5SK, 5SN, 5PD, 5FY, 5UF, 5XP, 6GN, 6GU, 6HF, 6HN, 8HI, GC4LI, 8NO, GM6SR, GW2BG (*Rx : RCA, AR88LF.*)

J. Bagshaw, Sunlea, Saltash Road, Callington, Cornwall.

'*PHONE:* G2TZ (Dorset), 3AIU (Surrey), 3CO (Kent), 5SK (Warwickshire), 5UF (Dorset), GM6SR (Edinburgh) (2200-2230, May 23), G2AB/A (Middlesex), 2HAI (Glouc.s.), 2TZ (Dorset), 4IC (Kent), 4OK (Yorks), 5UF (Dorset), 6AB (Essex), 6CH (Essex) (2215-2315, May 27). (*Rx : SX24.*)

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

'*PHONE:* G2TZ (Dorset), G4GA, 6AB (Essex), G3BGU, 4IC (Kent), G5BC (London), G6HN (Glouc.s.) G2AB/A (Middlesex), G3APV, 3CJS, 4OK (Yorks.), GD5CZ (Isle of Man).

CW: G2ND (Devon), G3AHE, 3DSV, 8JM (Essex), G3BSM (Hants), G2BYF (Kent), G2AAS (Lincs.), G2AZL, 6MU (London), G3ACK (Northumberland), G2FNW (Rutland), G8KL (Staffs.), G5AM (Suffolk), G3DJD (Sussex), G2FIX (Wilts.), GC8OK (Guernsey), GI3ALT (Antrim), GW2AVV (Glam.) (May 22-30, 2200-0010 GMT).

7 mc

N. S. Beckett, 48 Beaconsfield Road, Lowestoft.

CW: CM2BT, KP4HA, W1CTZ, 1MDF, 1OAQ, 1TMR, 2EYS, 2FOJ, 2GI, 2LSL, 2RDK, 2RUZ, 2WUK, 2YCC, 2YJG, 2YMF, 3CDR, 3LVF, 3OGY, 4AIS, 4CT, 4DIN, 4GIP, 4IA, 4MOU, 8GL, VE1RQ, 1TR.

'*PHONE:* CO1PA, 7AJ, PY1RC, YV5AF, 5AX. (*Rx : 5-Valve Superhet.*)

14 mc

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

'*PHONE:* C1BC, 1KF, 7TY, W6YOT/C6, FQ8SN, HC1JP, 1JW, 2KJ, 2KM, 2KQ, 7KD, HL1AA, 1AB, HP1RD, J5LQK, KG6AD, 6DL, KH6GF, 6GS, 6LS, W3FOJ/KL7, MI3AB, OQ5CA, 5CF, W2EJV/PK3, PK3WG, 4PQ, SHFIX, TG9AD, 9JK, 9RV, VE8MB, VK6DD, VP3MCB, VQ2DH, 2HC, 2JC, 3ALT, 3HJE, 3HJP, 5WCP, VS1BA, 2BN, 2BT, XE1AC, 1CQ, 2AV, 2HY, YS3PL, ZD1BD, ZE2JK, 2JR, ZL1CD, 3CV, 3HC, ZS3F, 5HF.

CW: CR7BB, 7MB, 7MC, 9AG, KB6AD, WØOZW/KS6, UAØPA, UH8AA, 8KAA, UI8AA, 8AE, 8KAA, UL7BS, VQ8AY, VS9GT, XZ2EM, ZD9AA. (*Rx : Mod. R1155, 2RF.*)

R. L. Skelton, 87 Riddons Road, London, S.E.12.

'*PHONE:* C1CH, 1MG, 7TY, HC1FG, 2OL, PK3WG, TG9AD, 9RF, XE1AC, ZC1AZ.

M. Wilks, 57 Longley Lane, Northenden, Manchester.

'*PHONE:* CX2CL, LU4BH, MD5JM, MF2AA, 2EE, SVØAG, 1RX, VK3JT, VO4Q, VQ3HGE, 4EAP, XAFG, YV5AB, ZB2A.

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

'*PHONE:* EA9AI, J3WGP, KA1ABT, 1AI, KG6AI, MD5JM, OQ5CA, OX3GE, PY7AG, 7AN, SHF1X, VK2AGU, 2XG, 4AS, VQ2JD, 3HGE, 4ASC, 4NSH, VS1BA, 2BT, 7GR, ZC6DA, ZL4AO, ZS1CK, 1CM, 1DH, 1FE, 1U, 2AZ, 2CI, 6AJ, 6DW, 6JS.

CW: AP2H, C1BC, WØMCF/C1, W6AMX/C6, CR6AI, EL3A, FE8AB, FT4AN, KG6AI, MD5AP, 5DS, 5KW, MI3AB, 3FG, PY1HF, UA9BP, 9DP, 9KCA, UH8AE, 8KAA, UI8AA, UJ8AE, UL7BS, VK2NS, 2XU, 3VJ, 3VW, 5LD, VO2G, 2K, VQ2RG, 3HGE, 4SGE, VS1CX, 2BY, 9GT, YI2AM, ZS1BK, 1BV, 1EA, 1FC, '1FQ, 2CL, 2CR, 2DV, 2DY, 2EJ, 5BN, 5DZ, 5F, 5FE, 5II, 5U, 5YF, 6AA, 6BV, 6DY, 6EW, 6FD, 6IH, 6IX, 6J, 6KE, 6KY, 6LM, 6OI, 6OW, 6PT, 6QF (1730-2000 *GMT only, May* 1-23).

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

'*PHONE:* AR1PC, 8BC, EA9AI, EL5B, FQ8SN, HC1KW, 2KJ, 2KM, 2OL, HH2X, K2UN, KH6CZ, MD2B, 5JH, 5OV, MF2AA, OA4EV, OQ5CF, 5CH, OX3BD, 3GE, 3UC, SHF1X, TI2OA, VE7ADJ, 7FC, 7HE, 7MQ, 7RV, 7VT, 7ZM, VK2BT, 2VP, 3BH, 3HW, 3XD, 3YH, 4KS, 7AZ, 7TR, VP2AG, 2GB, 9F, 9L, VQ2JC, 2RE, 3HGE, 4ASC, 4DFF, 5WCP, VU2LU, XE1AC, 1BW, 1CQ, 2AV, 3AF, YS1GM, ZC1AL/ZC6, 6NT, ZL1CD, 2GX, 3HC, 4AK, 4FO, 4GA, ZS1CK, 1DO, 3F, 5EW, 6AJ, 6DY, 6OB. (*Rx : AR88LF.*)

P. G. Castle, 34 Periwinkle Lane, Hitchin, Herts.

'*PHONE:* CN8BA, FA3GZ, LU1DJO, 2SN, 4DJ, 5GE, 6AJ, OX3GE, PY1ACQ, 1AOU, 7AD, 7AX, SVØAB, TR1P, UA1AY, 1BE, VK2AGW, 2NG, VQ2ALO, ZB2D, ZL2BT. (*Rx : Hambander.*)

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

'*PHONE:* C1CH, CE2BQ, CO7CX, CT2SM, 3AB, 3MN, CX1VD, 2BC, 2CL, 2CO, 3CN, 4CS, EA9AI, EK1AD, 1MD, ET3AF, FT4AH, 4AI, FQ8SN, HC2KM, HH2X, HI6EC, HP1LS, J9ABC, 9ATT, KA1AF, 1AI, KP4ES, LY1BC, M1B, MD1H, 2B, 5DA, 5JM, 5KW, 5PS, MI3AB, 3ZJ, OA4AK, 4BB, 4M, OQ5AV, 5CF, 5CI, OX3BD, 3BE, 3GE, 3UC, OY8LA, PK4PQ, SHF1X, ST2FU, TG9JK, TI2OA, UB5KBA, VK2AGU, 2AGW, 2NO, 2OQ, 2VA, 2XG, 3HG, 3JT, 3MC, 3OP, 3WX, VO1Y, 2AT, 2AV, 2BX, 2D, 2P, 4Q, 4X, 6AG, VP2AG, 2GB, 6CE, 9F, VQ2DH, 2JC, 2JD, 3HGE, 4ASC, 4DFF, 4NSH, 5WCP, VS1BA, 2BT, XE1AC, 2AV, YS3PL, YV1AD, 1AN, 5AB, 5ABW, 5ABZ, 5AK, 5AY, ZC1AL, 1AZ, ZS1DH, 3F, 6DW, 6DY, 6JS. (*Rx : R1116A.*)

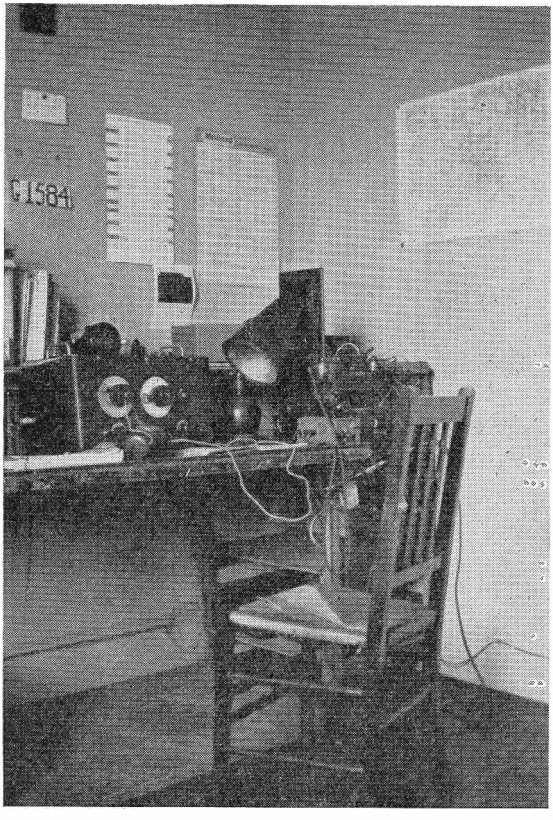
A. Bannister, 58 Demesne Road, Manchester, 16.

Central and S. America

'*PHONE:* CP1AS, HC2KJ, 2KM, 7KD, HI6EC, 8WF, HP1LS, 4AB, HR1CE, OA4AH, 4AT, TG9AD, 9AN, 9JK, TI2AFC, 2OA, VP2GB, 4AB, 6CE, 6MO, 9L, XE1BC, 1CQ, 2AV, 2IY, 3AF, 3AH, 3L, YN1AP, YS1AC, 1GM, 3PL.

SWL STATIONS

No. 13



M. I. WILK runs this station at Ormsby, 57 Longley Lane, Northenden, Manchester; he is a keen DX listener, with 14 mc as his main interest.

The Rx is a home-built TRF EF50-EF50-EF50-6V6, operated with a half-wave centre-connected aerial about 30 ft. high, which exhibits marked directional properties. M. I. W. remarks that he was at first content with an aerial of the "any-old-bit-of-wire" variety, but after reading up (what turns out to be) much sound advice on aerials, he decided there must be something in this aerial business. Accordingly, he started a number of experiments with different types of sky-wire and has been rewarded with results much better than those previously obtained. So much so that he is now planning further directional tests on the HF bands and is considering a 14 mc rotary beam for getting the utmost out of that band.

Like many other SWL's, M. I. W. is also working for his ticket and is looking forward to the day when he will be able to pump some RF up the feeder lines; his interest in radio goes back to crystal days, so he has a lot of useful practical experience on which to draw.

Finally, M. I. W. remarks that he is always very glad to see other SWL's—those able to make personal contact are asked to ring Wythenshawe 3158 beforehand. And good luck with the ticket, OM !

The VHF End

More EDX Results—Spor-E Conditions Good from 50 mc Up—Counties and Countries Heard

by **A. A. MAWSE**

HIGHLIGHTS of the past month have been the expected spor-E openings, on May 25 and June 4. That of May 25, the first major opening of the present summer, began at about 2000 BST when several Italian signals broke through at S9 *plus*, although with some fading. Towards 2100 BST the south of France came into the picture, fading out shortly afterwards, and a lull ensued for a while, until, somewhat surprisingly, the band opened again just after 2200 and further signals were heard from the Mediterranean areas. Commercial harmonics were audible until midnight. On June 4, the band opened about 1900 BST, and a large flock of Europeans were coming through in various parts of the country.

For several readers, this was their first experience of sporadic-E conditions, and we gather the excitement was intense ! Amongst the calls reported as heard on May 25 were F3JB, F9AQ, F9BG, I1BR, I1DA, I1RN, I1SS and I1XW. Most of these are regular five-metre operators. F3JB (Bandol) was the first F to work G in the post-war period, when he contacted G5BY on May 19, 1946. It is seldom he is missing on a spor-E opening. F9BG (Toulon) is another keen five-metre man. His Rx, by the way, is a home-made superhet. The Italians logged are all in the north, I1BR and 1SS in Milan ; 1XW at Pavia, just south of Milan ; 1RN in Genoa and 1DA in Cuneo, not far from the French border. Thus, all the signals heard—from both F and I—were from a comparatively small area on the northern shore of the Mediterranean. It is interesting to note that this opening was reported to us from all parts of G and with a fair measure of agreement on times of onset and fade-outs.

Other days when there were brief appearances of European DX signals on five metres were May 10 and 16, OK3BV/3 (a portable station) being heard in the early afternoon on the 16th. This same day I1DA was received in OK, working an SM station. Several HB's are active on five and we should be hearing them soon. Amongst calls to look for are HB9AT and HB9BZ.

Those of you whose receivers cover the 50 mc band should give it an occasional check as we are told that the spor-E MUF has been over 50 mc on quite a number of days, even when it has not reached our five-metre band. Among the interesting signals reported on six metres are FA8IH, OK3ID and W1PPH/MM off Naples.

Naturally, VHF SWL's will be QSL'ing all EDX stations heard, and may be sure of a high percentage of prompt returns.

Tropospheric Work

In spite of the thrills and longer distances obtained under EDX conditions, we know you will agree that it is GDX which is the real test of good equipment and location. The spell of fine weather in early and mid-May brought excellent tropospheric results and with transmitting activity at a high level there was always something interesting on the band—at least during the evening hours, and frequently during the earlier parts of the day. However, with the break in the weather later in the month, conditions fell off again and anything over about 60 miles became noteworthy. The North-West Radio Frequency Club chose the wettest day of the period, May 29, for their field day ! But, nothing daunted, they used the batteries as seats, and with the Rx's on their knees and coats over their heads they logged 9 London stations

Five-Metre Counties Heard

Starting Figure, 10

R. Rew (Birmingham)	28
W. H. Pierce (Reigate)	27
P. J. Towgood (Bournemouth)	24
G. E. Magrow (Dawlish)	22
B. & D. Kendall (Potters Bar)	12
D. L. Courtier-Dutton (Herne Bay)	12
N. Harris (Cheam)	11
A. H. Onslow (Hove)	10

NEXT M.A.W.E. PERIOD

Watch the five-metre band during the Activity Week-End from 1500 BST on Saturday, July 10, to midnight on the Sunday. Please let us have your report as soon as possible

FIVE-METRE CALLS HEARD

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

Under 50 miles : G2AK, 2AOK/A, 2ATK, 2RI, 3ABA, 3IS, 5BJ, 5BM, 5JU, 5PP, 6FK, 6SN, 6VD, 6XR, 6YU, 6ZQ, 8KL, 8UR, 8VN.

50-100 miles : G2ADZ, 2AJ, 2APW, 2OI, 3APY, 3BK, 3BUR/A, 3BY, 3DA, 3WW, 4KD, 4LU, 4OS, 4RO, 5JO, 5MQ, 5TH, 5US, 5WP, 6MN/A, 6XM, 6YO, 6YQ, 8UZ, 8WV.

100-150 miles : G2CIW, 2FI, 2HLF, 2NH, 2MR, 2MV, 2XC, 2YL, 3BLP, 4IG, 4RX, 5BD, 5GX, 5MA, 6DH, 6HD, 6OS, 6VC, 8AL, 8SM.

150-200 miles : G2BMZ, 3BW, GM3OL.

Heard, QTH not known : G3ARS, 3BBA, 5VB, 8UB. (*April* 29-*May* 28 *inclusive. Receiver : 3-Valve converter into comm. Rx. Aerial : 3-element beam in roof-space.*)

N. W. Harris, 12 Quarry Rise, Cheam, Surrey.

'Phone ; G2AJ, 2BB, 2BNZ, 2FKZ, 2FWA, 2JU, 2MV, 2NH, 2PT, 2QY, 2ZV, 3AEX, 3AYA, 3BLP, 3BTC, 3BYY, 3CQ, 3CU, 3CWW, 3DBG, 3FD, 3FP, 3MD, 3NR, 3WW, 4CG, 4IG, 4KD, 4RO, 5AA, 5AS, 5DT, 5KH, 5KJ, 5MA, 5PY, 5RP, 5RD, 6GR, 6HD, 6JK, 6KB, 6NF, 6SB, 6VX, 6XM, 8AL, 8DH, 8KZ, 8SK, 8SM, 8TH. (*April* 28-*May* 30. *Rx : RF Unit* 27 *into R*109 *Rx. Aerial : ½-wave dipole in roof-space.*)

B. & D. Kendall, 40 Aberdale Gardens, Potters Bar, Middx.

'Phone :

0-25 miles : G2AJ, 2CIW, 2MR, 2MV, 2NH, 2QY, 2RX, 2ZV, 3AEX, 3FD, 3NR, 4KD, 4RO, 5AA, 5KH, 5PY, 5UM, 5VY, 6JI, 6LL, 6LX, 6NF, 6OT, 6VX, 8AL, 8KZ, 8SK, 8TL.

25-50 miles : G2XV, 3BLP, 6KB, 6VC, 6XM, 8WV.

50-100 miles : G3BK, 3WW, 5AM, 5BJ, 6YU.

100-150 miles : F8ZF. (*RF Unit Type* 27 *into modified R*1155A *at* 7·5 *mc. 3-element fixed beam (NW) in roof-space.*)

D. Parker, 7 Park Mill, Clayton West, Huddersfield, Yorks.

F3JB, G2BH, 2CPT, 3ATM, 3ZK, G5YV, 5GX, 6TF, 6YO, 6XT, G8CD, 8SJ, I1DA, 1SS, (*Rx : Type* 27 *to 2-stage pre-selector to 5-Valve Superhet. Aerial : Indoor dipole. May* 25 *to June* 1.)

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

Under 50 miles : G2BMZ, 2RY, 3AUS, 3AVF, 3ID, 3TN, 4RX, 5BY, 6HZ, 6WT, 8FA.

50-100 miles : G2DBF, 3KX/A, 4OZ, W2AVV.

Over 100 miles : G2ADZ, 2AJ 2CIW, 2CWL, 2FI, 2FZR, 2HLF, 2JU, 2MC, 2MR, 2MV, 2NH, 2QY, 2XC, 3AAT/A, 3AEX, 3BLP, 3BTL/A, 3FP, 3WS, 4AP, 4KD, 5BM, 5JU, 5MR, 5PP, 5PY, 5RP, 5US, 5VB, 5WP, 6HD, 6KB, 6NA, 6RB, 6RS, 6SB, 6UH, 6VX, 6XM, 8AL, 8DV, 8KZ, 8LO, 8LY, 8PX, 8RO, 8RS, 8SM, 8TS, 8WV.

Over 200 miles : G5MQ.

Over 250 miles : G5GX. (*May* 2-30.)

Under 50 miles : G2BMZ, 3AUS 3AVF, 5BY.

50-100 miles : G4RX.

Over 100 miles : G2FKZ, 2FZR, 2HLF, 2MV, 2NH, 3AEX, 3BLP, 5BM, 5MR, 5MA, 5RP, 5US, 5WP, 6HD, 6VX, 8AL. (*M.A.W.E. May* 8-9.)

Foreign : F8NW (*Tropospheric*), F3HL, 3JB, 9BG, I1DA, ISS, 1XJ, 1XW. (*Spor-E, May* 25.)

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

Under 50 miles : G2CWL, 2FZR, 2HLF, 2MR, 2MV, 2NM, 2XC, 3AAT/A, 4IG, 5MA, 5MR, 5US, 6VX, 6XM, 8DV, 8RO, 8TS,

50-100 miles : F8NW, G5HN, 5RP.

Over 100 miles : F8GH, 8LO, G2BMZ, 3AUS, 5BY.

EDX : F3JB, 9AW, 9BG, I1DA, 1RN. (*May* 1-31, *on RF*27 *into Sx*-24. *Rotary dipole.*)

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

F3JB, 8NW, 8ZF, G2AJ, 2FZR, 2MR, 2MV, 2NH, 2UJ, 2YL, 3AEX, 3BWS, 3BYY, 3FP, 3WS, 4IG, 4RO, 5MA, 5PP, 5RP, 5PW, 5RS, 6DH, 6NF, 6NU, 6UH, 6VC, 6VX, 8GX, 8SM, 8WV, I1ARD, 1FL, 1SS, PAØZC. (*Rx : 3-Valve converter into 1-V-2 Battery Rx. 3-element fixed wire beam, direction, N.W.*)

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and G2XC in Portsmouth, which was the nearest they could get to DX under such conditions. Better luck next time, OM's —and well tried !

Around the Country

Welcome to a number of new correspondents. We are particularly pleased to have two letters from Yorkshire. D. Parker (Huddersfield) sends a list of calls heard just to encourage others Up North who may be a bit timid. D.P. had almost given up hope of making his RF 27 Unit perform satisfactorily when he tuned in I1DA on May 25. So sceptical was he that he thought it must be break through on the 7 mc IF—but he soon found out what was happening. His best GDX is around 55 miles, but that is not surprising when one considers the conditions which have existed since May 25. D.P. is now building the beam which we described in the April issue. Our other Yorkshire correspondent is E. Nottingham (York), who has been active on the VHF's since 1938. He is equipped for coverage of all the frequencies from 28 to 146 mc and from 400 to 500 mc and has rotary beams in use. He comments on the consistent 'phone signal received from G3WW in Wimblington, Cambs. E.N. was on to enjoy the fun on May 25.

In Middlesex, D. and B. Kendall have managed to hear 12 counties on five-metre 'phone in five days. They have also been listening on higher frequencies, using an RF 27 into R.1155A. Their aerial is an indoor 3-element wire beam using folded dipole feed from 72 ohm co-axial. The beam is aimed NW. N. Harris (Cheam) is another using an RF 27 unit. His aerial is a half-wave dipole with reflector

in the roof space and beamed NNW. He intends to instal rotary mechanism, but the presence of four other aerials under the same roof rather complicates matters !

A. J. Slater (Southwick) was in on the spor-E and has also been obtaining excellent signals from F8GH and F8NW across the Channel. His best nights for GDX were May 7, 8, 14, 18 and 19, while R. Rew (Birmingham) found May 10 and 11 particularly good, signals being heard from G3BW (Whitehaven) and GM3OL (Dumfries). R.R. finds some counties very poorly represented so we give you the following list to help : Dorset, G2RY and G3TN ; Hereford, watch for G3PZ/P on July 4 ; Norfolk, G2XS with vertical aerial ; Northants, G2AUA ; Suffolk, G5AM ; Wilts, G4AP ; Hunts, watch for G3BK/P. Many of the transmitters will be out portable on July 4 so that should provide a fine opportunity to increase on counties heard. We accept reception of a /P station for the county in which it is operating, by the way.

Five-Metre Countries Heard

Starting Figure, 3

G. E. Magrow	5
D. L. Courtier-Dutton	4
A. Slater	3
D. Parker	3

G. E. Magrow (Dawlish) has brought in a really rare county by logging GW2AVV (Port Talbot) in Glamorgan. This gives him five *countries* heard already on 58 mc, the others being G, F, I and SM (received last year). He has started checking the strength of G5US (Camberley) on his daily schedules with G2BMZ (Torquay). G.E.M. agrees that local barometer readings in themselves have little to do with five-metre propagation. (See the comment in this space last month.) What really matters, of course, is the relative humidities and temperatures of the upper and lower air. Useful information on this is obtainable from The Director, Meteorological Office, Air Ministry, Kingsway, W.C.2. Ask for the Upper Air Section of the Daily Weather Report. It costs 5s. per month including postage, or 3d. per day.

VHF Listeners Club

A number of readers have written in support of the idea of a VHF Listeners Club. We should like to hear further on this point from more of you and hope that it may be possible to launch the Club next month. No subscriptions will be called for as the *Short Wave Listener* will defray what small expenses there may be from time to time.

Late Ones

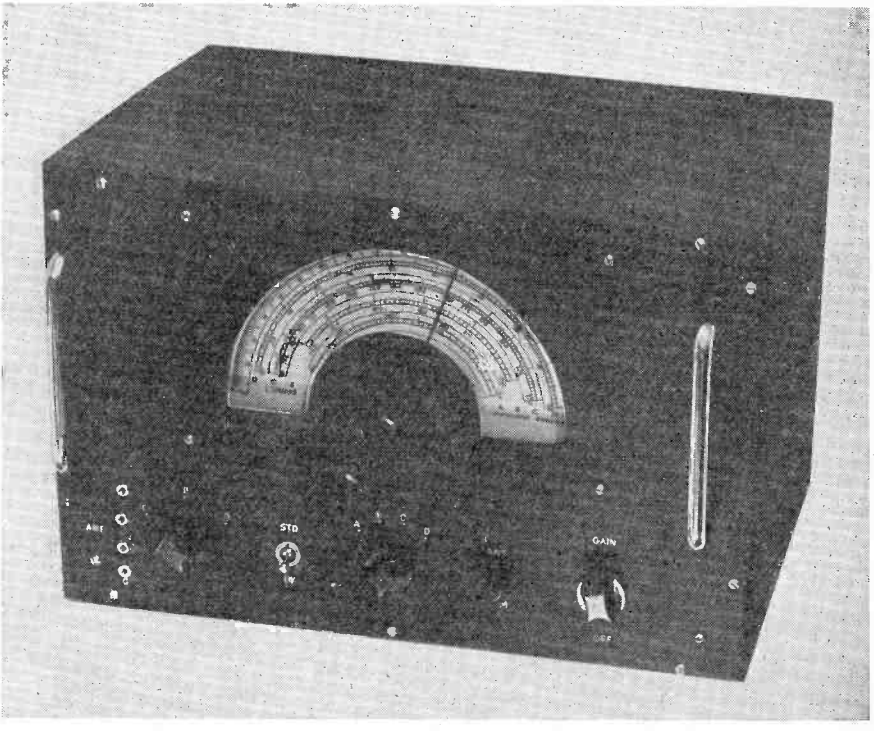
The spor-E burst on June 4 produced quick reports from L. Orton (Uxbridge), from whom we are glad to hear again after many years ; A. A. Littlewood (Hull) ; and L. Courtier-Dutton (Herne Bay).

L.O., using an R.208, heard eight I's and three F's in the period 2000-2200 BST, and also logged an unidentified SM5 ; many interesting signals were noted from 34 mc upwards. Up in Hull, A.A.L. during the same period received ten I's and three F's, and also followed several two-way QSO's between these stations and G's who were on ; signal strength was very high in most cases. L.C.-D. was likewise in on all this and from his outpost at Herne Bay was lucky enough to bring in PAØZC for an additional country.

The whole party was over in two hours, but while it lasted produced typical spor-E results, with high signal strengths and the sudden appearance of a number of strange stations, all busy calling and working DX.

To Conclude

That is all we can squeeze in this time —except to record that while your conductor has been busy writing these notes sporadic-E signals have been roaring in (June 4 to 6) ; just our luck ! We should like detailed reports of these openings and all other exciting things, as well as routine news, by July 2 *latest*. Thanks for all the mail this month. The address as you know is A. A. Mawse, *Short Wave Listener*, 49 Victoria Street, London, S.W.1. CU on July 15.



Preselector-Converter Unit

New Labgear Product

THIS unit can be used either as a Preselector (additional RF amplifier ahead of the existing receiver) or as a Converter (for extending the frequency coverage of the main receiver). These functions are selected merely by the setting of one switch, also arranged to cut the unit out entirely if it is desired to operate with the aerial straight through to the receiver.

A single EF50 RF stage is followed by a triode-hexode mixer, which gives an IF output at 4 mc. In the Preselector application, only the RF stage is in operation. Band-spread is provided and the frequency coverage as a Preselector in terms of bands tunable is 14-30 mc. As a converter, the 14, 21, 27, 28, 50 and 58 mc bands are covered.

Wave-band switching is provided, using a three-bank ceramic switch assembly, and careful attention has been paid to calibration accuracy and the design of the tuning dial. The aerial input terminals to the unit have been located on the front panel in order to make changing aerials an easier task.

Designed mainly as an additional piece of equipment to extend the range of the many ex-Service receivers which do not tune above about 18 mc, a unit of this kind is extremely useful in front of any receiver when operated as a preselector. As a converter, it makes VHF reception possible with any main receiver which can be tuned to 4 mc.

Publication Day—Third Thursday each Month

MONTHLY COMMENT on DX broadcast

by

R. H. GREENLAND, B.Sc.

World-wide reception of Short Wave programmes

We are pleased to hear from Cleve Costello, who is the short wave Editor of *Tune In*, organ of the New Zealand DX Radio Association. He says that the N.Z. Broadcasting Service is most reticent towards both the public and DX'ers on matters affecting their short-wave transmitters and the opening date of their new Overseas Service. He refers to PPH, Rio de Janeiro, mentioned on page 124 of the *Short Wave Listener* for March ; he has PPH listed on 11930 kc and PSH on 10220 kc, but there is no trace of PPQ—which is just about the answer to the queries put forward by S. P. Pratt (Portsmouth) and A. Packwood (Rochdale). Thank you, Cleve !

Australasia

The A.B.C. Inter-State broadcasts have been well received in England recently over station VLH5, 15240 kc. On May 4 at 0645 the call was clearly heard :"3LR Melbourne and VLH5", given after a preliminary warning of four vibraphone notes. Two notable events were broadcast over this station later in the month ; on May 9 at 0600 listeners joined in the ceremony held in the Melbourne Town Hall on the occasion of Empire Youth Sunday. The King's message to youth was read by Major-General Sir Winston Dugan, and Sir Laurence Olivier recited the vow made by Princess Elizabeth at Cape Town on her twenty-first birthday. The second occasion was on May 12 at 0528, when a commentary on the South Australian Jockey Club's race for the Adelaide Cup was broadcast. Three days later (a Saturday), both VLH5 and VLC11, 15210 kc, were heard at 0630 relaying the Australian football game between Essenden and Richmond ; the VLC11 call was not logged until 0730, however. Again, at 0538 on May 28, VLC11 was relaying the first Rugby League Test between Australia and New Zealand, and what an exciting game ! Nearly 56,000 people on the Sydney Cricket Ground witnessed a ding-dong struggle and a narrow New Zealand victory by 21 points to 19.

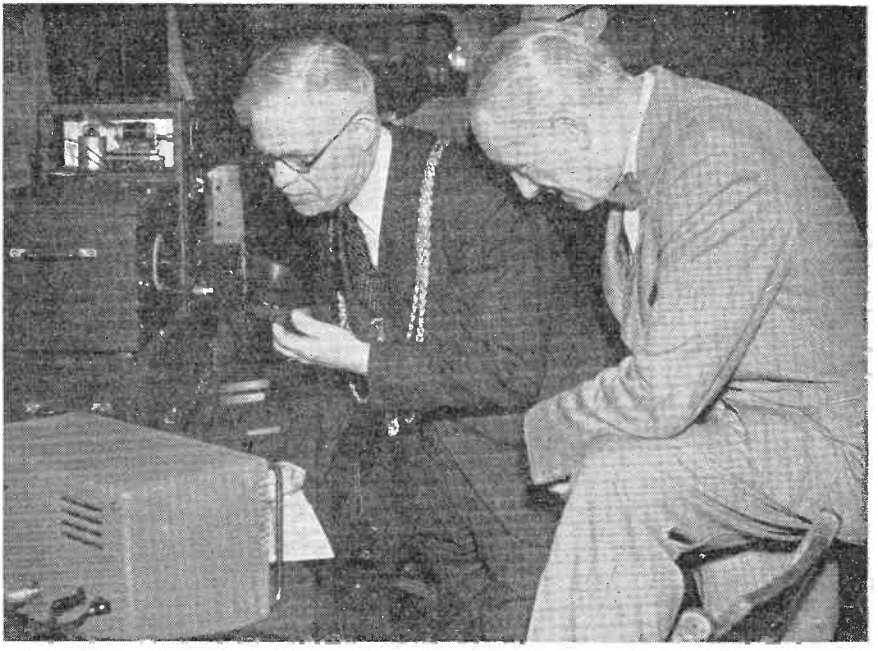
The Australian DX'ers programme is now given three times each Sunday as under : 0525 (16, 19, 25-metre bands, and 21540 kc for South Africa) ; 1327 (25, 31-metre bands, *viz* : 11810 kc and 9540 kc) ; and 1402 for the United Kingdom (19, 25 and 31 metres).

A very difficult station to log in this country is FK8AA, Noumea, New Caledonia, "La Voix de la France dans la Pacifique", which appears to have adopted a higher frequency of 9210 kc in addition to a transfer from its original channel of 6808 kc to 6000 kc. According to one report, it broadcasts 1100-1200 and 1830-2000 ; another gives the morning closure at 1000.

Asia

The big news here is undoubtedly the Palestine station now heard on an announced frequency of 6830 kc (46·8 metres) with an English broadcast at 1730 daily. It opens with a "pips" time signal and the direction : "This is CORI ISRAH-EH—The Broadcasting Station of the State of Israel." First comes the News, and this is followed by a news feature—on May 23 it was an eye-witness account of life in Jerusalem to-day, and the day following, Mrs. Wingate (widow of the late General Wingate of Burma fame) gave her views on the Palestine problem. At 1745 the broadcast ends with the words : "We shall be with you again to-morrow morning at 7.30 ; So Long and Goodnight, everybody." In a later transmission it was stated that there are two daily English broadcasts at 0945 and 1730 : it is thought that this station is located at Tel-Aviv.

Arabic stations have also been prominent, but as no English directions are given, it is difficult to identify some of them. The Near East broadcasting station ZJM6, 6790 kc, has been logged with native music at 1730 ; it is wondered, however, if this



The Home Section of the Eddystone "640" Competition was won by R. C. Jennison, G2AJV of Grimsby. To mark the occasion of the presentation to him of the receiver, the Grimsby Amateur Radio Society organised a very successful exhibition at the Town Hall, with G3CNX/A, G.A.R.S.' own station, on the air on 3·5 mc. Here is the Mayor of Grimsby, with G5GS, speaking over G3CNX/A.

is still located at Jaffa. The Damascus station on 12000 kc is quite regular with native music at 1730. J. Holden (York) says it closes each evening at 2000 and that there are no English announcements ; FXE, also in Syria, 8036 kc, may be heard with a French programme about the same time. Later, at 2120, FXE can be logged with the musical notes, doh-soh-me-soh-doh-ray-me-doh, which form its interval signal, after which comes an Arabic direction and a Sousa march, all proclaimimg a programme of native Arabic music. From Sweden we learn that a listener has received a verification from Iraq.

Radio Baghdad broadcasts simultaneously on 767 kc and 7092 kc, 0400-0530 and 1300-1900 with Arabic programmes, and on 7062 kc, 1500-1800 (Kurdish) and 1800-1900 (English). It is also reported that the Sana (Yemen) broadcast station on 7385 kc has now returned to the air from 1630 to 1715 with entirely Arabic programmes, but nothing has been heard of it here. In Turkey, TAQ, Ankara, 15190 kc, was unexpectedly logged at 2120 on May 13 with an English talk on Archæology by Kenneth Matthews.

Last month we gave a list of Japanese short wave stations on the air, but already there are some seasonal changes. From 0800 to 1400, JVW, 15225 kc, and JVW3, 15325 kc, have replaced JVW2 and JVW4. R. H. Niino, Liaison Section, Nippon Hoso Kyokai, writes us at length explaining the position in regard to short wave broadcasting in Japan at the present time. He says : "The reopening of our short wave overseas service has not yet been authorised. The transmissions we are now operating are purely for domestic purposes, and are not originally prepared to serve listeners in foreign countries. We have decided to take this occasion to explain our present activities in the short wave field to the *Short Wave Listener*. Our short wave transmissions now in operation

DX BROADCAST—CALLS HEARD

(Limited to TWELVE Calls)

J. Holden, The Bakery, Tang Hall Lane, York.

1.	May 15	1830		Damascus	12000 kc, S7
2.	May 16	1530	VUD7	Delhi	15160 kc, S8
3.	May 16	2230		Athens	15345 kc, S9 plus.
4.	May 16	2330	CXA19	Montevideo	11835 kc, S8
5.	May 17	1300	KRHO	Honolulu	15250 kc, S4
6.	May 17	1330	KCBR	Los Angeles	15130 kc, S6
7.	May 17	1445	YDC	Batavia	15145 kc, S9
8.	May 19	1415		Singapore	15300 kc, S8
9.	May 19	1930	CR6RA	Luanda, Angola	9470 kc, S6
10.	May 19	2130	CXA19	Montevideo	11835 kc, S8
11.	May 21	1745		Omdurman	13320 kc, S6
12.	May 23	1215	EPB	Teheran	15100 kc, S9

Rx : Eddystone 640. Aerial : 15 ft. Vertical

A. J. Thorndyke, 4 Huxley South, Cambridge Road, Edmonton, N.18.

1.	May 1	1400	HVJ	Vatican City	9660 kc, S6
2.	May 11	1930	OTC2	Leopoldville	9767 kc, S8
3.	May 15	1000	PGD	Hilversum	6025 kc, S5
4.	May 17	0810	VLB3	Shepparton	11760 kc, S6
5.	May 18	2010	EAQ	Madrid	9369 kc, S8
6.	May 20	2150	CKNC	Sackville	17820 kc, S7
7.	May 22	0745	SBP	Motala	11705 kc, S8
8.	May 23	1845	SEAC	Colombo	9825 kc, S7
9.	May 24	2040		Belgrade	6100 kc, S7
10.	May 25	1945	OLR3A	Prague	9550 kc, S7
11.	May 25	2150	VLC	Shepparton	15200 kc, S6
12.	May 26	2115	WNRX	Bound Brook	21730 kc, S7

Rx : Home-constructed S.G./v/Pen. Battery. Aerial : 22 ft. Inverted-L

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

1.	April 27	2145	HJCT	Bogota	11650 kc, S8
2.	April 28	1930		Cape Town	5882 kc, S5
3.	May 2	2045	VLH4	Melbourne	11880 kc, S8
4.	May 2	2105	KZBU	Cebu, P.I.	6100 kc, S6-2
5.	May 4	0535	VLH5	Melbourne	15230 kc, S6
6.	May 7	2000		Bucharest	9255 kc, S9
7.	May 8	2000		Rabat, Morocco	9080 kc, S7
8.	May 11	0330	TGWA	Guatemala City	9760 kc, S9
9.	May 12	0330	KWIX	San Francisco	9570 kc, S6
10.	May 14	0330	HRN	Tegucigalpa	5875 kc, S7
11.	May 15	2045	CR6RA	Luanda, Angola	9470 kc, S6
12.	May 16	2045	VLR2	Melbourne	6150 kc, S5-3

Rx : Bush 5. Aerial : 18 ft. high, 20 ft. long, centre-tapped

J. C. Catch, 19 The Broadway, South Shields.

1.	April 25	0001	FZI	Brazzaville	9440 kc, S9
2.	April 28	2215	TAQ	Ankara	15195 kc, S9
3.	April 28	2255	WNRX	Bound Brook	14560 kc, S8
4.	May 2	0100	TGWA	Guatemala City	9760 kc, S8
5.	May 5	2315	LRA1	Buenos Aires	9690 kc, S6
6.	May 8	2300	PSL	Marapicu	7935 kc, S7
7.	May 15	2300	LRY	Buenos Aires	9455 kc, S9
8.	May 17	1300	KRHO	Honolulu	15250 kc, S8
9.	May 22	0001	HOLA	Colon	9505 kc, S8
10.	May 23	0040	YNXW	Managua	8190 kc, S4
11.	May 23	1500	KZRH	Manila	9640 kc, S4
12.	May 23	2030		Brazzaville	17840 kc, S8

Rx : Hambander with Preselector. Aerial : 50 ft. Doublet. 30 ft. high

L. W. Lowis, 33 De Cham Road, St. Leonards-on-Sea, Sussex.

1.	April 26	0430	COBZ	Havana	9026 kc, S7
2.	April 27	1715		Bucharest	9255 kc, S4-5
3.	April 27	2030		Monte Carlo	6035 kc, S9
4.	April 30	2200	EA9AH	Tetuan, Morocco	6067 kc, S7-8
5.	May 3	0145	CJCX	Sydney, N.Scotia	6010 kc, S5
6.	May 7	1900	OZF	Kalundborg	9520 kc, S9-5
7.	May 9	0415	HI2T	Trujillo, D.R.	9740 kc, S9
8.	May 22	2130	PRE9	Fortaleza	6105 kc, S8-9
9.	May 23	2345	COBC	Havana	9360 kc, S4-5
10.	May 25	2200	ZYB8	Sao Paulo	11765 kc, S9
11.	May 28	0030	PZH5	Paramaribo	5843 kc, S7-8
12.	May 28	0330	YSUA	San Salvador	6250 kc, S8-9

Rx · MAS6 (SH5)

since the end of the war in 1945 are for the following two purposes : (*a*) Domestic relaying service. The broadcasting of this country has been solely operated by our Broadcasting Corporation of Japan. We have two network programs : National network programs Nos. 1 and 2, mostly originated by JOAK, Tokyo Central Broadcasting Station (midwave). For operating these two national programs we are mainly depending on line relaying, but for the few stations which have no line connections, we are operating short wave transmissions carrying these programs. The operations of these transmissions are delegated to Nazaki and Yamata transmitting stations, both located in the vicinity of Tokyo, and the Kawachi transmitting station near Osaka, all three owned by the Government.

The programs being carried on these transmissions bear the network sign of NHK and station sign of JOAK or any other station that may be supplying programs to the network, at the end of each hour, although each short-wave transmission has its proper callsign aside from this. (*b*) Service to Japanese ex-soldiers and civilians still abroad and waiting the repatriation. Nearly the same programs as the network No. 1 are being served to repatriatees in formerly Japanese occupied area through Kawachi transmitting station.

Aside from these two, two short-wave transmissions are being operated to serve the Allied Forces occupying Japan. The operation of these transmissions are delegated to our Corporation which, in turn, delegates the actual transmission to Nazaki and Yamata transmitting stations. The programs that are being transmitted by them are A.F.R.S. programs, originated by WVTR, Tokyo Key Station of the Far East Network of the Armed Forces Radio Service."

Any reception reports on the Japanese short-wave stations should be addressed to : Nippon Hoso Kyokai, Radio Tokyo Building, Chiyodaku, Tokyo, Japan.

J. M. Simpson's (Aberdare Gardens, N.W.6) latest verification is from Radio Saigon, in which they state that they were then operating on 11780 kc only, and that they hoped to be on the air in April or May on a 16-metre wave-length, but the exact frequency is not given.

We thank F. W. Hardstone (Streatham, S.W.16) for his prompt reply to the appeal made by D. Potter (Erdington, Birmingham) last month. His recent letter from Radio Batavia gives their correct address as : P. R. Hill, English Section, Stichting Radio Omroep i.o., Hfdkantoor, Koningsplein Z 17, Batavia, Java. D. O. French (Norwich) sends the schedule of Radio Makassar, which operates on 3030 kc in addition to the better known 9550 kc channel. Details are given elsewhere, but the address is : Radio Makassar, Strandweg Zuid 2, Makassar (Celebes), East Indonesia.

Radio Malaya is now operating several transmitters for its daily broadcasts, either at Singapore or at Kuala Lumpur. Singapore I and Kuala Lumpur operate the same programme on 7200 kc and 6025 kc respectively on week-days : 0430-0630 ; 1030-1600 ; Singapore II on 4825 kc operates daily 1030-1530, and on Saturdays and Sundays 0430-1600. According to R. Iball (Langold, Notts.), Radio Malaya, Singapore, also uses 1333 kc regularly and 6135 kc experimentally. All broadcasting is for residents in Malaya, and the English, Malay, Chinese and Tamil languages are used. His information came from the British Far Eastern Broadcasting Service studios in Singapore, and he quotes a pertinent paragraph contained in their letter concerning their own broadcasts ; it reads : "Since our target area is the Far East, we do not feel that we should take too much advantage of offers of reports from other areas. We have received many reports from the U.K., but while always pleased to verify, you will understand that we are more interested in reports from the Far East itself."

In the island of Java, Radio Welfare at Semerang operates YDH on 11100 kc with a power of 500 watts.

Africa

It is on very rare occasions that Cape Town offers us an English programme at really good strength, but this was the case on May 12. The frequency was 5885 kc, and at 1935 we were told that the South African Broadcasting Corporation was taking listeners over to a theatre for the Cape Town première of the film : "One Night With You," featuring the Metropolitan opera star Nino Martini. This famous singer, himself in Cape Town, figured in a presentation and made a brief speech in reply, after which listeners heard two of his song recordings from the film itself.

In the Portuguese colony of Mozambique, Lourenço Marques still figures prominently with its several transmitters.

E. Strangeway (Scagglethorpe, Yorks) has definitely logged two of the transmitters operating simultaneously with different programmes in the 60-metre band. On May 2 at 1800, CR7BV, 4905 kc, was engaged in putting over an English sponsored programme, and the direction: "Lourenço Marques, Moçambique" (in Portuguese) was heard simultaneously in a musical feature on 4885 kc. A recent Swedish DX bulletin gave the news that Radio Mozambique uses 9650 kc 0900-1500, and 4925 kc and 3190 kc (in parallel) from 1500 to 2100, but there is obviously some discrepancy in connection with the 60-metre channel. R. Iball logged CR6RA, Luanda, Angola, 9470 kc, at 2045 on May 15, and heard it close down at 2100 with a series of Westminster chimes and the slogan: "Radio Clube de Angola."

On May 5, J. P. Burden (Portsmouth) logged FZI, Radio Brazzaville, on the following five frequencies around 2030: 7000 kc, 9440 kc, 9984 kc, 11970 kc and 6024 kc, and has discovered that their Mail Bag is now changed to 1855 on Mondays. Likewise, he has had good reception from Léopoldville around 1900; the transmitters logged were: OTM2, 9380 kc; OTM4, 11670 kc; and OTM5, 6285 kc, all belonging to Radio Congo Belge, which also operates OTC2, 9767 kc. Its schedule is 1600-2000. In the same country, Radio Congolia operates on 6010 kc, 9210 kc, and 15325 kc. Thanks to R. Iball, we have discovered Senegal on a new frequency of 15520 kc (approx.). It was heard on May 17 at 2155 with news in French concerning Princess Elizabeth's visit to Fontainebleau; it closed down at 2200 with the call: "Ici Radio Dakar" and the Marseillaise.

It is reported that a new West African in Radio Gambia in Bathurst has been on the air on 9530 kc from 2214 to 2233; reception reports were requested.

In East Africa, VQ7LO, Nairobi, 4850 kc, has been excellent around 1945 on Saturdays. P. Finn (Iver, Bucks) gives a detailed report for May 22, as follows: 1757—Call: "This is Nairobi calling!"; 1800—Greenwich "pips" and B.B.C. News from London; 1817—Local news bulletin as compiled by *East African Standard*; 1821—Weather forecast for the East African area; 1823—Announcement: "From now until 11 o'clock we present a programme of dance music and variety"; 2000—Direction: "This is Cable and Wireless Broadcasting Station, Nairobi, now closing down; Goodnight, Everybody."

In Egypt, SUX, Cairo, 7860 kc, emits a tuning note at 1820 daily, and comes on the air at 1830 with a march, followed by announcements and news in Arabic.

E. Strangeway considers that the station heard on 4845 kc at 1700 is undoubtedly CSX2, Ponta Delgada, giving its afternoon session, but he admits that it is a real DX effort to log this one at this time of the day. A late message from J. P. Burden indicates that he has just received a letter-verification in English from CQM4 confirming that they are on the air nightly 2130-2300 on 7947 kc, and he gives the following address: Emissora da Guiné, Estaçao CQM, Serviços de Secretaria, Bissau, Guiné Portuguesa.

South America

This month we have a pile of information on Latin Americans.

Ecuador—J. P. Burden logged HC2AK, Guayaquil, 4656 kc, with a broadcast of operatic music from a concert hall, after which, at 0200, it closed with: "C-R-E, Radiodifusora Ecuador", "Muy buenos noches", and the National Air. The writer has again logged a station on 4650 kc, closing at 0402 without a call other than the words: "Colombia Broadcasting System of America—Muchas gracias por su atencíon." Can anyone assist, for it is not HC2AK apparently? Recently we reported HCJB on four channels: a verification just received gives them as 15·1 mc, 12·4 mc, 9·9 mc and 5·9 mc. R. Iball estimates this lowest frequency to be 5970 kc and not 5995 kc as we recently reported.

Uruguay—Here, J. P. Burden is the expert with four Montevideo stations to his credit. CXA3, 6075 kc, was logged at 2320; and CXA10, 11903 kc, at 2345 on the same day. J. P. B. logged CXA8, 9640 kc at 2230; he thinks CXA6, 9620 kc, with its slogan: "Radio Electrica" is most reliable, rivalling CXA19, El Expectador, 11835 kc, which is reported also by J. Holden and D. O. French. From Chile, J. P. Burden logged CE960, Radio la America, 9595 kc, putting in a fine signal at 2230 on May 4, and from Argentina he heard LRR1, Rosario, 6145 kc, with an S9 signal relaying Radio Belgrano on May 9 at 2230. Radio Belgrano itself, LRY, uses 9545 kc until 2205, then moves to 9455 kc.

A third Argentinian, LRS2, Radio Splendid, on 11840 kc, works in parallel with LRS, 9315 kc.

Peru—OAX4V, Lima, 5907 kc, was heard closing on May 12 at 0445 with a pianoforte solo, and on May 17 it was logged at

TABULATED SCHEDULES

I. Australian Broadcasting Commission. Transmitters carrying the Inter-State Programmes.

Melbourne

VLR	9540 kc	2230-0830	(Commence 2045 Sundays
VLR2	6150 kc	2000-2215 ; 0845-1400	(Commence 0730 Sundays)
VLH4	11880 kc	2000-2315	(Commence 2045 Saturdays)
VLH5	15230 kc	2300-0815	
VLH3	9580 kc	0828-1400	
VLG6	15230 kc	2000-2200	

Brisbane

VLQ3	9660 kc	2000-1400	

Perth

VLW3	11830 kc	0730-1000	(Commence 0230 Sundays)
VLW5	9610 kc	1015-1600 ; 2200-0215	(Commence 2045 Saturdays)

II. Radio Makassar, Strandweg Zuid 2, Makassar (Celebes), East Indonesia.

9550 kc (10 kW power) and 3030 kc

Weekdays.	0300-0500 Indonesian	0500-0630 Dutch
	0900-1200 Indonesian	1200-1500 Dutch
	2230-2330 Indonesian	2330-0030 Dutch
Sundays.	0000-0515 Dutch	0515-0630 Indonesian
	0900-1200 Indonesian	1200-1500 Dutch

III. Brazilian stations heard in the United Kingdom. 2230-0100.

11950 kc	PRL5	Rio de Janeiro	6095 kc	ZYB7	Sao Paulo
11765 kc	ZYB8	Sao Paulo	6016 kc	PRA8	Recife
10220 kc	PSH	Marapicu	5995 kc	PRI3	Bello Horizonte
9720 kc	PRL7	Rio de Janeiro	4895 kc	PRF6	Manaos
9610 kc	ZYC8	Rio de Janeiro	4865 kc	PRC5	Belem
7935 kc	PSL	Marapicu	4825 kc	PRJ4	Paranaiba
6105 kc	PRE9	Fortaleza			

IV. British Guiana Broadcasting Company, Ltd. 30-32 New North Road, Bourda, Georgetown, British Guiana.

Frequency :—6000 kc. Power :—600 watts

Monday to Saturday	Sunday
1. 1045-1245	1. 1045-1645
2. 1445-1645	2. 1945-0045
3. 1945-0045	

0400 with the call in Spanish : "Radio America, OAX4V," and mention of a medium-wave callsign, followed by a recording of "Liebestraume." The QTH is : Cia Peruana de Radiodifusion, S.A., Casilla 1192, Lima, Peru.

J. P. Burden sends in more information about Brazil, Bolivia, Venezuela, Colombia and Suriname. Between 2230 and 2300 on May 25 he logged eleven Brazilians, and PRC5, Belem, 4865 kc, was heard two hours later. PRL5 is a new one on 11950 kc, and works in paralled with PSL, 7935 kc, from 2230 to 2300, but continues after the latter has closed down. A BBC News bulletin in Portuguese is relayed at zero hour, after the station direction : "PRA2 e ondas cortas PRL5 en la banda veintzcinco metros." J. P. B. says PRA8, 6015 kc, has a programme in English 2300-2335 on Sundays ; it is called "Anglo-American Music." For convenience we are giving a list of these Brazilian transmitters under our Tabulated Schedules.

We recently queried a station on 5860 kc, thought to be the Bolivian "Radio El Condor," CP15 in La Paz. J. P. B. has logged it many times recently around 0015 with the letters "CP" and "La Paz" mentioned in the frequently announced call; also three ascending notes on a vibraphone precede the direction "—— Broadcasting Company." Listeners must not confuse it, however, with the station often logged by the writer on 5870 kc closing at 0400. During the past month no actual callsign has been heard, but identification has been obtained through the slogan : "La Reina del Aire" which is used by TIGPH, San José, Costa Rica. Returning to J. P. Burden's notes, we find that a new Venezuelan is working on 9445 kc, in parallel with YV5RY, Radio Continente, Caracas on 4725 kc. This is not a harmonic, for Maracaibo is mentioned in the former's direction.

J. P. B. logged HJCD, 6160 kc, at 0030 on May 8 ; there is frequent mention of "Emisoras Sociales" with the call, given, as a rule, each quarter-hour ; and another Bogota station, HJCT, 6200 kc, was radiating the "Radiodifusora Nacional de Colombia en Bogota" programme at 0005 on May 9 (S9). The writer heard this one closing at 0410 on May 22 with a Spanish direction incorporating a multiplicity of callsigns, both for short and long waves.

Paramaribo, Suriname has a second outlet on 15405 kc, working in parallel

with PZH5 on 5843 kc, and finally, J. P. B. mentions that PJC2, Curaçao, has changed its frequency from 7250 kc to 9560 kc. He logged it at 0130 on May 26, announcing in Dutch its other channel of 2315 kc.

Central America

Guatemalans TG2, Radio Morse, 6620 kc, and TGBC, La Voz de Mazatenango, 6670 kc, have both been logged by the writer in the early mornings. The latter gives its call at 0400, then closes down, but TG2, distinguished by its frequent series of gongs, continues until 0500. In Nicaragua, YNOW, 6850 kc, has been heard with light music at 0345; YNQ, 6915 kc, gave Spanish announcements at this hour on May 27; and YNFT, 7500 kc, closed with its call at 0357 on May 22.

HRN, Honduras, 5875 kc, has been heard with mention of both "National Broadcasting Company" and "Colombia Broadcasting System" in its Spanish announcement before closing with the "Good Night Melody" at 0355. In Mexico, XEHH, 11880 kc, was an excellent signal at 0425 on May 12. In a call preceded by a single gong stroke both XEHH and XERO were mentioned: XEOI, 6012 kc, gives a series of vibraphone notes before its announcement at 0500; this is Radio Mil in Mexico City.

North America

J. Holden (York) has received from CFRX, Toronto, 6070 kc, a very fine post-card showing a map of Canada and a view of Toronto's downtown and harbour as seen from the bay. They write: "CFRX was originally put on the air for the benefit of listeners in the northern areas of the Provinces of Ontario and Quebec, where, due to heavy mineral deposits, radio reception leaves a great deal to be desired." In July the transmitters are being moved to a new location and the aerial array will be a vertical beamed system which will possibly favour the audiences for whom the broadcasts were intended in the first place. Reports are most welcome and should be addressed to: Rodgers Radio Broadcasting Company Limited, 37 Bloor Street West, Toronto 5. CBFW, 6090 kc, has confirmed R. Iball's reception report. The main studios are in Montreal and the transmitter at Verchères. The power is 200 watts and the schedule 0001-0500.

KGEI, 15210 kc, and KNBX, 15250 kc, have been logged signing on at 0530; and KCBR, 15130 kc has been noted with call in English at 0430 during a Spanish transmission. J. M. Simpson heard KRHO, Honolulu, 15250 kc, from 0930 to 1500 on one occasion; here are some of the details: 0930-0945 World News; 0945-1030 Toscanini conducting for Beethoven's 7th; 1330-1400 News in Chinese and Siamese; 1440-1500 Sir John Boyd Orr giving a talk on world food production.

Our medium-wave expert, A. J. Slater (Southwick, Sussex), reports that little DX is now available, due to seasonal conditions.

However, A. J. S. has logged altogether 191 medium-wave stations outside Europe, and that *is* a remarkable record! It includes 75 in U.S.A. (52 verified), 14 Canadians (12 verified), 20 West Indians and 65 South Americans. A. J. S. is one of the outstanding SWL's in this country, and he obtains DX on all bands down to the VHF's.

J. P. Burden reminds us, in an artistic effort, that Set Listening Periods are popular amongst readers, so this month we will have one on Sunday, June 20 from 1530 to 1630 GMT—European stations excepted. All correspondence for the month should be addressed to: R. H. Greenland, *The Short Wave Listener*, 49, Victoria Street, London, S.W.1, to reach this office by Thursday, June 24.

STATION R.1155

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It contains amongst other things a strong chassis, 18 in. × 6 in. × 3½ in., fitted with 13 Amphenol type Valve Holders. Among the parts mounted on the chassis are relays, 1 mfd and 2 mfd can type condensers. Ceramic variable condensers, small transformers and chokes, grid caps and Pye plugs, etc. Three banks of Mica condensers (approximately 36). Also eight Paxolin panels, 6 in. × 2½ in., with feet containing approximately 60 assorted resistors and 25 assorted tubular condensers. **The special bargain price of this unit is only 12/6 plus 3/6 carriage. The supply is limited, so time is precious, don't delay, order immediately.**

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DATA BOOKS. Copies from official publications, giving circuit diagrams, component values and useful notes: BC.342 — BC.348 — BC.312 — BC.221 — R.208 — R.103a — R.107 — M.C.R.1 — R.1155 — W/S.22 — RT.18 — W/S19 — R.1116A — all at 2/8 each, also Walkie-Talkie 58, 3/6. "Demobbed" valves, 2/6. LIST free on application with stamp. 200 BARGAINS described.

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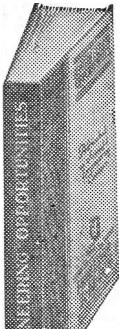

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SHORT WAVE BROADCAST STATIONS

Revision 87·21-129·59 and 11·49-19·79 Metres

Giving Frequency, Wavelength, Callsign and Location

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

Frequency	Wavelength	Callsign	Location
3440	87·21	YV1RU	Maracaibo
			Falkland Is.
3420	87·72	YV2RC	Merida.
3400	88·24	YV5RW	Caracas
3395	88·37		Colombo.
3390	88·50	YV4RK	Maracay.
3370	89·02	YV1RT	Maracaibo.
3325	90·23	ZJM3	Jaffa.
3310	90·63	YV1RO	Trujillo.
3015	99·50	YDA	Bandoeng.
2510	119·50	JODK	Seoul, Korea.
2465	121·70	WLKS	Kure, Japan.
2330	128·80	ZQI	Kingston.
2315	129·59	PJC	Willemstad.
26100	11·49	GSK	Daventry.
21750	13·79	GVT	Daventry.
21730	13·81	WNRX	New York.
21720	13·81		Singapore.
21710	13·82	GVS	Daventry
21690	13·83	WLWL1	Cincinnati.
21680	13·84	VLC10	Shepparton.
21675	13·84	GVR	Daventry.
21650	13·85	WLWS1	Cincinnati.
21640	13·86	GRZ	Daventry.
21610	13·88	WNRA	New York.
21600	13·89	VLA9	Shepparton.
		VLB8	Shepparton.
21590	13·90	WGEA	Schenectady.
21570	13·91	WCRC	New York.
21560	13·91		Moscow.
21550	13·92	GST	Daventry.
21540	13·89	VLB5	Shepparton.
21530	13·93	GSJ	Daventry.
21510	13·95	VUD8	Delhi
21500	13·95	WOOW	New York.
21470	13·97	GSH	Daventry.
21460	13·98	KCBA	Los Angeles.
21450	13·99		Brussels.
21350	14·05		Moscow.
19850	15·11	WBE	New York.
19350	15·50	PMA	Batavia.
18600	16·18	PLA	Batavia.
18160	16·53	WNRI	New York.
18135	16·54	PMC	Batavia.
18130	16·55	GRP	Daventry.
18080	16·59	GVO	Daventry.
18025	16·64	GRQ	Daventry.
17880	16·78	WGEX	Schenectady.
		KGEX	San Francisco.
17850	16·81	PRL9	Rio de Janeiro.
			Paris.
17840	16·82	HVJ	Vatican City.
		VLC9	Shepparton.
			Brazzaville.
17830	16·83	WCBX	New York.
		VUD10	Delhi.
			Moscow.
17820	16·84	CKNC	Sackville.
17810	16·84	GSV	Daventry.
17800	16·85	VLB7	Shepparton.
		VLA7	Shepparton.
		WLWO	Cincinnati.
		OIX5	Helsingfors.
		KRHO	Honolulu.
17790	16·86	GSG	Daventry.
17784	16·87	HER7	Schwarzenburg.
17780	16·87	WNBI	New York.
		KGEX	San Francisco.
17775	16·88	PHI	Hilversum.
17770	16·88	U:N.O.	Geneva.
			Moscow.
17765	16·89		Paris.
17760	16·90	KWID	San Francisco.
		VUD3	Delhi.
		VUD8	Delhi.
17750	16·90	WRUW	Boston.
			Moscow.
17745	16·91		Moscow.
17730	16·92	GVQ	Daventry.
		SEAC	Colombo.
17720	16·93	LRA5	Buenos Aires.
17715	16·93	GRA	Daventry.
17700	16·95	GVP	Daventry.
17527	17·11		Brazzaville.
16670	18·00	CNR	Rabat.
15895	18·87	CR6RL	Luanda, Angola
15825	18·96	WBC	New York.
15450	19·41	GRD	Daventry.
15435	19·43	GWE	Daventry.
15412	19·47		Moscow.
15385	19·50		Moscow.
15375	19·51	GRE	Daventry.
15360	19·53		Moscow.
15350	19·54	WRUA	Boston.
		WRUS	Boston.
			Paris.
15345	19·55	SVD2	Athens.
15340	19·56		Moscow.
15330	19·57	KNBX	San Francisco.
		KCBA	Los Angeles.
		WGEO	Schenectady.
15320	19·58	CKCS	Sackville.
		VLA5	Shepparton.
		VLC4	Shepparton
			Moscow.
15315	19·59	HER6	Schwarzenburg.
		HEU6	Schwarzenburg.
15310	19·60	GSP	Daventry.
15300	19·61	GWR	Daventry.
15290	19·62	WRUL	Boston.
		VUD11	Delhi.
15280	19·63	WNRE	New York.
		ZL4	Wellington.
			Moscow.
15270	19·65	WCBN	New York.
		WCRC	New York.
15260	19·66	GSI	Daventry.
15250	19·67	WLWK	Cincinnati.
		WLWR2	Cincinnati.
		KNBX	Dixon.
		KRHO	Honolulu.
15240	19·69	VLG6	Lyndhurst.
		VLH5	Melbourne.
		TPA2	Paris.
15235	19·69	JVW3	Karachi.
15230	19·69	OLR5A	Prague.
15225	19·70	JVW	Karachi.
15220	19·71	PCJ	Hilversum.
15210	19·72	KGEI	San Francisco
		VLC11	Shepparton.
		WBOS	Boston.
15200	19·74	VLA6	Shepparton.
		VLB6	Shepparton.
		VLC	Shepparton.
15195	19·74	TAQ	Ankara.
15190	19·75	OIX4	Bjornborg.
		CKCX	Sackville.
		VUD5	Delhi.
15180	19·77	GSO	Daventry.
15170	19·78	TGWA	Guatemala City.
15160	19·79	VLB11	Shepparton.
		VLG7	Lyndhurst.
		VUD7	Delhi.

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MCR1 Universal power pack, 30/-. Coil ranges, 5/- each. IT4's 7/6d. each. *Radio Craft* May-December 1947 (November missing) 7/6d. or 1/3d. each. Shearlaw, Kaduna, Frimley Road, Camberley, Surrey.

SALE. *Practical Wireless* Dec. '45 to May '48. *R.S.G.B. Handbook* and *Supplement*. R.1082 coils wanted, urgent. T. Strevens, 70 Thirlmere Avenue, Reading, Berks.

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