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# SHORT WAVE LISTENER



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AUGUST 1949  
VOLUME 3 · NUMBER 9



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# THE SHORT WAVE LISTENER

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VOLUME 3

AUGUST 1949

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interest.

EDITORIAL

## Forty

In this space last month we discussed the appearance of the BBC on frequencies in the 7 mc amateur band.

Arising from these comments, the BBC wrote to explain that they are in no way responsible for this state of affairs, since their operating frequencies are allotted to the Corporation by the General Post Office, the authority for the control of frequencies in this country.

On the subject of the BBC's appearance on Forty, the GPO also wrote us to the effect that they are well aware of the difficulties arising by reason of operation on "unauthorised" frequencies, but that amateurs are not alone in suffering in this respect; that international conditions in the field of radio are abnormal; and that the GPO does not consider any real improvement to be possible until the agreements reached at the Atlantic City conference are fully implemented. The GPO also undertakes to remedy the position as soon as conditions allow.

In view of our own observations on this topic, both here and in "another place," we feel that we should bring these facts to the attention of all our readers. The BBC is clearly not in any way to blame and, for the moment, it is also plain that the GPO is unable to rectify the position. It may be a long time yet before all countries have adjusted themselves to the 1947 International Agreement and, what is just as important, are prepared to honour that Agreement in every sense in which it was made.

## CONTENTS

### AUGUST 1949

Editorial	257
HF Preselector Unit	258
Systematic Indexing	263
Have You Heard?	264
Calls Heard	272
SWL Stations-No. 23	275
"Pse QSL"	276
The VHF End	278
DX Broadcast	281
Broadcast Station List, Revision 50.26-92.95 metres	287

A COMPANION PUBLICATION TO "THE SHORT WAVE MAGAZINE"—  
THE JOURNAL FOR THE RADIO EXPERIMENTER AND TRANSMITTING AMATEUR

# HF Preselector Unit

## Two-Stage Design for 14-30 mc Operation

by J. N. WALKER (G5JU)

*(Here is a piece of auxiliary equipment which will considerably improve the performance of most receivers at the HF end of the tuning range—where it is usually wanted most. The author of this article discusses the advantages of using a preselector, and describes in detail the construction of a modern two-stage unit. —Ed.)*

**B**EFORE dealing with the design of a preselector, it may help the newcomer if information is given on the benefits to be obtained from the use of an instrument of this kind.

First of all, some may ask what is the difference between a preselector and a converter and why is it that sometimes the use of one instrument is recommended and sometimes the other? The answer depends mainly on the characteristics of the receiver. In brief, a converter is employed when it is desired to receive signals on frequencies not covered by the existing receiver. A preselector is used when it is desired to improve the sensitivity

and signal-to-noise ratio of the existing receiver.

The preselector amplifies incoming signals and passes them on to the receiver proper at the same frequency. The converter accepts a signal, amplifies it, changes the frequency and passes it on to the receiver at a much lower frequency, usually between 1.6 and 10 mc.

A converter is sometimes employed to give a better performance than that obtainable from the receiver by itself. This applies especially at the higher frequencies where the choice, in a converter, of special valves and circuit values, combined with the absence of switches, results in increased efficiency.

Also, sometimes, the existing receiver may not possess an adequate degree of bandwidth for amateur needs and the simplest answer is to add a converter, when it is a fairly easy matter to arrange for any desired amount of bandwidth.

The converter, in its modern form, is chiefly of advantage when listening on amateur bands. The preselector, on the other hand, confers equal benefits to short wave broadcast listeners and to those interested solely in amateur communication.

If the receiver is fitted with two RF stages, the performance should be good and it is doubtful if the addition of a

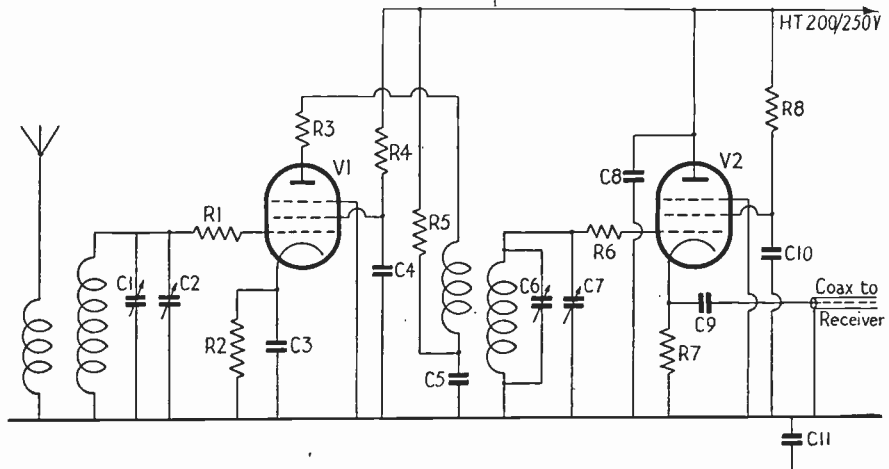
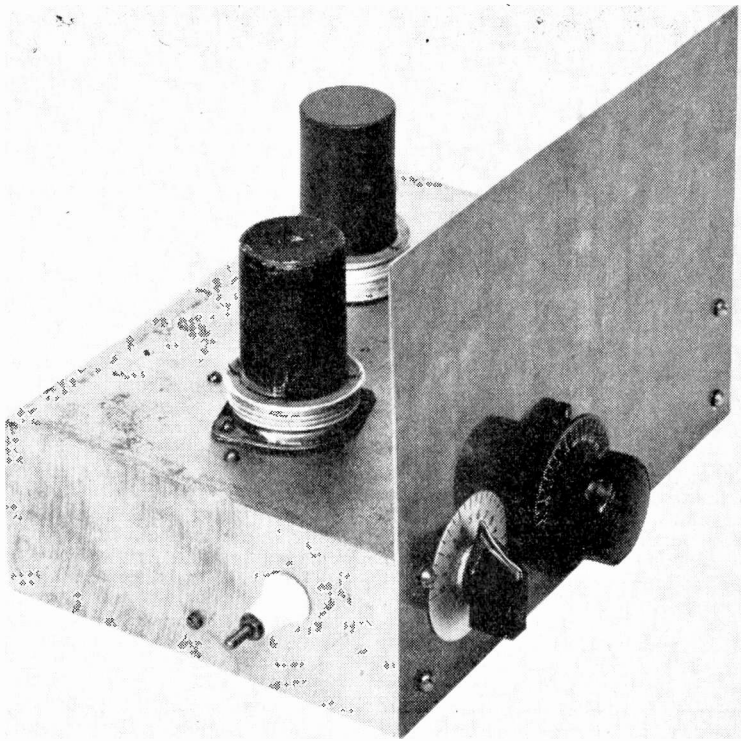


Fig. 1. Circuit complete of the two-stage Preselector, for which full constructional details are given in the text.



The EF50 Preselector complete. The knob to lower left is the input trimmer control C1.

preselector will be worth while—except possibly when local circumstances dictate the use of only a very small aerial. Where, however, no RF stage exists and the aerial works direct into the frequency changer, very considerable benefit will be obtained from a preselector—sensitivity will be much greater, selectivity will be improved, image interference will be much reduced

but, of more importance than any of these, the signal-to-noise ratio will definitely increase, making it possible to receive intelligible signals that were previously barely audible above the general noise level.

Where one RF stage is already provided in the main receiver, the benefit is still very definite at the higher frequencies, where

#### TABLE OF VALUES

Fig. 1. Circuit of the EF50 Preselector

- C3, C4, C5, C9, C10, C11 = .001  $\mu$ F Moulded Mica  
(T.C.C. Type CM20N recommended)
- R1, R3, R6, = 12 ohms  
R2 = 220 ohms  
R4, R8 = 47,000 ohms  
R5 = 470 ohms  
R7 = 100 ohms
- (All resistors are  $\frac{1}{2}$  watt rating)

#### COILS

Tuned winding 8 turns 22 SWG enamelled copper, following threading.

Other winding, 4 turns spaced  $\frac{1}{4}$  in. from main winding.

#### LIST OF PARTS

- |   |  |                     |
|---|--|---------------------|
| 1 | Microdenser 15 $\mu$ F (C1), Cat. No. 580  | Eddystone           |
| 2 | Microdensers 100 $\mu$ F (C2, C7), Cat. No. 585                                      | Eddystone           |
| 2 | Coil Formers Threaded, Cat. No. 648  | Eddystone           |
| 1 | Chassis, Cat. No. 643  | Eddystone           |
| 1 | Direct Drive Dial, Cat. No. 638  | Eddystone           |
| 1 | Flexible Coupler, Cat. No. 50  | Eddystone           |
| 1 | Pointer Knob and Dial, Cat. No. 425  | Eddystone           |
| 1 | Lead-through Insulator, Cat. No. 695   | Eddystone           |
| 1 | Concentric Trimmer 30 $\mu$ F max. (C6)  | Mullard or Phillips |
| 2 | Valves, type EF50  | Mullard             |
| 2 | Valveholders B9G, List L.500/C   | Belling-Lee         |
| 2 | Retaining Rings and Bases, List L.658/R and L.658/B, Tag Strips, Coaxial Cable, etc. | Belling Lee         |

the degree of internal RF amplification falls off to some extent. But little is gained by the use of a preselector at frequencies lower than 7 mc.

**Practical Preselector**

It is not difficult to design a preselector which is reasonably easy to build, economical in the number of components used and capable of a good performance. A single tuned stage does not permit full realisation of the benefits to be obtained from the preselector. Three stages are hardly necessary and would result in undue complexity — there would undoubtedly be considerable difficulty in maintaining stability (freedom from self-oscillation) over the full frequency coverage. Two stages are entirely satisfactory for all normal requirements. It is important that the two stages should be maintained in accurate alignment. In this connection, it should be remembered that quite a small variation in frequency will affect the loading imposed by the aerial on the first tuned stage (unless it has been purposely designed for a wide bandwidth). This, in turn, will affect the tuning of the stage.

In the present design, the two tuning condensers are ganged to give ease of control, but a small separately adjusted condenser is provided for peaking the input circuit, to ensure optimum results irrespective of aerial or frequency in use.

The complete circuit of the preselector is given in Fig. 1. The first EF50 valve is employed as a high gain amplifier, the input stage being carefully and thoroughly screened in a compartment of its own. The second valve, also an EF50, is a cathode follower, to ensure a good match into the receiver aerial terminals.

The single coil/condenser combination in each stage gives a frequency coverage from 13.75 to 29.5 mc. Two popular amateur bands and several of the more interesting short wave broadcast channels are thus included, whilst the design is kept reasonably simple. To increase the coverage would entail the use of a special type of Yaxley switch and more coils, which additional complexity is considered hardly worth while, since the benefit secured from the preselector is less with decreasing frequency.

**Construction**

One piece of sheet metal (brass or aluminium) is required to act as a front panel (unless the instrument is enclosed in a cabinet), and another for a screen beneath the chassis. Dimensions and drilling details are given in Fig. 2. The hole in the screen to take the tuning condenser must be lined up accurately with the hole in the front chassis wall. This is best done as follows: bolt the screen in position, noting that the slot over the valveholder gives no more than adequate clearance over the tags; fit a bush to the hole in the front panel and pass through it a 1/4-in. diameter rod, of sufficient length to

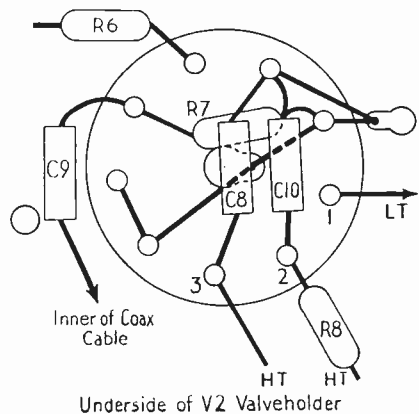
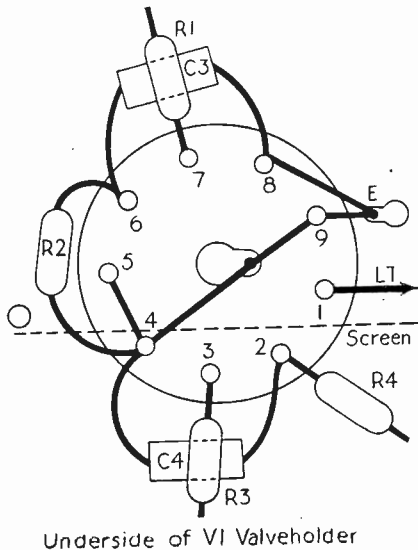
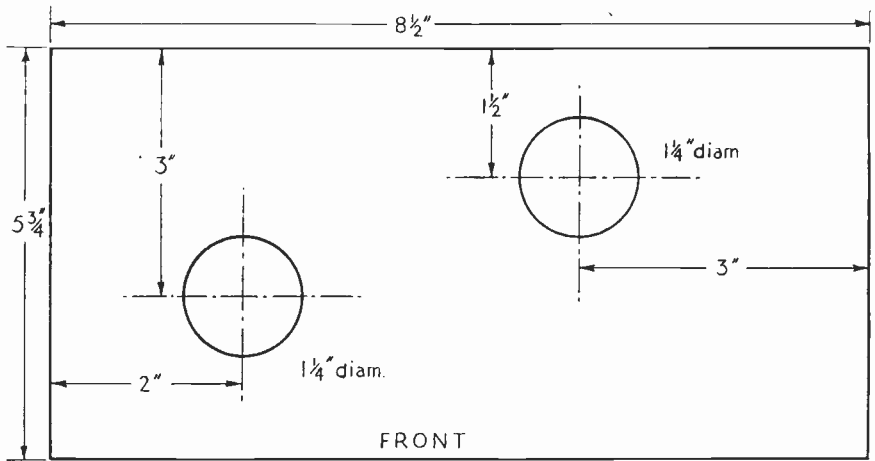


Fig. 3. Showing the wiring round the valveholders. A layout following this as closely as possible will ensure the best results.



Top of Chassis

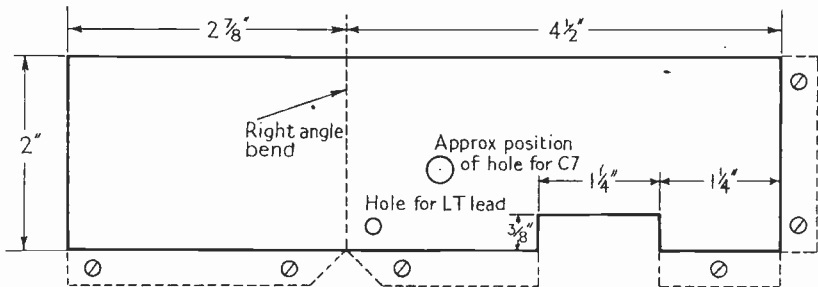
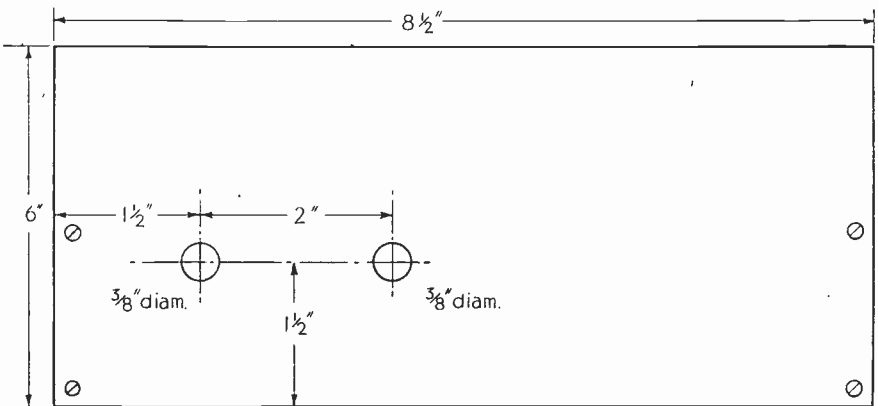


Fig. 2. For those who like to do their own metal work (and in this instance it is simple enough), here are the dimensions and drilling layout for the panel, chassis and screen.

reach the screen, and mark the point at which the hole should be made. The screen is then demounted and the hole drilled out. A small hole is also required for the LT lead to the valveholder.

The only holes in the top of the chassis are two 1½-in. ones for the valveholders, positioned as shown in Fig. 2, with the spigots located parallel to the length of the chassis. A hole for a lead-through insulator (or coaxial socket) to take the aerial connection should be made in the left-hand wall of the chassis about 1½ in. from the front.

#### Wiring

With a high-gain valve such as the EF50, coupling between the anode and grid circuits must be reduced to an absolute minimum, if good stability is to be achieved. The complete screen around the input circuit is effective in preventing direct coupling, but it is very necessary to pay proper attention to the by-pass condensers—their position and their quality—to prevent inter-electrode coupling. T.C.C. Type CM20N are small, possess low inherent inductance and are

strongly recommended. In any case, make quite certain that the condensers used are good ones—a single poor condenser may lead to trouble.

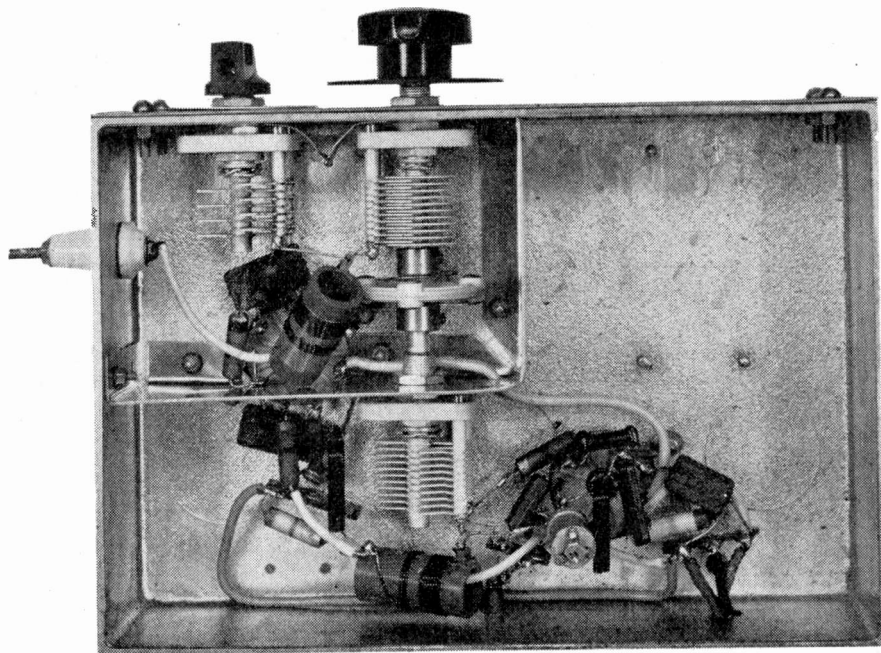
Fig. 3 indicates exactly how the valveholders should be wired. Small stopper resistors are included in places, to prevent VHF parasitic oscillation, which might otherwise occur, particularly when the tuning condensers are at minimum.

When the valveholder wiring is complete, the tuning condensers can be fitted. The large flexible coupler is slipped over the rear spindle of the front condenser before the rear condenser is bolted in place. If the screen has been positioned correctly, the coupler will fit properly over both spindles.

The lead to the receiver takes the form of a piece of ¼-in. diameter coaxial cable (72/80 ohm), the length of which is not important.

The two coils should be wound to be as nearly identical as possible. They are soldered directly in position between a lug on the tuning condenser and an earth point on the associated valveholder.

A pilot indicating lamp has not been



The works in detail. The ganged condensers are C2, C7. Note how the coils are wired directly into the circuit.



included but one can be easily fitted if desired.

#### Preliminary Adjustment and Operation

The power supplies required are small—6.3 volts 0.6 amperes for the heaters and 200/250 volts 12/15 mA HT—and it will usually be possible to draw these from the receiver power unit.

To align the preselector, the tuning condensers should be set at maximum (tuning dial at 100 deg.) and the aerial trimmer at half mesh. Rotate the receiver tuning control until resonance with the preselector is indicated (by generally increased liveliness) and adjust the concentric trimmer (C6) for maximum signal

strength. The frequency should be slightly below 14 mc.

With the preselector dial set at zero, the frequency should correspond to 29.5 mc, and the ganging should hold well, possibly with some slight movement of the trimmer C1.

It may be mentioned that the optimum setting of C1 should be quite definite. If this control is flat, it indicates that the aerial is loading the input circuit severely and some reduction must be effected. The simplest way to do this is to insert a small condenser between the aerial terminal and the coil—a value of 10  $\mu\mu\text{F}$  fixed, or preferably a 3/30  $\mu\mu\text{F}$  trimmer, will be satisfactory.

## Systematic Indexing

by R. S. BURROWS

HOW often have you wanted to refer back to an article which you once read in the *Short Wave Listener* and have had to hunt through all your back numbers to find it? Wouldn't a simple general index be helpful?

The *Short Wave Listener* is now in its third year of publication and the number of back copies is ever increasing. Why not set about making an index before they have increased to such an extent as to make it too big a job?

The making of the index described here entails about an hour's work. All that you need is a small cash book with each page devoted to a single letter of the alphabet. The money columns should be used for the Volume, Copy number (given on the front cover) and Page number respectively. If, however, you have had your copies bound, you can dispense with the column

for the copy number. The date column should be used for the principal word under the index letter, the rest of the page being used for the remainder of the title. The accompanying diagram is given to show the general layout.

On the completion of a series of articles, such as the recent one on "Amateur Transmission for the Beginner," it is worth while to make a special index to cover the scope of the whole series. The ordinary cash book should leave enough pages for you to do this.

Every time your *Short Wave Listener* arrives just enter up the technical articles and any other items of interest in the index and you will not be bothered by long searches any more.

To complete the job, stick the plate from the envelope in which it comes on the front cover of the index.

TITLE		VOL	No	B
				PAGE
<i>Bandspread</i>	<i>For Beginners</i>	1	3	68
<i>Bandspread</i>	<i>More about</i>	1	6	166
<i>BFO</i>	<i>Adding a</i>	2	4	98

Typical page layout for an indexing system.

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**T**HE spell of bad conditions from which we all suffered last month seems to be well on the move, and there are signs that a really good DX season is already starting up. Needless to say, 28 mc is quiet at the height of the summer, but the other bands are all yielding their crop of DX. In spite of the fine weather and the "call of the great outdoors," the volume of correspondence and Calls Heard is very nearly up to the winter level!

#### SET LISTENING PERIODS

Last month's SLP's were successful enough; in fact the 14 mc period on June 23 brought in quite a surprising amount of DX. A quick scrutiny of the Phone lists shows that the following were heard: AR8, CE, CN, CX, EA8, EK, EL, FA, FT, HC, HK, KP4, LU, OQ, PY, VK, VO, VP9, YK, YV, ZB1 and 4X. The few CW lists received add up even better



former found VK5KO coming through at 2100 GMT and then discovered DL1FF working LU3EL, LU7AZ and ZS5YF in a matter of a few days! The LU's are there

revive the old pioneer spirit and the thrill of achievement.

There is something in his remark that when the owner of, say, an AR88 rolls in a nice piece of DX he should really say "The RCA and I received ZK1AA last night"!

Fortunately this is entirely a matter of free will, and those who like to feel a certain amount of pride in their DX achievements can always build their own receivers—whether of the single- or multi-valve type. Indeed, many of the leaders in our DX competitions *do* use home-brewed apparatus.

At the same time we must face the fact, especially in these days of heavy QRM, that what is DX on an 0-V-0 cannot really rank as DX on a commercial communications job. So, after our portable SLP is over, I am arranging a trial period for 0-V-0 and 0-V-1 receivers only—just to see what sort of support we get for it

## AMATEUR BAND COMMENTARY *by the DX Scribe*

and give us C, C8, CM, CT3, EA8, FA, FT, LU, MD2, OQ, OX, PY, TF, UA9, VE6, VE7, VK, VO, VQ4, VS7, YK, ZB1, 4X.

For midsummer that is not bad going! And in a two-hour period chosen at random, remember!

By comparison the 28 mc period was small beer and only gave us CE, EK, KP4, FA, OQ, LU, PY, ST, VQ4, ZD4, ZE and ZS. Even so, that is more than some of the pessimists would have predicted for Ten this summer.

#### THE LF BANDS

It is becoming more and more obvious that great things will happen on the LF bands this coming season—and that includes the Top Band, too. Only two listeners (C. S. S. Lyon, of Liverpool, and J. L. Hall, of Croydon) seem to know that 3.5 mc has already opened wide again. The

band between 2200 and 2300 GMT and ZS a little earlier. All this, of course, is on CW at the LF end of the band.

In the course of some stray early morning listening I have been surprised to hear East Coast W's coming through nicely both on 7 and 3.5 mc; it is obviously only a matter of time before the first W's break through on the 1.7 mc band.

So how do you like your DX? Dead easy, as on 14 mc, or exciting, as on the LF bands?

#### THE LITTLE SETS

This brings me to an interesting letter from R. W. Finch (Ilford), who advocated a kind of "QRP Championship" last month. He forwards his QSL from VP5HN, confirming that 5 watts was the power in use. Now he extends his ideas with a plea for SLP's for *single-valve receivers only*, adding that he thinks this might

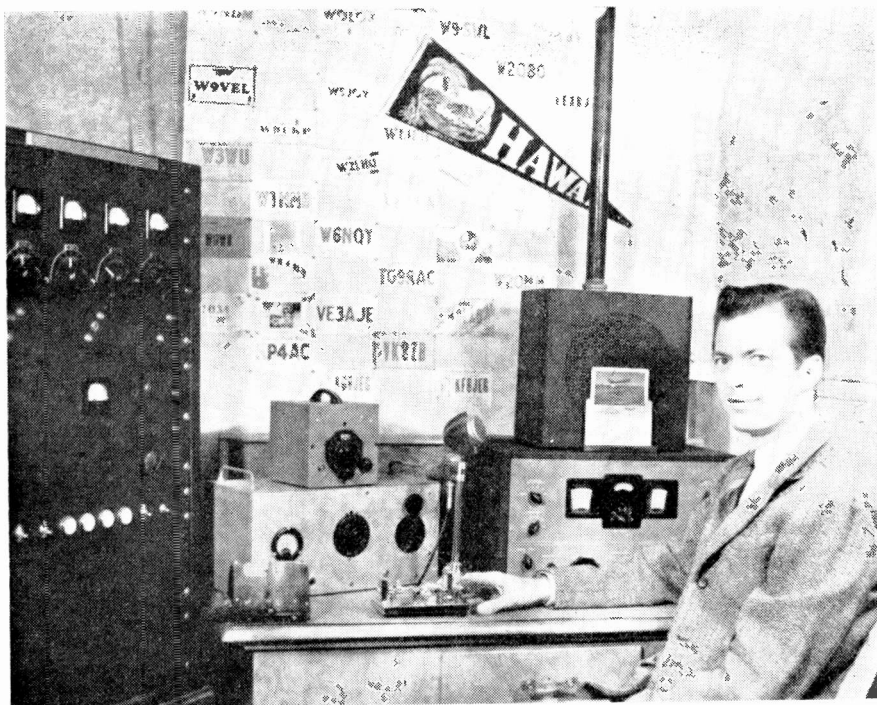
and how the competition shapes.

#### CONTESTS AND COMPETITIONS

Our three comparative tables continue to thrive. A special bouquet to M. E. Bazley (Birmingham) for hearing 40 Zones during the month. This is the second time he has done so, and, believe me, it takes some doing.

Actually he heard Zone 23 twice, because, in addition to his listing of AC4RF, I note that he heard C8FP during the 14 mc SLP. Few others appear to have found this one.

On the Top Band, G. C. Allen (Thornton Heath) has managed to keep his position at the top of the list with the fine score of 62 counties heard this year. The going will be really difficult from now on, but some of the Top Band Contests will undoubtedly liven it up a little. We shall



W0FDY of Garden City, Kansas, is a 28 mc CW/Phone operator.

have to switch from Counties to Countries when the winter DX starts appearing.

As far as the Four-Band Table is concerned, I have come to the conclusion that this is rather a running record than a competition, and so I have evolved yet another order for this one. In short, Alphabetical! You can see just as easily from the table who has the highest score on each band and who is the best all-rounder. Top scorers to date are D. W. Bruce (Eltham) for 28 mc, M. E. Bazley (Birmingham) for 14 mc, and J. L. Hall (Croydon) pulls off the double for by far the highest totals on both 7 and 3.5 mc. (Note that 122 in the 7 mc column; no one else ranks above the 76 put in by W. J. C. Pinnell, of Sidcup.)

#### DX OF THE MONTH

And so on to the month's

news. Starting on the Top Band I should mention D. L. McLean (Yeovil), who writes to say that W1ZE is already looking for DX on 1820 kc, and will probably be using phone. The big 3.5 mc news you have already had. We seem to know all about 14 and 28 mc these days, and nothing particularly startling *can* happen on those bands now, unless someone obligingly treks off to a brand new country and puts it on the air. So, for a breath of fresh air, let us scrutinise the much-maligned 7 mc band.

#### FORTY WAKES UP

There is a distinct stir in the air—not so much a property of the band itself, but rather an awakening on the part of listeners to the fact that Forty is still worth an hour or two.

For those who still treat 7 mc with disdain, here are a few specimen tit-bits. N. S.

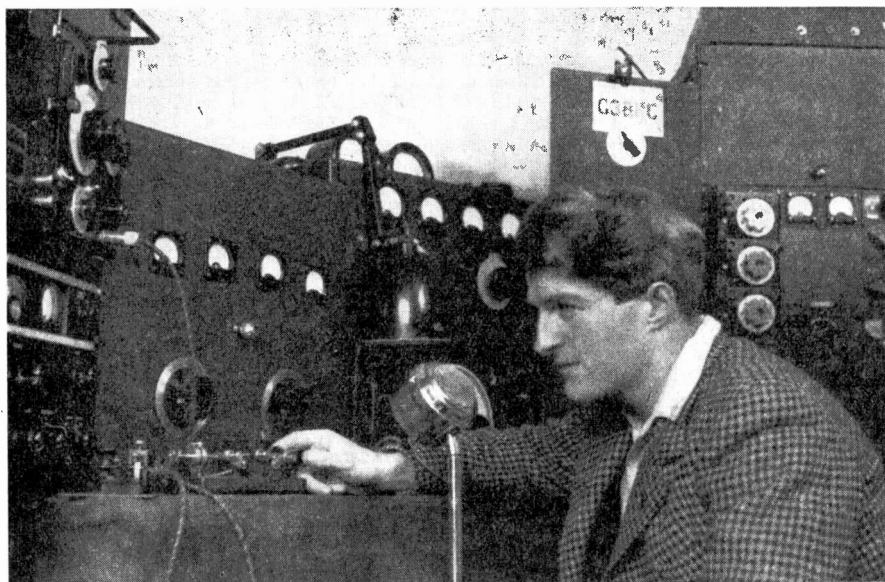
Beckett (Lowestoft) reports "swarms of W's" from midnight until 0730, PY7WS nearly every morning at 0630, and VP2LS on phone, S7 for nearly two hours. J. C. Beal (Wembley) added seven new countries to his score with HZ, ZL, KZ5 as the high spots.

B. Hummerstone (Harrow) has added ten more, including an HI (0700). D. Powell (Wilton) collected VP4TAQ, CO2CV and ZL4HI, all on CW between 0430 and 0520 GMT on June 18.

A. Studley (Harrow) found the best signals on the band in the early mornings came from W4, CO and PY, but he also heard ZL4CH, RST 569 at 0530 one morning. W. J. C. Pinnell (Sidcup) listened for two hours between 0130 and 0330 and heard CO2PA, PY1ALF, PY1RC and HK3BJ, all on phone, plus

FOUR-BAND DX					
Listener	28 mc	14 mc	7 mc	3.5 mc	Total
A. Bannister (Manchester) .. .. .	124	138	18	22	158 (P)
R. L. Bastin (Coventry) .. .. .	56	95	18	19	108 (P)
M. E. Bazley (Birmingham) .. .. .	128	218	49	19	222
J. C. Beal (Wembley) .. .. .	29	121	25	15	126
N. S. Beckett (Lowestoft) .. .. .	48	152	58	27	159
G. Braithwaite (Belfast) .. .. .	129	144	25	20	171
D. W. Bruce (Eltham) .. .. .	151	197	69	34	207
P. Butler (Porismouth) .. .. .	84	127	38	19	136
P. Bysh (London, N.8) .. .. .	61	76	17	14	96 (P)
F. K. Earp (London, S.W.11) .. .. .	100	137	30	26	152 (P)
A. O. Frearson (Birmingham) .. .. .	68	64	13	8	102
C. J. Goddard (Coventry) .. .. .	3	93	23	13	93
O. A. Good (Oswestry) .. .. .	108	148	7	4	154 (P)
H. M. Graham (Harefield) .. .. .	53	114	18	19	120 (P)
J. L. Hall (Croydon) .. .. .	7	202	122	55	205
Miss D. Hall Taylor (Southport) .. .. .	33	78	7	11	87
K. G. Harland (Westcliff) .. .. .	32	58	11	14	78 (P)
R. A. Hawley (Goostrey) .. .. .	124	151	29	19	183
F. A. Herridge (London, S.W.12) .. .. .	126	92	37	16	151
A. L. Higgins (Aberkenfig) .. .. .	45	93	13	15	101
B. Hummerstone (Harrow) .. .. .	45	92	18	16	95 (P)
T. W. Jones (Birmingham) .. .. .	54	175	63	22	177
D. Kendall (Potters Bar) .. .. .	124	131	24	29	150 (P)
Miss P. A. Litson (Saffron Walden) .. .. .	50	67	7	16	89 (P)
P. G. Lucy (East Barnet) .. .. .	89	98	19	23	118 (P)
D. G. Martin (Cheltenham) .. .. .	83	111	15	17	137 (P)
O. R. F. Mason (Prittlewell) .. .. .	3	72	12	11	73 (P)
D. L. McLean (Yeovil) .. .. .	141	139	19	18	158 (P)
G. Musk (Blackpool) .. .. .	16	91	11	14	94 (P)
C. A. Naylor (Appley Bridge) .. .. .	89	62	15	12	106 (P)
A. M. Norden (London, N.W.11) .. .. .	3	115	18	15	116 (P)
E. C. Palmer (Bath) .. .. .	59	80	26	18	108
E. J. Parish (Watford) .. .. .	105	140	17	23	155 (P)
E. A. Parkinson (Leeds) .. .. .	105	119	10	14	137 (P)
K. M. Parry (Sandwich) .. .. .	59	83	12	6	104 (P)
K. Parvin (Thornton Heath) .. .. .	110	136	22	28	145 (P)
W. J. C. Pinnell (Sidcup) .. .. .	116	176	76	29	184
C. S. Poole (Ipswich) .. .. .	68	96	19	24	116 (P)
D. Powell (Wilton) .. .. .	67	122	59	27	135
A. W. Robertson (Cranford) .. .. .	82	143	22	20	154
D. Shallcross (Derby) .. .. .	75	98	18	20	120
K. Smeeton (Barnton) .. .. .	89	124	22	22	135 (P)
R. S. Stott (Upminster) .. .. .	129	194	74	26	200
A. Studley (Harrow) .. .. .	51	131	52	37	133
J. P. Warren (Croydon) .. .. .	10	109	9	8	111 (P)
M. Watson (Malta) .. .. .	72	114	41	32	135
M. G. Whitaker (Halifax) .. .. .	80	114	22	27	131 (P)
A. R. Wybrow (London, S.E.22) .. .. .	89	115	21	18	131 (P)

(P) Signifies 'Phone Only



Two years ago we printed a photograph of G3BFC, Ferndown, Dorset, after the station had not been long on the air. Here is a general impression of the installation as it is to-day.

CO6ZE, XE1SA and YV1AX on CW.

Well—what do you think? Is it worth losing some sleep occasionally?

#### THE 14 MC NEWS

Twenty has been pretty good in the mornings and evenings, and most of its regular followers have sent in lists of quite nice DX. The Calls Heard will speak for themselves. D. L. McLean mentions a whole bunch of EA8's (1700-1900) on phone; FF3CN (14385 at 2100); MP4BAC (14345 at 1700); and also TA3BS, YK1AC, ZC1AL and ZC1AR. W. E. Bachell (Prittlewell) logged CR6AI, FF8PM, KG4AD, VP2LA, ZD3A and ZP2AA—all phone.

M. Shortland (Sunderland) was one of the lucky ones who heard C8FP (Zone 23) coming in RST 349 at 2225. This was on a battery 0-V-1 with an indoor aerial. C8FP and AC4RF seem to be the only active representatives of Zone 23 these days.

J. C. Beal (Wembley) collected DU1AI, HH2X, HP1LQ, TG9AN, TI2OA, VP7AI, XE1VA, ZS3F and YV5BQ—all on phone. A. W. Robertson (Cranford) points out that although conditions have been good for Asia, the late hour at which they come in has meant a scarcity of active stations. He mentions outstanding signals from VQ4IMS, PY2CK, LU6AJ, CX2CO and YV5AB.

C. J. Goddard (Coventry) managed to find the elusive M1B—on phone, 14100 at 1930. Other nice ones were ZD4AB, and UG6KAB. He wants the QTH of F7AH, if anyone can give it.

The best heard by M. E. Bazley were AC4RF, C8FP, SV5UN, ZD9AA, XZ2FK, VP2LA, FE8AB, ZD2S, HP1LX, FF8GP and PJ1X. J. Neal (Birmingham) is now a confirmed CW fan and his best of the month were AP2Y, DU1HR, FM8AD, VP7NW and VS2BK. All his listening was done between 2200 and 2300 GMT.

K. Smeeton (Barnton) logged some of the American portables on the ARRL Field Day—but this was not like our NFD and some stations were using a kilowatt! Others on 14 mc were CR6AE, VP7NI, HC2EB, YS1MS, HH3DL and ZC1AL. J. A. Bagley (Durham) logged, among others, ME1RA and J6AR, both of whom sound queer. Some of the others were EP4MW, VP3HL, VQ4IMW, ZC1AL and ZB2AA.

From K. Parvin (Thornton Heath) comes a list including HV2A, EL7A, FF8PM, TG9RB, TI2HP, SV5UN, YS1GM and YS2SA. R. A. Hawley (Goostrey) mentions W1FH/Portable-Mobile, SV1VS/MM and MP4BAC and 4BAD.

O. A. Good (Oswestry) added to his phone score with CR6AI, KS4AI. He found Zone 10 well represented by HC's and OA's and also heard stations in HP, YS, YN and TG—all on phone. On CW he mentions KS4AI, KV4AA, OQ5AS (Urundi), VK9NR,

and queries UA7OR, MS4UU and a station signing F78AA. He would like to solve that query. D. Kendall (Potters Bar) has found the Central American Zone good, with VP2LA, VP7NK, YS1AC, YS2AG.

D. W. Bruce's summary shows Asiatics from 1500-1800, and again from 1800-2000 (including UAΦKFD), with many West Indians after 2000. KG4AA, KZ5AA and 5CP, KV4AA, HI6EC and

8WF are among them. He also adds that if anyone lacks HR, there is now a new one active—HR1RF on 14 mc CW.

A. Bannister (Manchester) says 14 mc conditions are down compared with last year, although night-time listening has produced signals of amazing strength from CE, CP, OA, VE8 and ZP. D. K. Cocking (Farnborough) remarks on the strength of the VQ4's ('ERR, 'IMS and 'NSH). Other good ones

heard were YS1MS and LU4DJ. D.K.C. was very pleased to receive a card back extra quickly from HI6EC.

J. P. Warren (Croydon) singles out for mention ZP2AE, YS1MS, YK1AC, HZ1AB, OA4Q and TG9RB—all phone—and a station signing ??1SS who, he hopes, may have been HS1SS. H. M. Graham (Harefield) collected FQ8SM (SN ?), MI3ZZ, MP4BAC and VS9AH (all 2000-2030). D. Dadswell

### 1.7 mc COUNTIES HEARD—1949

Listener	Counties	Listener	Counties
<b>'PHONE and CW</b>		<b>'PHONE ONLY</b>	
G. C. Allen (Thornton Heath) .. ..	62	J. H. I. Austin (Coventry) .. ..	49
A. Baldwin (London E.11) .. ..	60	W. Eyre (Whaley Bridge) .. ..	46
R. A. Hawley (Goostrey) .. ..	57	R. A. Hawley (Goostrey) .. ..	45
D. Webber (Newton Abbot) .. ..	52	J. H. Woodward (Stoke-on-Trent) ..	43
L. H. Walne (Yeovil) .. ..	50	K. L. B. Dalby (Gainsborough) .. ..	43
D. Powell (Wilton) .. ..	49	J. H. Roskell (Harrogate) .. ..	42
R. S. Stott (Upminster) .. ..	44	A. Hart (Ilkeston) .. ..	41
E. C. Palmer (Bath) .. ..	41	L. H. Walne (Yeovil) .. ..	40
M. Davies (Carmarthen) .. ..	40	E. Nottingham (York) .. ..	37
G. Greenfield (Slough) .. ..	35	J. Bagshaw (Callington) .. ..	35
D. Shallcross (Derby) .. ..	31	R. S. Stott (Upminster) .. ..	34
D. T. Bradford (Denham) .. ..	29	D. Garrard (Ipswich) .. ..	33
J. Woodfield (Hayes) .. ..	27	W. McBey (Orkney) .. ..	27
W. Iball (Wigan) .. ..	25	E. C. Palmer (Bath) .. ..	27
A. C. Blair (Farnham) .. ..	25	P. N. Marriage (Newbury) .. ..	25
M. E. Bazley (Birmingham) .. ..	19	M. G. Whitaker (Halifax) .. ..	25
D. W. Bruce (Eltham) .. ..	15	M. Neale (Aylesbury) .. ..	24
A. L. Higgins (Aberkenfig) .. ..	7	K. Smeeton (Barnton) .. ..	21
		D. J. Freeman (Welwyn) .. ..	20
		H. M. Graham (Harefield) .. ..	20
		K. G. Harland (Westcliff) .. ..	19
		D. S. Grant (Sevenoaks) .. ..	18
		G. Musk (Blackpool) .. ..	15
		O. R. F. Mason (Prittlewell) .. ..	11
		R. Line (Birmingham) .. ..	9
		R. J. T. Sands (Harrogate) .. ..	8
		R. L. Bastin (Coventry) .. ..	7

(Steyning) added three new ones in the shape of VQ4IMS, SV5UN and UN1AB—all phone.

B. Hummerstone (Harrow), by going for CW in a big way, added 19 countries on 14 mc during the month. The best from W. J. C. Pinnell (Sidcup) are KA1A1A, YSIAC (phone) and C4WX, CR9AG, EA8AL and UAØFB (CW).

So much for the 14 mc news. Summing up, it seems that Asia and Central America have been prominent, with a pretty continuous background of Africans in the evenings. In fact a surprisingly good month on the band, with scores going up in all directions.

#### 28 mc DX

Not nearly so much to say about Ten, but here are some of the devotees. D. W. E. Powell (Wilton) sums it up by saying "No outstanding DX but couldn't call it a dead band." J. C. Beal found some new ones owing to European short-skip. H. M. Graham heard CX4CS at 1845, S8, and also VQ4CJG.

A. Bannister mentions CPIAM (1920) and PK4DA (1425) in addition to PY, OQ, VQ4, ZE, ZD2, ZS and Europeans. D. G. Martin (Cheltenham) gives a similar list. D. W. Bruce thinks the band has "packed up" but mentions XZ2TH, PK4KS and VK6DD and thinks Ten is wide open for short periods. D. S. Kendall was even luckier and found VQ5ALT, KZ5CD, ZD4AX, ZP5BL and a lot of VQ4's and OQ's. R. A. Hawley extracted a new country from ZP5BL and found South America the main source of DX.

Lastly, D. L. McLean's notes include loggings of CP5FB (1900), ZD1BD (1830), ZP2BB (1830) and sundry Central Americans.

#### EIGHTY METRES

A few more listeners mention 3.5 mc; J. L. Hall added

LU to his total, hearing 3EL and 7AZ, and says that ZS5YF, 6AM and 6HO are on the band, although he has not yet heard them. M. G. Whitaker has heard VP9L on phone and says that W4DCQ puts in an S9 signal regardless of conditions.

#### MISCELLANY

A very interesting card has been received from T. W. Moss (Topsham), who must be a real Old Timer among SWL's. He says he has QSL's from the *Queen Mary*, *Normandie*, *Europa*, *Berengaria*, *Torbay Lifeboat*, VR6AY, FR8VX, W9XQ (a Balloon Flight in U.S.A.), and an American Lighthouse! He also has them from all States U.S.A. on 28 mc phone. His own card shows a view of his operating position with an enormous area of wall full of QSL's behind. By the way, he will be 65 on his next birthday. Some of you 14-year-olds take note! In another 50 years of listening you, too, should collect considerable wallpaper.

D. S. Kendall has now logged his 150 countries on phone and has passed the 50 mark for "MM's." He has a QSL from OK1UQ, whose 0.6-watt phone he logged. D. G. Martin wants to know the best way of receiving single-sideband phone on an ordinary receiver; there is no satisfactory answer to that!

A. M. Norden (London, N.W.11) sends a useful summary of the VE8 stations active at present. VE8MI, MU, ND, and OY are in Zone 1, with VE8MA, MB, MO, NB, NS, NW, OX, PA, PN, PO and PS in Zone 2.

Although French stations are not licensed for 1.7 mc, G. Greenfield (Slough) reports F9VA on CW, working a G (2220). K. Parvin, after looking over the Calls Heard lists and seeing how many more countries he might have logged if he had been a CW fan, has promptly decided to become one. Others please

note: you don't know what you're missing. And that includes the fellow who says CW is an "antiquated means of communication"! He, by the way, is mentioned by A. H. Edgar (Newcastle), who reports for the first time. A.H.E. suggests limiting Calls Heard to one call from each country. There is something in this, but they seem to have reached a satisfactory level for the present.

M. E. Bazley says he thinks VQ4KRL is a pirate, and asks whether HZIKE is genuine, and, if so, his QTH? M. Shortland says XA5BQ gives his QTH as Casablanca. L. G. Chastey (Penzance) heard W60OU/Airborne, flying in a bomber from Ankara to Athens. When on *terra firma* he is either TA3FAS or DL4VC.

D. W. Bruce's remarks about "Experimental Short-Wave Receiving Stations" have met with a divided reception. W. Iball agrees and says communications receivers are all very well for just *listening* to stations, but for true DX work you want a home-built job, even if small. "G 321" (York) disagrees violently but rather misses the point, as he runs a small set

#### CALLS HEARD

#### REPORT FORMS

We prefer these forms to be used wherever possible for the compilation of Calls Heard lists to appear in that Section—they have no other purpose. These forms, which are a *free issue*, help you and help us to get the lists set out correctly. A supply can be obtained on request, with a large stamped addressed envelope and a card marked "Calls Heard Report Forms," to the Circulation Manager, Short Wave Magazine, Ltd., 49 Victoria Street, London, S.W.1. But please note that to prevent delay and confusion, all such requests should be kept quite separate from any other correspondence. The DX Scr.be does not issue Calls Heard Report Forms!

himself and experiments with aerials. Incidentally, D.W.B.'s 12-valve super is home-made. Correspondence now closed!

R. A. Savill (Sevenoaks) has just migrated from SW Broadcast to the amateur bands, and his first report, covering some

four hours, gives him five Zones and five countries.

W. E. Bachell was surprised to hear ZL4HP on 14 mc phone at 0545—long way round. He also found UQ2AB on phone. A. W. Robertson heard AG2AB on

28 mc phone, asking for SWL reports. He also heard SPIOP on 14 mc CW, but my information is that *all* SP's are phoney.

#### QUERIES

From A. Bannister—who is AK1YZ? AK was once used for Korea, but it sounds very phoney now. Incidentally, A.B. pays tribute to the top-scorers on our lists and thinks a few medals should be handed out. As he says, the effort and concentration necessary to keep on hearing 35Z and 100C month after month is no small matter.

J. P. Warren asks if MD5 and SU count as separate countries. The answer to that is No. He also wants to know if there are any XZ's on 14 mc phone—and, if so, when?

From J. P. Moore (Birmingham): When are best times for Zones 28, 31 and 39 (14 and 28 mc)? I leave that to you. Does Sardinia count separately? Yes, it does. And QTH of MF2AA, please?

From J. C. Beal: Various stations in Germany are now using prefixes DL 1-5, DK8-9, DI2, EZ3—what are they all? The answer is that DL 1-5 are official and the rest are pirates or phoneys. The fanciful "EZ" for stations in the Saar zone is doubtless used as a bait, but the Saar is *not* a country.

D. L. McLean would be glad of any of these QTH's; FF3CN, MP4BAC, TA3BS, YK1AC. He asks whether Sicily counts as a country. So far as I am aware, it does. But I haven't heard anyone there since XAEF in 1946.

#### TOP BAND AGAIN

G. C. Allen has been going through his logs and finds more than 800 different stations recorded on the band! The QSL's are also coming in well. But, as he says, "Score is now 62 and I'm blown if I can see where the next is coming from!"

D. Powell made hay on

## ZONES HEARD (JUNE)

Listener	Zones	Countries
<b>'PHONE and CW</b>		
M. E. Bazley (Birmingham) .. ..	40	110
D. W. Bruce (Eltham) .. ..	37	123
O. A. Good (Oswestry) .. ..	34	107
R. W. Thomas (London, E.5) .. ..	34	103
R. A. Hawley (Goostrey) .. ..	33	89
C. J. Goddard (Coventry) .. ..	30	93
J. C. Beal (Wembley) .. ..	29	98
J. Neal (Birmingham) .. ..	26	69
B. Hummerstone (Harrow) .. ..	23	65
<b>'PHONE ONLY</b>		
D. W. Bruce (Eltham) .. ..	35	98
R. G. Poppl (Beckenham) .. ..	33	87
R. A. Hawley (Goostrey) .. ..	32	78
K. Parvin (Thornton Heath) .. ..	30	87
F. K. Earp (London, S.W.11) .. ..	30	84
B. N. Sutton (Liverpool) .. ..	27	65
O. A. Good (Oswestry) .. ..	27	65
J. C. Beal (Wembley) .. ..	25	73
D. Vincent (Beckenham) .. ..	25	58
K. Smeeton (Barnton) .. ..	24	70
A. T. Cheesley (London, E.10) .. ..	23	62
J. P. Warren (Croydon) .. ..	23	59
A. M. Norden (London, N.W.11) .. ..	23	55
B. Hummerstone (Harrow) .. ..	22	57
M. G. Whitaker (Halifax) .. ..	21	48
P. Bysh (London, N.8) .. ..	16	43
H. M. Graham (Harefield) .. ..	15	50
D. Dadswell (Steyning) .. ..	14	48
D. K. Cocking (Farnborough) .. ..	13	34
J. P. Moore (Solihull) .. ..	11	24
O. R. F. Mason (Prittlewell) .. ..	11	19
K. G. Harland (Westcliff) .. ..	7	17



NFD and heard six countries on 1.7 mc—G, GI, GM, GW, EI and DL. On another day he heard OK1ZB. Altogether he has nine countries confirmed, and hopes to add W to the list this winter.

#### ANOTHER CONTEST

From India comes news of the first Indian DX Contest, which will take place from 1130 GMT, September 17, until 1830 GMT, September 18 and then again a week later. CW or phone may be used and it will run on the usual worldwide contest lines with an exchange of figures between stations making contacts. Only the 14 and 28 mc bands will be used. From the SWL point of view this will be worth watching, because at the "Home End" will be all stations in India, Burma, Ceylon and Pakistan. They will be trying to work all other stations in countries between Long. 10 deg. E. and 180 deg. E.—in other words, no Americans, North or South, are eligible.

#### SET LISTENING PERIODS

July 29, 2100-2200 GMT  
—14 mc CW and Phone.

July 31, 1400-1700 GMT  
—14 mc CW and Phone  
(for Portable Receivers Only)

August 27, 1700-1800 GMT  
—14 mc Phone

August 28, 0700-0800 GMT  
—7 mc CW.

Note that the July 31 period, which runs for three hours, is open only to users of portables operated away from home. No mains and no permanent aerials are to be used. In reporting, please give details of the site and of the type of receiver used. A certain amount of latitude in the stations logged seems desirable, in case conditions are not good for real DX on that day, so I suggest that you log everything you hear and then compile a list consisting of the thirty or forty best stations, wherever they are. The interpretation of that word "best" is up to you!

It is a fairly tight month again, and the last minute for all correspondence, including Calls Heard, will be first post on August 3. Address to DX Scribe, *Short Wave Listener*, 49 Victoria Street, London, S.W.1. Please continue to separate out your letters into the headings mentioned last month. So 73 and Good Hunting!

#### CALLS HEARD

Before sending in lists of Calls Heard, please read the instructions at the head of the first page of Calls Heard in this issue. Too many are being received with the Calls in vertical columns, prefixes not in alphabetical order, name and address at the bottom or even on a different sheet of paper, no details of receiver used, and all sorts of irregularities.

Some, in fact, look more like Crossword Puzzles. Please make your lists look as much as possible like those that you see in print—but don't be afraid of spacing them out well. We will do the rest.

#### PHOTOGRAPHS

We are always glad to see readers' own photographs which are thought to be of interest for possible publication. The sort of picture you see in the *Short Wave Listener* every month are the kind we want. They can be any size, and either print or negative, but do not send them unless they are really clear and sharp. We cannot use any that are at all fuzzy or dark. Of particular interest are photographs of overseas amateur stations and equipment. All photographs used are paid for at good rates and can be returned undamaged if required.

#### DX OPERATING MANUAL

All those who aspire to an understanding of the vast subject of DX on the amateur bands—how to work it and how to hear it—need a copy of the *DX Operating Manual*, which is a work of reference complete in itself. The *Manual* sets out to guide the beginner and inspire the uninitiated. Of seven chapters and 36 pages, it tells you everything you want to know about DX—so far as that is possible by the printed word. The price is 2s. 8d. post free, of the Circulation Manager, Short Wave Magazine, Ltd., 49 Victoria Street, London, S.W.1.

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# CALLS HEARD

Please note the following simple rules for sending in lists of Calls Heard :

- 28 and 14 mc : No Europeans. No USA except W6 & W7  
No VE except VE5, 6, 7 & 8.  
7 mc : No Europeans.

Arrange logs in the form given here, with (a) prefixes in alphabetical order, but not repeated; (b) numbers in numerical order and repeated as part of the call-sign; (c) call-signs in alphabetical order. For example:—VK2GW 3CP, 4UL, YPIAA, 6CDY, VQ3HJP, 4EJT, W6ENV, 7VY. Please underline each prefix, keep each list to one band, and, in short, make your lists exactly like those below, except that the more space you leave, the better.

## SET LISTENING PERIODS

### 14 mc

#### June 23, 2000-2200 GMT

F. K. Earp, London, S.W.11.

'PHONE: AR8BC, CX2CL, EK1DL, HC1FQ, HK4BF, LU3DB, PY1DH, 2CK, 2YL, 40L, 4RJ, 4ZS, 7AT, 7EL, 7FC, 7IS, 7SC, VK3AGU, VP9GG, YK1AC, YV1AC, YV5BQ, ZB1AM, 4X4AB, AR. (Rx: RF24 and 5-valve superhet.)

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

CE3AT, CN8AH, 8MI, 8MZ, CX2CO, EA8MC, FA8IH, KP4AZ, LUIDV, PY1ACH, 1BH, 2AD, 2AFX, 2CK, 2KS, 2NK, 4BU, 4LZ, 4RJ, 4UO, 4ZI, 6AO, 7AP, 7FA, 7SC, VO2O, VP9GG, 4X4AR, 4BC. (Rx: *Hambander*.)

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

'PHONE: 4X4BC, AR8BC, EK1MD, KP4EE, PY1BH, 2AUT, 7AC, YV5BQ.

CW: UA9CC. (Rx: AR-88 and 504.)

A. L. R. Johnson, 2 St. Stephens Terrace, London, S.W.8.

C.W.: FA8CR, K2NRO, PY2AQ, UC2AF.

R. W. Finch, 36 Bathurst Road, Ilford.

'PHONE: PY2CK.

C.W.: CT3AV, LU4BH, PY3AH, OE, UA, YO5A, ZB1AU, AY, 2G, 4X4CL.

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

'PHONE: AR8BC, CN8EI,

EK1MD, FA3DS, PY2CK, 4AJ, 7AT, 7XC, VP9GG, 4X4BC.

C.W.: LU4BH, 6HR, OX3WC, PY2AQ, 4X4CL. (Rx: 0-V-0.)

D. Cocking, Farnborough, Kent.

'PHONE: OH2OI, PY2CK, ZB1AM. (Rx: BC SH5.)

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

'PHONE: AR8BC, CE1TE, EA3BL, 3BP, 3OY, 4FC, 4PG, EK1MD, EL4LC, LU4BC, PY1CK, 1DH, 2ALN, 3AY, 4ZS, VP8GG, YK1AC, YV5BQ. (Rx: "Commander.")

A. W. Robertson, 149 Firs Drive, Cranford, Hounslow, Middx.

'PHONE: AR8BC, FA3WC, OQ5RM, PY2CK, 4ZS, 7AD, VP9GG, YK1AC, ZB1AM, 4X4BC. (Rx: Home Constructed S.H. 6.)

M. E. Bazley, 2 Bagnell Road, Birmingham 14.

CW: C4WX, 8FP, CM2WD, CT3AV, EA8AW, FA8DA, FT4AB, LU1EC, 4BH, 6DJX, 9BO, 9EV, MD2GO, OQ5RA, PY1ARZ, 1BV, 2OE, 7DF, TF3AB, 3JS, UA9CC, VE6AO, 7GI, VK4AP, 5LC, VO1R, VQ4ALF, VS7PG, 4X4CL, YK1AB, ZB1AU. (Rx: AR88 LF.)

K. Parvin, 98 Winterbourne Road, Thornton Heath, Surrey.

'PHONE: AR8BC, CN8MA, 8MZ, CX2CL, EA8RM, EK1MD, FA3DS, 9WC, FT4AP, PY1BH, 2CK, 3AY, 4BU, 4RJ, 4UO, 4ZS, 7EY, 7XC, VO2ML, VP9GG, YK1AC. (Rx: S.640.)

### 28 mc

#### June 26, 1600-1800 GMT

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

'PHONE: EA3AEB, FA3DS,

3GZ, 8IH, HB9IE, LU1CC, 3CS, 4CD, 4DD, OQ5BA, 5CV, PY1FR, 2CK, 2QK, ST2AM, VQ4CRE. (Rx: *Hambander*.)

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

'PHONE: FA3DS, KP4AJ, LU3EJ, 4CD, OQ5BA, PY1FR, 2CK, 2JU, 2PK, ST2AM, VQ4CRE, 4ERR, 4RF, W3NE/MM, Ø1AX/MM, ZD4AH, ZS6DW.

CW: PY2CD. (Rx: AR88 and 504.)

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

CE2CC, EK1CH, FA3DS, 8CF, 9KJ, LU3DH, 3EJ, 4CD, 4DD, OQ5BA, PY1FR, 2CK, 2JU, 7GQ, ST2AM, VQ4CRE, 4ERR, 4RF, W3NE/MM, ZE2KH, ZS1P, 6DW, 6LF. (Rx: V55R with Converter.)

J. P. Moore, Kings Road, Tyseley, Birmingham.

'PHONE: FA3DS, LU4CE, OQ5BA, PY2CK, 7KG, ST2AM, VQ4CRE, 4ERR, WØ1AX/MM, ZD4AH, ZS6LF.

W. Eyre, Orchard Field, Whaley Bridge, Derbyshire.

FA3DS, OQ5BA, PY2CK, 2JU, 2QK, ST2AM, VQ4CRE, 4ERR, 4RF, WØ1AX/MM, ZS6DW. (Rx: "640").

K. Parvin, 98 Winterbourne Road, Thornton Heath, Surrey.

'PHONE: CN8MI, CX4CS, FA3DS, 8CF, 9KJ, LU3EJ, 4CD, OQ5BA, 5BQ, PY1JY, 2CK, 2JU, ST2AM, VQ4CRE, 4ERR, 4RF, WØ1AX/MM, ZS1P, 6DW. (Rx: S640.)

D. V. Preston, 93 Ulverley Green Road, Olton, Birmingham, 27.

'PHONE: CX4CS, PY2CK, 2JU, VQ4CRE, 4ERR. (Rx: S.640.)

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

'PHONE: FA8CF, LU3DH, 3EJ, 4CD, 5AR, OQ5BR, PY1MK, 2CK, 2QK, 5AL, ST2AM, VQ4CRE, 4ERR, 4RF, WØ1AX/MM, ZS1P, 6LF. (Rx: "Commander.")

## GENERAL

### 3.5 mc

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

'PHONE: PY4ABD, W1AAH, 1CMP.

C.W.: FA8BG, K4NRT, LU3EL, 7AZ, PY5EO, VE2OA, VK5KO, W4OMN. (Rx: 1-V-1.)

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

'PHONE: VEIAT, 1DP, 1HY, 1IK, 1MQ, 1RF, 2ABD, 2AJ, 2IC, VO2AP, 2BL, 2CO, 2J, WICMN, 2ALH, 2AOX, 2IJC, 2LV, 2RGA, 4BFZ, 4KAA, 4NI. (June 8-20, 0300-0500 BST). (Rx: R.1155.)

## 7 mc

A. Studley, 274 Kings Road, Harrow.

C.W.: CO2CV, 2RC, 2SA, 5FL, 7FH, PYIAlM, 2RT, 4ACF, 7DN, VE1BK, 1TC, 1YK, 1YO, 2IJ, 3AMX, 3BNY, VO2CS, 2CV, W4AFF, 4GIP, 4MTY, 4NHX/4, 4PGP, 5ATW, 5NPI, 5SPJ, 8VE, 8PYX, ØCRM, ZL4CH. (Rx: 1-V-2.)

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

C.W.: CO5FL, 5PN, 8FH, F8DA, KZ5CG, PX1A, VE2IE, 2MG, 2OL, 3BSL, 3CAI, VP2AH, W5NPI, 5USN, 9ABL, ØMTU, YV4AO.

'PHONE: VP2LS. (Rx: 0-V-0.)

## 28 mc

F. W. Hardstone, 43 Shrubbery Road, Streatham, London, S.W.16.

'PHONE: AR8AB, CE3HN, 5BH, CX4CS, ET3AE, HC1OY, HH2BL, HK4ARP/MOBILE, 4BN, KP4HL, KZ5CP, 5CS, 5FP, LU3ES, 6DJD, OQ5CH, 5CQ, 5LL, 5RU, PK4DA, VP2ABP, 2JU, VK5AE, VP6SD, 6YB, VQ2HW, VS1AX, W7RM/M, XZ2KN, 2KW, ZD1BG, ZS1RG, 1P, 2DY, 5G, 5GE, 6CY, 6GJ, 6MD, 4X4ES. (Rx: RF24 and S40A.)

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

'PHONE: AR8AB, 8BM, CP5FB, EL3A, HC1OY, HH2CP, HK3AB, KZ5CP, OA4AN, 4BN, 4DR, PZ1D, VQ2DH, 4ASC, 4CJG, 4CRE, 4CUR, 4RF, 4SC, 5ALT, YV1AU, ZD1BD, 1SW, 4AX, ZE1JB, 2KH, ZP2BB, 9FA, 4X4CV 4ES. (Rx: AR88LF.)

K. Parvin, 98 Winterbourne Road, Thornton Heath, Surrey.

'PHONE: CE2CC, 3AB, 5BH, CX4CS, EL3A, FQ8SN, HK5MO, KP4HZ, KZ5CP, PK4DA, ST2AM, VP6SD, VQ2HW, 5WCP, VS7FS, 9AH, 8AJ, YV1AU, ZD2S, 4AX, ZE2JV, 2KH, ZP5BL, 9FA. (Rx: S.640.)

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

'PHONE: AR8AB, CN8BA, CX2CL, 4CS, EL2A, FA3DS, KZ5CP, LU3DH, 7DU, OQ5BD, 5HI, PY1FR, 1OR, 2CK, 2OE, VQ4RF, 4SC, ZD4AX.

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

'PHONE: AR8BC, CE5BH, CX4CS, EL2A, EF8FP, LU3EJ, 4DD, OQ5CH, 5LL, 5VD, PY1GO, VQ4CRE, 4CUR, WS9AH/M9AJ, W3OZA/MM, ZD4AX, ZE2JV, ZP5BL, ZS1BK, 2DY, 4N, 6KP, 6OY. (Rx: AR-88 and 504.)

## 14 mc

D. Vincent, Beckenham.

CE2DT, H16EC, MP1AL, KP4CO, M13GH, TG9AN, TI2PG, VQ5GG, 4IMS, YS1MS, YV5AU, ZC1AR, ZD4AD, ZL2TJ. (Rx: S.640.)

A. H. Edgar, 15 Dene Terrace, South Gosforth, Newcastle-on-Tyne.

'PHONE: CE2BQ, CO2WV, CX1VD, EA8MC, 9AI, EO1DL, HP1LO, KP4EF, M13AC, OA1BPT, OQ5OV, UN1AB, VK2HK, VP4TB, 9WV, VQ4IMS, VS1AY, W61KQ, YK1AA, YV5BQ, ZC1AL, 2E, 4OD, ZD1PW, 4AD.

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

'PHONE: HC1FG, 1KW, H16EC, JA2BL, KZ5AA, LU1BC, 2BL, MP4BAC, 4BAD, PY4LZ, 7FC, TI2CG, TG9MG, VE8MB, 8NY, VK3BH, 4VD, 6AP, 7JB, VP4TB, VS1AX, 1BJ, 2AL, 7RF, XZ2KN, VQ4IMS.

C.W.: UI8AE, 9CC. (Rx: AR-88 and 504.)

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

'PHONE: CR6AI, HC1FG, 1KW, HP1AL, 1LO, KH6GS, 6UL, WØZEE/KL7, KS4AI, OA4AM, 4BA, 4BX, 4T, TG9AN, VE8MB, 8NQ, VP2LA, 3HL, VQ2HW, 2IC, VS1BJ, 2BS, W7JPY (Arizona), YN6AP, YS1MS, ZE1JX, ZL4HP, ZS3F.

C.W.: KS4AI, KV4AA, OQ5AS (Urundi), UAØKFD, UJ8AF, VK9NR, XZ2FK, ZD9AA. (Rx: 640.)

G. Braithwaite, Belfast, N.1.

'PHONE: ET3AJ, KS4AI, MP4BAC, VS1BJ, ZD4AB.

C.W.: CP4CC, EA8AE, EL2A, HP1BR, KS4AI, KZ5IP, MD7JE, M13FG, 3GH, PK2AM, SP1OP, TA3AA, TF3AR, 3JS, UF6AC, UJ8AF, VE8AW, 8NY, VP5AY, VQ2DH, 8AG, VS1DA, 2BX, 2CH, 7CC, 7PG, YK1AB. (Rx: V-55-R.)

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

'PHONE: CE1AR, 1BE, 1VA, 2DT, CP1JB, 5FB, CT2AB, CX2AF, 2CL, 2CO, EA8MC, ET3AM, HC1FG, 5MM, HH2X, HK1FE, 1FQ, 1GI, 4DF, HP1FU,

1LB, KL7GW, OA2Q, 4C, TG9RB, TI2OA, VP2KM, 2KS, 3FN, 4BD, 4CF, 5RX, 7NK, 9GG, 9WW, VQ4IMS, XE1AL, 1VA, 3BL, YS1GM, 1MF, 1MS, 2AG, 2FA, ZP2BB. (Rx: Modified B21A.)

O. R. F. Mason, Greenways, Fairlawn Gardens, Prittlewell, Essex.

'PHONE: CN8BA, CO8MP, EK1DI, FA3KC, 9OW, FT4AP, HH2X, HK1DZ, 3IR, M13CD, MT2E, OX3BC, 3MC, TI2EV, 2OA, VE6TM, 8MI, VO1AF, 6AL, VQ4IMS, 4NSH, W6YX, 7CHZ, Y5AB, ZC1AL. (Rx: 1155A/Modified.)

D. Dadswell, Hills Farm, Ashurst Steyning, Sussex.

'PHONE: CE2CC, CX2AF, EA8AE, FT4AV, MD2AC, MT2E, SVSUN, TA3FAS, VP9F VQ4IMS, W6KGY, YV5BQ, ZB1AJX, 1BA, 1FK, ZC1AL, 1AR.

L. Chastey, Rosehill Sanatorium, Penzance.

'PHONE: CO2VW, CX2CO, EA8CO, 8KM, HC1FC, H16EC, HK3IR, LU2BL, 6AJ, 7BH, OQ5RU, PY1AKN, 4UO, 7A, 7EE, 7FC, TA3FAS, TG9RB, TI2JC, VE8NY, 8PS, VK7KB, 5RN, VP9WV, VQ4ASC, 4INS, XE1AC, 1CQ, YS1ES, 1MF, YV5BJ, 5BV, ZC1AR, ZD4AD, ZL4HP.

R. W. Finch, 36 Bathurst Road, Ilford.

'PHONE: CO8AZ, M13SC, ZB1AJX, ZD4AD.

C.W.: AC4AR, CT3AN, MD7BU, ST2AE, SVØUN, TF3ZM, VQ4AL, KRL, VS2BX, ZS6KY.

J. P. Warren, 14 Francis Road, West Croydon, Surrey.

'PHONE: CO2VW, CX2CO, HC1FG, HK3IR, HZ1AB, KL7WQ, KP4JA, MD2AF, MT2E, OA4Q, OQ5CF, TA3FAS, TG9RB, UQ2AB, VE8MB, VK7HJ, VP9GG, VP2JC, XE1AC, 2AV, YK1AC, YS1MS, ZC1AR, ZD4AD, ZP2AE. (Rx: Bendix RA-10-DA.)

T. A. Newton, 15 Hillside Street, Totterdown, Bristol 4.

'PHONE: CE2CC, CN8BA, EA7PL, EK1AD, 1DL, FA9WU, LU4BC, 4DJ, 6AJ, 6KG, 7BF, 7BH, 9MA, MD2AC, PY1GO, 1IK, 1KZ, 2AK, 5CG, 7EE, ST4AC, VQ2ML, VP9F, VQ4NSH, W6AK, YV5AY, ZB1AB, 2A, 4X4CZ. (Rx: BC348R.)

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

'PHONE: CE4BP, DU1AI, KP4AP, 4IE, M13ZZ, MP4BAC, UA1BE, UN1AB, UQ2AB, VP2LX, VP5AR, 5BB, 7NK, 9F, 9GG, VQ4CRE, 4IMS, 4NSH, VU2ET, XE2IY, YK1AC, YS1AC, 2AG, ZB1AP, 1BA, ZC1AR, ZS4D. (Rx: R1155A.)

D. K. Cocking, Old Meadow,  
Farnborough Park, Kent.

**\*PHONE:** EK1DI, LU4DJ,  
MD2AC, 2AF, PY4BU, 7EE,  
SV5UN, TA3BS, 3FAS, VO2MD,  
VQ4AJ, 4ASC, 4ERR, 4IMS,  
4NSH, 4SC, XE1AC, YS1MS,  
ZBIAR, 1FK, ZC1AL, 1AR,  
ZD4AB. (Rx: Pilot BC SH5.)

F. W. Hardstone, 43 Shrubbery  
Road, Streatham, London,  
S.W.16.

**\*PHONE:** CO2WV, 7RO,  
CR6AI, HH2X, HP1LB, JA2BL,  
KG6DR, KP4EZ, 4JF, LU6KE,  
MP4BAC, OX3BF, PY1HP,  
PK4GO, TI2HP, VK3JE, VP4TB,  
9PG, VQ4CJG, 4NSH, VS1AX,  
1BJ, 1PRV, 6BE, 7RF, YV5AY,  
ZC6UNJ. (Rx: RF 24 unit and  
S40a.)

A. M. Norden, 9 Leaside Crescent,  
Golders Green, London, N.W.11.

**\*PHONE:** CO2EC, CR6AI, 6AR,  
CX2CL, 2CO, KL7LL, 7WQ,  
LU6AJ, MI3MB, OQ5RU,  
UB5BG, VE8MB, 8NB, 8PS,  
VK7CT, VP2LX, 4TB, VS1AX,  
7ES, ZC1AL, ZD4AD. (Rx:  
Phillips BC 7V.)

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

**\*PHONE:** HH2X, 3DL, HI6EC,  
8WF, JA2AB, KG6EF, KH6CT,  
KL7WK, PK4PO, VP2KS, 2LA,  
3HAG, 4TB, 4TX, 7NK, VQ2JC,  
VS1BI, 9AH, XZ2KN, YN6AP,  
YS1MS, ZC1AL, ZD1PW.

**CW:** AP2Y, DU1GT, FE8AB,  
HZ1PC, JA2BO, KG4AA, 6DE,  
6DI, 6FA, W6CRE/KG6, KV4AA,  
KZ5AA, 5CP, MD7BU, MP4BAD,  
PZ1QM, ST2WB, UA9CC, OK6FD,  
VS1DA, 1DZ, 2BD, 2BK, 2CH,  
7BJ, 7NX, VU2LJ, XZ2FK,  
ZC6DZ. (Rx: 12 valve S.H.)

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

**\*PHONE:** AR8AB, 8BC, EA8AE,  
8AL, 8FG, 8JA, 8RM, E1BAJ,  
FF3CN, KH6UL, MD2AC,  
MP4BAC, MT2E, TA3BS/Airborne,  
TA3FAS, VE8NY, 8PS, VQ3HJS,  
4ERR, 4IMS, 4RF, XE1AC,  
YK1AC, YS1MS, ZC1AL, 1AR,  
ZD4AD, ZE2JG, 4X4ES. (Rx:  
AR88LF.)

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

**CW:** CR7BB, HH3L, JA2BQ,  
KG6FA, KJ6AB, KP6AA, KS4AS,  
6GS, KW6EA, KX6BE, MS4AB,  
PK5HL, TF3AB, UA0CF, ØPA,  
U18KAA, UL7BS, VK7KB, 9KR,  
VQ6F, VS2CH, 6BA, WØMCF/CI,  
ZD9AA. (Rx: Hambander, Pre-  
selector, BC-453.)

K. Smeeton, 36 Runcorn Road,  
Barnton, nr. Northwich, Ches.

**\*PHONE:** AR8AB, 8BC, CO7AA,  
CR6AE, EK1QV, HC2EB, HH3DL,  
HK4DF, OA4AY, 4M, TA3BS/  
Mobile Airborne, TG9RD, VK5NP,  
VP2LA, 7NI, 9GG, VQ4AJ,  
4IMS, W8PO/P/Toledo, Ohio,  
ØBAU/P/Kansas C, Kansas,  
YK1AC, YS1MS, ZC1AL, ZD4AD,  
ZL4HP. (Rx: Hambander and  
1155A.)

P. Bysh, 118 Campsbourne Road,  
Horsney, London, N.8.

**\*PHONE:** CN8AB, 8BV,  
CR6AI, EK1AD, FA8CF, 8WD,  
8WX, KP4DR, LU4BH, PY1ACQ,  
1AEB, TA3ALK, 3FAS, TG9AN,  
TI2OA, UQ2AB, VE6KX, 7ZM,  
VQ4IMS, W6GAL, 7KA, 7IWW,  
ZC1AR, 4X4AA. (Rx: SX 24.)

M. E. Bazley, 2 Bagnell Road,  
Birmingham 14,

**CW:** AC4RF, AP2Y, C8FP,  
CE1AT, CR6AI, FE8AB, FF8GP,

HZ1A, 1KE, JA2GK, KG6DA,  
6DI, 6FA, KH6AO, 6DO, KP4FX,  
4KD, MD4GC, 4UU, PJJX,  
ST2DD, 2RA, SV8UN, VQ8AA,  
VS1DA, 1DZ, 2CH, 2CX, 3AE,  
6AC, 7AD, 7BH, XZ2FK, ZD9AA.  
(Rx: AR88) June 22-29, 1800-2000  
GMT.

J. Neal, 217 Sladefield Road, Ward  
Edd, Birmingham 8.

**CW:** AP2Y, CT3AA, 3AN, 3AV,  
CX1FY, DU1HR, EA8TM,  
FM8AD, HH2LR, KP4AZ, 4CC,  
4HB, 4HU, 4IE, KV4AA, KZ5CP,  
5KS, TF3AB, 3AR, 3MB, 5TP,  
UD6KBB, UF6AC, UG6AB,  
UO5KAA, VP4TAR, 7NW, 9GG,  
VQ2DH, 4AJ, 4KTF, VS2BK,  
YV1AI, ZD2RGY, ZP8BL. (Rx:  
Hambander.)

G. Murray, 6 Agricola Road,  
Newcastle-on-Tyne 4.

**\*PHONE:** CN8AB, 8BA, 8BT,  
8EI, 8EQ, 8MC, CX2AC, EK1DI,  
1MD, 1SB, EP5AZ, ET3AN,  
3BE, FA3DS, 8IX, FT4AI, HI6EC,  
HK3FA, LU2BB, 2BL, 4BC, 4BH,  
6AJ, 7BH, OQ5CF, OX3GE,  
3MC, PY1ACQ, 2CK, 2FN, 4BU,  
4IK, 4OR, 4QE, 7AD, 7AY, 7EE,  
7FC, 7LO, MD2AC, TA3FAS,  
TI2TG, TG9RB, VE7SO, VP2LA,  
VP5RS, VQ4EAA, 4IMS, W6KQY,  
6RRG, 7EEF, 7HRV, 7MLJ,  
XE1AC, YK1AA, 1AC, 1AH,  
YS1GM, YV1AN, 5AU, ZB1BA,  
ZC1AL, 1AR, ZL4HP. (Rx: 1-V-2  
"All Dry Portable.")

A. T. Cheesley, 738, High Road,  
Leyton, London, E.10.

**\*PHONE:** CX2CO, EA8MC,  
HH2X, HK1FE, KS4AI, MD2AF,  
MI3ZZ, MP4BAD, OQ5BV,  
OX3GE, TI2OA, UQ2AB, VK7SY,  
VP4TB, 5AX, 6MO, 9F, YK1AA,  
ZC1AZ. (R: Hambander, Pre-  
selector, BC 453.)

#### LATEST LICENCE FIGURES

As at the end of May, there were 11,873,950 BC licences current in the U.K., an increase of nearly 51,000 over the April figure. This total includes 140,850 TV licences, which shows an increase of 7,600 over the previous month. And so it goes on.

#### BROADCAST NOTE

We understand that short wave broadcasters in the "Voice of America" service now carry what is known as the Radio Amateurs Programme every Saturday at 2045-2100 GMT in the 13, 16, 19 and 25 metre broadcast bands.

#### BARNES RAD-ELEC. CO.

##### 12 PIPERS ROW, WOLVERHAMPTON

When in Midlands visit "Radio-Arcadia" for biggest stocks and variety anything from cat's-whisker to television. Filament transformers (new), 6.3v 14 amps, 25/- (230v input); control (new) panels with 2 M/c 2" meters 5 ma and 40v, plus a lot of gear, 12/6; adjustable polystyrene 4-section formers with dust cores, size 1" x 2", a real bargain at 1/3; high grade L.S. transformers with 5 ratios, size 3" x 2", only 8/6; V.C.R. 97 nu-metal screens, 3/9; Ferranti A.F.3 L.F. transformers, 10/6; oil-filled condensers with ceramic pillars, 4 mfd. 1000v, 7/6; new 3-valve chassis in cabinet, about 50 parts, makes ideal portable set (less valves), 10/-; New lists in preparation. A few R1116 tested battery superhets (all wave), £11 (leaflet 3d.)

#### Radio G200 Announces

**POWER SUPPLY** vibrator units, input 12v. D.C. output 325v at 80 Ma. or more. These units were used to supply the well-known army No. 22 set. Ideal for car radio supply, etc., etc., uses 4-pin vibrator with metal rectifiers. G200's price only 18/6.

**GENERATOR**, permanent magnet type 320. In another very useful self-contained set, rated as follows:—23v 3/2 Amp. to 13.5v 1.8 Amps. and 200 v .05 Amp. Completely enclosed in metal case together with valve voltage stabiliser, P.O. type relay, smoothing choke, etc., etc. These units if run from a 200v supply can be used to charge accumulator batteries. Brand new, superb value at G200's price, only 24/6.

Other bargains include, new boxed 6S37 valves, 4/8; 1 Meg. volume controls, 2/-; 1 or 4 Meg. with switch, 3/6; 8M4 450v wkn. electrolytics, 3/-; and for those who use battery HT 1.5v inert cells, 60v for 12/6, sample cell 7d., post free. It will pay you to pay a visit to G200.

ARTHUR HOILE.

55 UNION STREET · MAIDSTONE · KENT



# SWL STATIONS

No. 23

**A**T the station operated by A. F. Hayton at 69 Munster Gardens, Palmers Green, London, N.13, the main receiver is a Radiovision "Hambander." On this stands a home-built preselector using EF50's, and to the left of the Hambander is an RF26 unit converted for 28 mc; A. F. H. remarks that the combination preselector-converter-receiver produces excellent results on the 10-metre amateur band.

Other equipment at this station includes a stand-by TRF receiver which can feed into a 15-watt amplifier using a pair of 6V6's in push-pull.

The aerial system is a 90-ft. long-wire, a two-element 10-metre array in the roof space, and an indoor dipole which was originally used for 58 mc reception. A. F. H.'s listening activities have been confined mainly to the 20-, 10- and 5-metre bands, on which he has heard

142 countries, with 64 verified—six of these were on the old 58 mc band.

Interested in short wave radio since 1947, A. F. H. is at present taking a course in radio technology, and hopes to be on the air himself very shortly as a G3-plus-3. These brief notes suggest not only that he is keen and experienced, but also that he has been gaining his practical knowledge in a very effective way. We wish him luck with that call sign!

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## AMATEUR ELECTROCUTED

The July issue of our *Short Wave Magazine* reported the untimely death of VE3ZM, who was electrocuted while actually operating his station. It would seem that the output stage of his transmitter was so arranged as to make it possible for him to receive the full HT (1250 volts) while holding the microphone. Thus, Amateur Radio has lost—and not for the first time—a good operator who might otherwise have been with us still.

# 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.

- CE5AW *Casilla 560, Concepcion, Chile.* 14 mc CW, 1100-1400 and 2200-0300 GMT. Report condx.
- CM3CS *Duarte No. 75, Guines, Habana, Cuba.* VFO-controlled 7, 14 and 28 mc 'phone and CW, 0600-0800, 1200-1500 and 2000-2200 GMT.
- CR6AQ *Box 79, Sao Paulo de Luanda, Angola.* Operating 14060 kc CW, 1800-2300 GMT.
- CX6BT *Instrucciones 936, Montevideo, Uruguay.* VFO-controlled 7, 14 and 28 mc 'phone and CW, operating 2100-0400 GMT.
- DL1AG *16 Erbach, Odw, Hessen, U.S. Zone, Germany.* 3-5, 7, 14, 28 and 144 mc CW, operating 0400-0500, 1600-2200 and weekends.
- DL1SV *73 Kastanienallee, Brunswick, Germany.* 3-5, 7, 14 and 28 mc CW, VFO. Transmissions for SWL's, 14 mc 'phone, 1100 GMT Sundays.
- DL2LZ *c/o 66 Kingston Avenue, North Cheam, Surrey.* Operating 3, 5, 7 and 14 mc CW.
- DL2NN *Sgt. Moore, c/o Sgts.' Mess, 3rd King's Own Hussars, B.A.O.R. 22.* Quality of 3, 5, 7 and 14 mc 'phone and CW, 1130, 1530 and 2130 GMT.
- EA2LS *Mattia 14, San Sebastian, Spain.* VFO-controlled 7 and 14 mc CW, 0600-0800 GMT.
- G2CPL *55 The Avenue, Lowestoft, Suffolk.* 145080 and 145630 kc 'phone and CW, 1830-2230 GMT.
- G2HJV *P/ 39 Northumberland Road, Leamington Spa.* QRP 1-7, 3, 5 and 7 mc 'phone and CW, VFO.
- G3CZZ *83 Trevenson Road, Carn Brea, Redruth, Cornwall.* Overseas reports on 3, 5 mc 'phone.
- G3EJR *13 Quemerford, Calne, Wilts.* 3510, 3518, 7020, 7036 and 14040 kc CW, 1630-2100 GMT and weekends.
- G3ETH *Elm Lodge, Elbow Lane, Formby, Lancs.* 1773 kc CW (over 50 miles), 1800-2230 GMT and weekends.
- G3FEX *Bonigen, Maudlyn Close, Bramber, Sussex.* 1810-1995 kc CW, 1700-2130 GMT and weekends.
- G3FMY *63 Birley Road, London, N.20.* 14062, 14100, 28124 and 28200 kc CW, 1700-2300 GMT.
- G6CB *7 Caxton Road, London, S.W.19.* 144-36 mc 'phone and CW (over 30 miles), 1830-2000 GMT.
- G6KR *Ardul, Wentlock Road, Shrewsbury, Salop.* 1815, 1855 and 1875 kc 'phone and CW, operating 1930-2130 GMT.
- HK1FE *Box 134, Barranquilla, Colombia.* Quality of 14 mc 'phone, VFO, 2300-0030 GMT.
- I1SSS *P.O. Box 165, Pavla, Italy.* Quality of 14 and 28 mc 'phone, 1300-2359 GMT.
- KZ5FL *Box 124, Balboa, Panama Canal Zone.* Quality of 28 mc 'phone, 2130-2230 GMT, weekends at 1400-1700 GMT.
- LU2BL *Fco. Bilbao 3131, Buenos Aires, Argentina.* 14350 kc 'phone, VFO-control, 2000-2300 GMT.
- LU7DV *Roca 339, Punta Alta, Buenos Aires, Argentina.* 14 mc 'phone, 2200-0200 GMT.
- MD4GC *G. Cuppleditch, Posts and Telegraphs Dept., Mogadishu, Somalia.* QRP 3-5, 7, 14 and 28 mc CW, operating 1600-2000 GMT.
- OH3OD *Lujanen, Ilmav. VPI/LVK, Hameenlinna, Finland.* RST and stability, 14040 kc CW, 2000-2300 GMT.
- ON4JU *7 Rue de Tilleul, Hermales/Argenteau, Lg., Belgium.* 7, 14, 28 mc CW, 1800-2359 GMT.
- OZII *S.A. Graff, Holsted St., Denmark.* Reports on 14 mc 'phone and CW operation.
- OZ9AA *Tordenskjoldsgade 36, Aarhus, Denmark.* Modulation of 3-5 mc 'phone, 2200-0500 GMT.
- PY1AGP *R. Edmundo Lins 45, Copacabana, Rio de Janeiro, Brazil.* 28 mc 'phone, 1900-2100 GMT.
- PY1AKY *Belfort Roxo 269, Apt. 501, Copacabana, Rio de Janeiro, Brazil.* 14 mc 'phone and CW, VFO-control, operating at 2200 GMT.
- PY7AY *Augusta 620, Recife, Pernambuco, Brazil.* 3-5, 7, 14, 28 mc 'phone, VFO, 2000-2130 GMT.
- PY7WS *Box 417, Fortaleza, Ceara, Brazil.* 3-5, 7, 14, 28 mc CW, 0600-1000 and 1800-2200 GMT.
- SM6AIO *Carnegiegatan 10 D, Goteborg, Sweden.* 3610 and 7035 kc CW, operating 1900-2300 GMT.
- VE1NS *P.O. Box 233, Chatham, New Brunswick, Canada.* Operating 28322 kc 'phone.
- VE5AJ *Box 532, Saskatoon, Saskatchewan, Canada.* 3, 5, 7, 14 and 28 mc 'phone and CW.
- VE6NW *1104 Fourth Street N.E., Calgary, Alberta, Canada.* 14 mc 'phone and CW, 0030-0500 GMT.
- VE6SR *Postmaster, Glenwoodville, Alberta, Canada.* 3-5, 7, 14 and 28 mc 'phone and CW, 1700 GMT.
- VE6WZ *Box 138, Barons, Alberta, Canada.* 28365 kc 'phone, operating 1700-1930 GMT.
- VK3APV, VK3PV *682 Glenhantly Road, Glenhantly, Victoria, Australia.* 14006 and 14050 kc CW, QRP, operating 0600-2200 GMT.
- VK5LG *317 Cross Roads, Clarence Gardens, South Australia.* 7, 14, 28 and 144 mc 'phone and CW, 0830-0930 and 2030-0230 GMT.
- VK5OD *Rev. Guthberlet, Central Methodist Mission, Port Pirie, S. Australia.* 14 mc CW, 2030-2359 GMT. Reports from Motpurr Park, Surrey.
- VB4TAB *100 Ninth Street, Barataria, San Juan P.O., Trinidad.* 14085 kc CW, 2100-1100 GMT.
- VP8AO *R. Lenton, S. Shetland Is., c/o F.I.D.S., Port Stanley, Falkland Islands.* 14000, 14100 and 14150 kc CW, 2330-0300 and 1830-2200 GMT.
- VQ4CUR *P.O. Box 110, Mackinnon Road, Kenya.* Reports required only for 1850/60 kc and 144, 9 mc 'phone and CW, 2000-2100 GMT.
- VQ4RF *Box 264, Nakuru, Kenya.* Comparative reports from GC and Cornwall, 28 mc 'phone, 1100-1230 and 1400-2100 GMT, and Sundays.
- VS2CC *D. Fraser, c/o Chartered Bank of India, Australia and China, Kuala Lumpur, Malaya.* 14056 and 14090 kc CW, 14214 and 14300 kc 'phone, operating 1000-1600 GMT.
- W2IXT *447 S. Ocean Avenue, Patchogue, L.I., N.Y., U.S.A.* Band-width and modulation percentage of 14118, 14240 and 14282 kc 'phone, 1200 GMT.
- W3LTU *D. Phillips, N. Wash. Avenue, Sellersville, Penn., U.S.A.* Band-width, modulation and comparative reports, VFO-controlled 14 and 28 mc 'phone, at 1200 and 2200 GMT.
- W8DMJ *J. Williams, RFD.4, Kent Munroe Falls Road, Kent, Ohio, U.S.A.* VFO-controlled 'phone.
- W0AYS *V. D. Bures, RFD.2, Schuyler, Nebraska, U.S.A.* Operating 28560-28580 kc 'phone.
- W0MCX *1022 N. Rockhill Road, Rock Hill, Mo., U.S.A.* 7, 14, 28 mc 'phone and CW, Sundays and Mondays.
- W0WR *2591 Crown Point Avenue, Omaha, Nebraska, U.S.A.* 3, 5, 7, 14, 28, 30 mc 'phone and CW.
- XE1BC *Pitagoras 582, Narvarte, D.F., Mexico.* 14330 kc 'phone and CW, at 0500 GMT.
- ZS2AT *Hibiscus Lodge, Sprigg Street, E. London, Cape, S. Africa.* VFO all bands, 'phone and CW.
- ZS2EW *P.O. Box 744, Port Elizabeth, South Africa.* 7, 14 and 28 mc 'phone, operating evenings.
- ZS6HO *D. Cormack, Federal Hotel, Schoeman Street, Pretoria, S. Africa.* Comparative reports on 3-5, 7, 14 and 28 mc CW, 1530-2200 GMT.
- 4X4BF *c/o BCM/QSL, London, W.C.1.* 7010, 7049, 14020 and 14098 kc CW, QRP, 1900-0400 GMT.
- 4X4BX *Box 4099, Tel-Aviv, Israel.* 14000-14250 and 28020 kc CW, 1600-2000 GMT. Enclose IRC.
- 4X4CW *Box 4099, Tel-Aviv, Israel.* 14020 kc CW. 0300-0500 and 1500-2000 GMT.

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SP. 350A.	350-0-350v	100 m/a.	5v 2-3a. 6-3v 2-3a. . . . . 29/-
SP. 352	350-0-350v	150 m/a.	5v 2-3a. 6-3v 2-3a. 6-3v 2-3a. . . . . 36/-
SP. 375A.	375-0-375v	200 m/a.	6-3v 2-3a. 6-3v 3-5a. 5v 2-3a. . . . . 46/-
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56	330-0-330v 70mA., 5v 2a., 6-3v 2-3a. . . . . 17/6
57	300-0-300v 70mA., 4v 2a., 4v 3-4a. . . . . 17/6
58	300v Half wave 60mA., 6-3v 1a., 10v 1a. . . . . 10/-

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## The VHF End

Improved Conditions—  
Better GDX—  
More SWL Reports—  
Seventy Centimetres and Up—  
Calls Heard

by A. A. MAWSE

THE prolonged spell of fine weather produced a marked improvement in VHF conditions during June and many readers have written reporting their first experience of 2-metre DX. Although there were nightly variations in the propagation characteristics, few evenings failed to produce something which could be described as DX. GM3OL (Dumfries) was heard in the Midlands with fair consistency, while G2IQ (Sheffield) was equally regular in his appearance on the band so far as Southern listeners were concerned. Several rare Welsh counties were logged during the July 3 Field Day, when a number of well-known G VHF operators crossed the border to work /P and add the prefix GW. There are, however, two regular fixed-QTH GW's on the band—GW2ADZ at an unpronounceable place in Montgomeryshire, and GW5SA in Neath, Glamorgan. Across the water the PA's have been active, and for those along the East Coast they have been a source of DX.

### Those RF27's

Anent the remarks of R. Rew (Birmingham), in last month's *VHF End*, that he was doubting the efficiency of the RF27 units in pulling in the weak DX signals, some of you have pointed out that the matter of expense makes it an RF27 or nothing, and it is generally considered better to be on the band with something, than not at all. And that is of course only too true and an opinion which we accept unreservedly. One cannot agree, however, with the comment of one listener that even a super-regen "rush-box" is better than nothing, for the very important reason that an Rx of that type causes interference to other listeners unless very elaborate safeguards are taken. The point was made in this column some months ago that many of these so-called "modified RF27's" bear little resemblance to the original unit

and under those circumstances it is hardly reasonable either to condemn or commend the actual RF27.

It is well to realise, though, that whatever our Rx may be, there is probably room for its improvement; if we keep that thought in our minds it will provide the incentive to try other circuits as and when one is able, and in that way more and more DX achievements will come to be recorded.

### Other Receiver Notes

R. R. himself, after finding his words quoted in last month's column, thought it prudent to show that DX could be heard by SWL's, and accordingly connected up his home-built converter once more. Locating the band at the first attempt, he pulled in GM3OL straight away, followed up with G3BW (Whitehaven) and GM3BDA (Airdrie). Amongst recent modifications to R.R.'s receiver are a change to an IF of 12.5 mc to avoid injection of local oscillator volts into the CV66 RF stage. These volts had been causing some instability. At the same time the oscillator stage has been made very stable by reducing the HT volts to 70. The HT is fed to a VS70 stabiliser from 250 volts through 20,000 ohms, and then through a further 5,700 ohms to the anode of the 9002. Coupling to the mixer grid is by means of a 2  $\mu$ F ceramic condenser, direct from the oscillator grid.

Another who has had success with the DX is D. T. Bradford, who is one of the "very-much-modified-RF27" owners. His oscillator, a 955, is now mounted in a raised position above the chassis and thereby has reduced local component heating, and minimised thermal drift. He has tapped the grid of the 955 down the coil and improved the note considerably. This is the method suggested by G2XC a few months ago and quoted in these columns and, as D. T. B. says, it is a much better way of getting T9 than by

### Two Metres Counties Heard Starting Figure, 10

R. Rew (Birmingham)	..	..	..	23
W. H. Pierce (Reigate)	..	..	..	22
G. E. Magrow (Dawlish)	..	..	..	22
A. W. Blandford (Mitcham)	..	..	..	16
D. T. Bradford (Denham)	..	..	..	14
R. M. James (Chatham)	..	..	..	12



raising the heater volts. He is also at work on a 4 x 6J6 line-up. This will use two of them as push-pull RF stages, one as a P/P mixer and the fourth as oscillator, one of the triode sections being on 38 mc and the other tripling to 114 mc to give a 30 mc 1F.

B. Highfield (Wolverhampton) is using the Rx portion of the SCR522 (modified, of course) with a 2-element wide spaced rotary beam. He feels it needs a pre-selector and is considering using 6AK5's or 6J6's, but in the meantime he has logged quite a number of the Midland 2-metre stations. L. W. Ross (Almondsbury) is also modifying a SCR522.

R. A. John (Swansea) has a home-built Rx which covers 35 to 170 mc with plug-in coils. The valve line-up is EF54 RF, EF54 mixer and EC52 oscillator and the IF is 28 mc. The EC52 is in a Colpitts circuit, using the inter-electrode capacities of the valve, and the coil is tuned by a 25-plus-25 µF condenser, the rotor being unearthed. A tendency to produce rough notes was cured by the expedient of an 8 µF decoupling condenser in the anode circuit. In addition to local signals on Two, R. A. J. has heard taxi-services, the BBC television, and some Italian sporadic E on this Rx.

While on the subject of receivers, A. V. White (Leigh-on-Sea) would be interested to hear from anyone who has successfully modified a R1132A for 2 metres.

## Other News

In Devon, G. E. Magrow (Dawlish) finds G2NH and G5MA his most consistent two-metre signals and these two usually come through whatever conditions may be. As the distance is around the 150-mile mark this is no mean achievement. Both G2NH and G5MA are using stacked Yagi arrays and at a greater height than at most stations. G. E. M's best DX to date is G3DAH (Herne Bay) at somewhat over 200 miles. GW2ADZ and G4RK (Coventry) have also been heard. G. E. M's QTH is unfortunately on a main road, and that makes his log of calls heard all the more creditable; he has a daily listening schedule with G2FZR (Snodland, Kent) at 0730 GMT.

Miss P. Conton (York) has now shifted QTH and has a 4-element beam ready, but no mast to put it on! However, she hopes to be active within a month or so. A first report from A. E. Wright (Hinckley) tells that he is using a converted RF27 into a Hambander, and feeding it from a 3-element rotary. A. W. Blandford (Mitcham) is getting better results on Two than he did on Five, and considers it to be due to his using a 4-element beam on the new band. Raising his beam 5 feet made a big difference to signal strengths. Now he is learning to read CW to add further to his interests on the band. L. C. B. Blanchard (Coulsdon) has seen GM3OL's QSL confirming his record

## TWO-METRE CALLS HEARD

L. W. Ross, Severn Ridge Lodge,  
Gloucester Road, Almondsbury,  
Glos.

G2FMF, 2NH, 2XC, 3EHY, 3YH,  
4LU, 5BM.

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

G2AOK/A, 2BMZ, 2FZR, 2KG,  
2MR, 2NH, 2NM, 2XC, 3AEX,  
3AGA, 3AUS, 3AVF, 3BLP,  
3CMT, 3DAH, 3EHY, 3EJL, 3RI,  
3TN, 4AP, 4CI, 4GR, 4OZ, 4QL,  
4RK, 5BY, 5MA, 5NF, 5QA,  
5RP/P, 5TP, 5WP, 6DT, 6NB,  
6UH, 6VX, 6WT, 8AJ, 8BD, 8GX,  
8JB, 8KZ, 8KZ/P, 8SM, GW2ADZ,  
5BM/P, 5SA.

A. W. Blandford, 1 Biggin Avenue,  
Mitcham, Surrey.

G2ADN, 2AJ, 2BW, 2CIW, 2DPD,  
2PPP, 2IQ, 2MR, 2MV, 2NH,  
2PU, 2XC, 3ADT, 3AEX, 3AUA,  
3BKQ, 3BLP, 3BOB, 3BXN,  
3DAH, 3DGO, 3FD, 3FP, 3VM,  
4CI, 4DC, 4HT, 4IG, 4KD, 4RO,

5AA, 5AS, 5BC, 5DT, 5KH, 5MA,  
5MI, 5OO, 5TP, 5XA, 5YM,  
6JK/P, 6LR, 6NB, 6NF, 6OG,  
6OH, 6UH, 6VX, 6WT, 6XM,  
8GX, 8KZ, 8SK, 8SM.

A. E. Wright, 92 Druid Street,  
Hinckley, Leic.

G2AOK/A, 2ATK, 2AVA, 2AVQ,  
2XS, 3BKQ, 3BLP, 3CXD, 3DA,  
4RK, 5LJ, 5RW, 6FK, 6SN, 6XY,  
8OK, 8OX, 8OY. (Mod. RF27 into  
Hambander; 3-element beam.)

L. C. B. Blanchard, 122 St. Andrews  
Road, Coulsdon, Surrey.

G2AJ, 2MR, 2MV, 2NH, 2WS/P,  
2YL, 3BLP, 3DPM, 5MA, 5WP,  
6NB/P, 6VX, 6XM/P, 8SM/P,  
8TS/P. (GJ6-EC91 Converter into  
HRO at 26 mc; 4-ele. beam.)

R. M. James, 1 West Drive,  
Maidstone Road, Chatham, Kent.

G2BRH, 2CPL, 2FZR, 2IQ, 2KG,  
2NH, 2WI, 2XS, 3AUA, 3ADT,  
3BWS, 3GW, 3WS, 3WW, 3DAH,  
4RO, 5DT, 5IB, 6DEI, 6OT, 6PG,

6UH, 6VC, 6VX, ON4FG,  
PA0AD, ØUD. (Rx: Modified  
RF27 with 6AK5 preselector; 2-ele.  
beam. June 1-30.)

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

\*PHONE and CW: G2AJ,  
2AOA, 2AOK/A, 2ATK, 2AVQ,  
2BUJ, 2IQ, 2MR(101), 2MV(110),  
2NH(105), 2OL, 2WJ(106),  
2XC(119), 3AEX(110), 3APY,  
3BKQ, 3BLP(111), 3BW(155),  
3CXD, 3DA, 3DAH(152),  
3DEP(122), 3DH, 3DIQ, 3EEZ,  
3EHY, 3MY/P, 3TF, 4DC,  
4CI(105), 4LU, 4OS, 4RK,  
5AS(102), 5BM, 5CP, 5GX(118),  
5JU, 5KX, 5LJ, 5MA(106),  
5MI(103), 5VN(101), 5WP, 6FK,  
6LC, 6NB, 6SN, 6XY, 8KL,  
8KZ/P, 8MZ, 8OX, 8OY, 8WV,  
GM3BDA(242), 3OL(168),  
GW2ADZ. (Rx: CV66-6AK5-9001-  
9002 into Comin. Rx at 12.5 mc.  
6-element c.s. rotary beam in roof-  
space. June 13-30. Bracket figures  
distances over 100 miles.)

GDX contact with G3BLP over a 296-mile path.

R. M. James (Chatham), who turns in a very useful calls heard list, is glad to have got in on the recent DX; he has heard PAØUN and ON4G for new European countries, as well as some of the better two-metre GDX, like G2IQ. The latter, incidentally, is always well received in the South when the band is anything like open. R. M. J. is now up to 12 counties heard on two metres, so takes his place in the panel appearing this month.

Apologies must go to G. E. Magrow for incorrectly listing him in the final "Five Metre Counties Heard" table. He actually heard 36 and therefore ties with R. Rew for top place.

#### 420 mc and Up

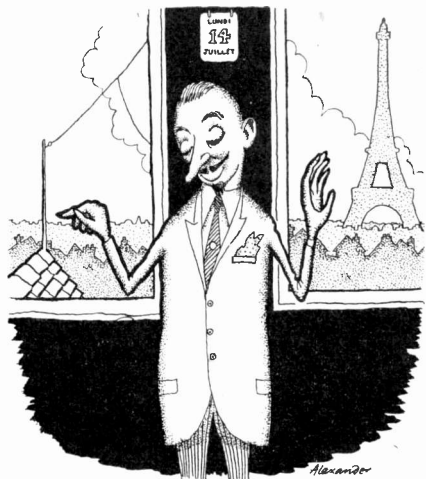
R. Rew continues to listen on 70 cm, but the only signal he has logged this month is G8JI. The change from vertical to horizontal polarisation seems to have dropped signal strengths by about 10 dB. He has added a square corner reflector to bring things back to normal. This he has made from 1-inch wire netting, with 36 by 18 inch sides. He thinks the loss of strength can be attributed to the roofs around his aerial, as he has similar screening effects on two metres. He points out that feeder losses on 70 cm can be alarmingly high, and as much as 10 dB may quite easily go astray in that way.

L. W. Ross, who listens on all VHF bands from 50 to 2300 mc, reports *nil* heard on 420 mc although he is hopeful of G3EHY and G3YH being on the band soon. On 50 mc he logged ZS1P in mid-June, and on 70 mc he heard an F3. At least one local Tx man has promised him support on 2300 mc, and L. W. R. mentions that he finds the 1N22 a good 2300 mc mixer.

D. T. Bradford has started work on a 70 cm converter using 955 oscillator and two EA50 diode mixers in P/P and a 30 mc 1F.

#### General

The frequency list promised to members



"... Non, m'sieur—this is mine ..."

of the VHF Listeners' Club should have reached them by the time they read this. Claims for the "Counties Heard" table have come in this month. The starting figure is 10 and a list of the stations on which the claim is based should be submitted. Several of you have intimated that you will be sending in claims for the mileage table and as soon as these are received we will start it. *Remember, all claims for this table must be accompanied by a QSL to verify.* The QSL's will of course be returned promptly.

A two-metre receiving contest is being scheduled for November. Last year, it will be remembered that in spite of the dismal prophecies of the VHF pessimists, the November fogs produced some outstanding conditions and it is hoped something of the same sort may happen again this year.

In conclusion, the latest date for next month's reports is August 3 and the address is A. A. Mawse, *Short Wave Listener*, 49 Victoria Street, London, S.W.1. CU on August 18.

#### NOTES ON RECENT ARTICLES

In that by G5JU on a Ten-Metre Converter in the June issue of the *Short Wave Listener*, the value of C17 should have been given as .0005  $\mu$ F, and of R4 as 1,000 ohms. For G8LO's noise limiter circuit (p. 229, July) it is suggested that any hum with it can be eliminated by putting a 27-ohm resistor in the limiter valve heater lead; and, if the suppression is not good enough, the value of C3 can be increased to 0.5  $\mu$ F.

#### HAND FOR SWL's

VQ4ASC, Nairobi, writes us to thank SWL's for their cards and to apologise for the delay in QSL'ing. However, all that were outstanding as at February 13 last have now been cleared—with the exception of one particular individual, regarding whom VQ4ASC remarks as follows: "If you saw the card you would know why I will not QSL him. It is terribly bad form and not appreciated by DX stations, I assure you."

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

# DX broadcast

## WORLD WIDE RECEPTION OF SHORT WAVE PROGRAMMES.

During the past month Radio Australia's signals have not, in general, been up to their usual high standard, probably due to seasonal conditions, though there have been some excellent broadcasts from Melbourne on some occasions. R. T. Blackmore (Exeter) heard a religious service, the Mailbag, and Breakfast Music over VLA8, 11760 kc, between 2040 and 2125, and VLB2 was an equally good signal. He has also logged VLC11, 15220 kc; VLB6, 15200 kc; and VLA6, 15230 kc, around 2150 with the News in English.

On the morning of Saturday, May 28, the writer listened to just about the entire commentary on the rugby match being played on the Sydney cricket ground between New South Wales and the Maoris. At 0510, VLG11, 15210 kc, was the best signal; VLB5, 21540 kc, was audible at 0540, and around 0620 ZL3, 11780 kc, was heard with a relay of the game, after which members of the victorious Maori side sent messages to their families in New Zealand. This was repeated on June 25 at the conclusion of the final Rugby Test between Australia and the Maoris, the whole of which was heard by the writer over ZL3. Prior to this, a local rugby game between a Wellington school and its Old Boys was clearly audible here around 0415.

All times given in this article are GMT except where stated

### AFRICA

J. C. Catch (South Shields) checked Cape Town's frequency as 5883 kc and notes that English programmes are given on Wednesday evenings; on May 25 at 1850 there was a talk on Farming in South Africa.

ZNB, Mafeking, 5900 kc, is heard around 1915 on rare occasions and is asking for reports; on June 14 at 1930 English announcements and a slowly-played version of "God Save the King" brought the proceedings to a close. It is reported that ZUD, Pretoria, on 17748 kc has been testing from 0515 to 0630; now it transpires that ZUD is a Post Office transmitter loaned to the SABC for the purpose of relaying rugby matches to New Zealand during the N.Z. tour of South Africa. Days of play are every Saturday and some Wednesdays up to the end of September; the latest frequency is 8695 kc (ZUD24) and the times of transmission are 1600-1620, 1621-1626.

In Mozambique, CR7BV, 4930 kc, was heard by A. Baldwin (Leytonstone, E.11) with a talk in Portuguese at 2015, and he logged CR7BU, 4825 kc, at 1930 with a three-chimes signal and the slogan: "Radio Clube de Mocambique." E. W. Jordi (South Kensington, S.W.7) has logged Portuguese programmes

around 2145 on many occasions on 4850 kc; we venture to suggest that this is the Lourenco Marques station mentioned above. A. Baldwin also lists VQ7LO, Nairobi, Kenya, 4855 kc, heard with a relay of a BBC News talk at 1810, followed five minutes later by the direction: "This is Nairobi calling."

In Angola, Radio Club Bie at Silva Porto on 7650 kc has been heard at 1900 and signing off at 2000. A. Baldwin reports CR6RG, Dondo, 8240 kc, with light music at 1900, and CR6RL, Benguela, 9470 kc, closing at 2100 after national anthem and clock chimes for 10 o'clock. R. Patrick (Accrington) remarks that OTC2, Leopoldville, 9767 kc, is still putting in a fine signal around 1930; Wednesday is the DX Night at 1940 and on Monday evenings they broadcast request programmes from distant parts.

At 1730 on June 17, the Colonel Bogey March preceded this direction on 9750 kc: "Good evening, everybody; this is the Sudan Broadcasting System broadcasting from Omdurman on 30.5 and 49 metres short wave, and on a medium wavelength of 524 metres. Here is this week's English News bulletin." The official frequencies are 9750 kc and 5940 kc. Signal strength was S9-plus, and we were

given details of a football match played at Miala, where the one thousand spectators "kept order well." Another item referred to the visit of the Sudan Minister of Education to the Equatorial Province town of Juba, where he laid the foundation stone of the new training centre.

E. W. Jordi heard SUX, Cairo, 7867 kc, for the first time, with native music at 1830; he also logged EAJ43, Canary Islands on 7535 kc, with musical recordings 2110-2130, native music 2131-2146, then a Spanish news peaking to S9-plus. Lastly in Africa, Rabat, French Morocco, 6006 kc, has been behaving strangely according to R. A. Savill (Sevenoaks, Kent). Peaking to S8 in the early evenings, there have then been complete fade-outs, with a return to a mere S4-5 before the close.

#### ASIA

C. Costello (Wellington, N.Z.) sends us a list of new

Chinese callsigns which we include elsewhere; it must be understood that these calls were determined by the Nationalists and may not now be used by the Communist regime in China. C. C. gives us more information about Java. YDC, 15150 kc, will be operating with 100 kW power; YDQ3, 11084 kc, has been logged recently, but there was no trace of YDD3, 6170 kc. R. T. Blackmore heard PLB4, Batavia, 10365 kc, with a musical programme at 1530; this one uses a dipole aerial directed E/W and a power of 3 kW, and is again on the air at 0001. J. C. Catch spotted PLF2, 19345 kc, with a French programme at 1730. Bangkok, Thailand, is on 11650 kc, in parallel with 6010 kc from 1100 to 1130, with an English News Bulletin at 1115; after half an hour's break it continues until 1530. In Annam, Radio Hue is operating with 1 kW on 7210 kc to the following

schedule: 2330-0100, 0300-0600, 1000-1530. The address is: Radio Hue, P.O. Box 65, Hue, Annam, Indo-China.

It is understood that Radio Jodhpur in Rajputana is still using 8550 kc from 1430 to 1500 daily. A. Baldwin logged Radio Pakistan, Dacca, 15270 kc, with Indian songs in an English programme at 1900. R. T. Blackmore gives VUD10, Delhi, 17830 kc, an S8 report during its News in English at 1530. In Iran, ECQ is now on 9660 kc from 0845 to 1100; News in English can be heard daily at 1840 over EPB, 15100 kc. R. Iball (Langold, Notts) heard the following announcement at 1850: "This is Radio Teheran, Iran, and now for the remaining time of our transmission we will play some music."

In Transjordan a station located at Mafrak and using 8100 kc may be heard calling Fayd around 0730, and in Arabia, HZAG is using 6875 kc. A. Baldwin logged

#### TABULATED SCHEDULES

##### I. Chinese Callsign Changes

5985 kc	BEA9	Nanking	9750 kc	BEM6	Lanchow
6065 kc	BEF9	Kwelyang	11700 kc	BEK9	Pelung
6140 kc	BEF10	Chungking	11780 kc	BEB5	Shanghai
7153 kc	BEF6	Chungking	11830 kc	BEA7	Nanking
7215 kc	BED9	Ta wan	11880 kc	BEA5	Nanking
7245 kc	BEL7	Hankow	11913 kc	BEF7	Chungking
9520 kc	BEN6	Taiyuan	15105 kc	BEA3	Nanking
9552 kc	BED8	Amoy	15170 kc	BEF8	Chungking
9700 kc	BEE4	Canton	15250 kc	BEA4	Nanking
9730 kc	BEA8	Nanking	17765 kc	BEA6	Nanking

##### II. The Voice of the Andes. HCJB. Broadcasts Tuesdays to Sundays Address: Casilla 691, Quito, Ecuador.

Frequencies: 1130-1230: 12455 kc, 9958 kc  
2000-2100: 17890 kc, 15115 kc  
2200-2300: 15115 kc, 12455 kc, 9958 kc  
0200-0400: 15115 kc, 12455 kc, 9958 kc  
0400-0530: 15115 kc, 12455 kc, 9958 kc, 5995 kc

##### III. TRANS-CANADA NETWORK. Local Stations

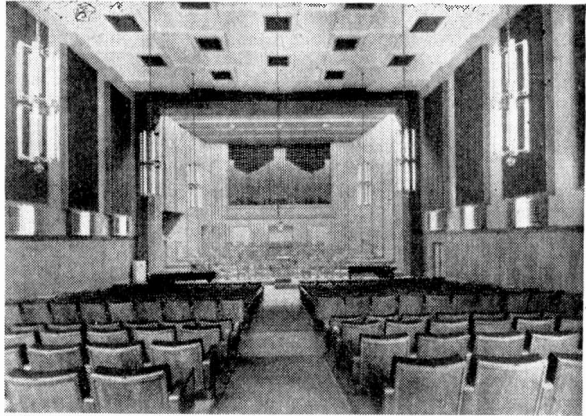
Location	Callsign	Frequency	Power
St. Johns, N'd	CBNX	5970 kc	·300 kW
Montreal	CFCX	6005 kc	·075 kW
Sydney, N.S.	CJCX	6010 kc	1 kW
Calgary	CFVP	6030 kc	·100 kW
Toronto	CFRX	6070 kc	1 kW
Vancouver	CKFX	6080 kc	·010 kW
Vercheres	CBFW	6090 kc	7·5 kW
Halifax	CHNX	6130 kc	·5 kW
Winnipeg	CKRO	6150 kc	2 kW
Vancouver	CBRX	6160 kc	·15 kW
Vercheres	CBFR	9520 kc	7·5 kW
Vercheres	CBFX	9610 kc	7·5 kW
Vercheres	CBLX	15090 kc	7·5 kW

Damascus, Syria, on both 6000 kc and 12000 kc at 2055; and on 9650 kc, ZJM8, the Sharq-Al-Adna station in Cyprus was heard at 2000. A. B. also heard Kol-Yisrael, Tel-Aviv, with its identification signal—an air played on a woodwind instrument—before the “seven-pips” time signal and News in English at 2000. The writer has logged Kol-Yisrael on 9000 kc with an S9-plus signal, this in addition to its other two channels, but the lady announcer only gives 6830 kc (43.9 metres) and 8117 kc (36.7 metres) short wave and 460 metres (medium wave) as the channels in use. A. Baldwin and a reader in Croydon have also logged Kol-Yisrael on this new frequency. Lastly, J. C. Catch tells us that RAD, Radio Tashkent, 6825 kc, now broadcasts in English from 1700 to 1730 on Mondays, Wednesdays, Fridays and Saturdays.

#### SOUTH AMERICA

During the summer months, Latin America is our happiest hunting ground. R. A. Savill says that ZFY, Georgetown, British Guiana, 5985 kc, has been putting out a beautiful signal, clear and free from interference, peaking to S9 after midnight. J. D. Oxenford (Sturry, near Canterbury) heard ZFY with News from the *Daily Argosy* at 0045, followed by dance music until the close-down at 0145. He stresses that this station is inaudible until after Radio Andorra on 5980 kc has left the air.

In Brazil, Radio Tamoio, 9610 kc, has been heard by R. Patrick at 2230; R. Iball hears Radio Tope regularly on 15370 kc. Both are located in Rio de Janeiro and apparently these slogans are the now the correct ones for the frequencies given, though J. C. Catch gives the latest Radio Tope channel as 15265 kc and says that it sometimes announces as: “Radio Nacional.” L. Chastey (Penzance) listened to



The Radio-Wien broadcasting hall, Vienna, Austria.

ZYK3, 9565 kc, from 2030 to 2100 on June 5 with a programme of Brazilian music in the English broadcast “Brazil Calling” introduced by Janet Slater. She asked for reports and promised verification cards; the address given was: “Brazil Calling,” Radio Jornal do Commercio, Recife, Pernambuco, Brazil. A. Baldwin mentions the following: ZYB7, Sao Paulo, 6095 kc, announcing as “Radiodifusion de Sao Paulo” at 2215; PRK5, Belo Horizonte, 6000 kc, with a trumpet fanfare before the direction “Radio Inconfidencia en Belo Horizonte, Brasil” at 2230; PRA8, Recife, 6016 kc, with three gong notes followed by “Radio Clube de Pernambuco” at 2300; and PRL7, Rio de Janeiro, 9720 kc, with call “Radio Nacional en Rio de Janeiro, Brasil” at 2300.

Argentina is still prominent with English broadcasts. J. D. Oxenford informs us that the new five-language service entitled “Servicio Radiofonico Internacional” is sponsored by Senora Peron, wife of the President, and operates as follows: English, 0200-0600 (15290 kc, 9455 kc); French, 2100-2230, 2231-0130 (11880 kc); Italian, 2215-2245

(9455 kc) and 1100-1300 (11880 kc); Portuguese, 0131-0330, 1500-1800 (11880 kc). R. Iball heard LRY1, 9455 kc, with the direction: “Radiofonico Internacional LRY Buenos Aires, transmite de El Mundo, Buenos Aires, Republica Argentina” at 2110. He also received LRS, 9315 kc, with slogan: “Radio Splendid” at 2230. The writer has heard the following interesting talks in English: “Oil in Argentina” (0505 on May 28) over LRU, 15290 kc; and “The Economic Development of Argentina” (0430 on June 15) over LRY 9455 kc. News bulletins in English are given daily at 0400, 0500 and 0555 over both of these transmitters.

M. Iball heard ZPA3 11850 kc, at 2225 on May 17 with the direction: “Radio Teleco, Asuncion, Republica Paraguay”; J. C. Catch logged ZPA1, 6275 kc, at 2315 on June 5 with the call: “Thayta-Pay-Ah-Oono, Radio Nacional de Paraguay.” J.C.C. also discovered CXA6, Radio Electric, Montevideo, Uruguay, with a News in Spanish at 2230; A. Baldwin’s log includes CXA3, Radio Ariel, Montevideo, 6075 kc, identified by three gong notes in descending scale at 2215.

In Peru, OAX4W, 9380 kc, was excellent with a relay of a pelota game at 0345; J. C. Catch mentions OAX4Z, Radio Nacional de Peru, 5897 kc, giving a Spanish News from 0001 until 0015. In Chile, CE1180, 12000 kc, was heard by A. Baldwin with a few bars of a march, followed by the slogan: "Radio de Agricultura Nacional" at 2345.

J. C. Catch logged CE1190, Valdivia, 11900 kc, with news in Spanish at 2230, and CE960 9595 kc, with chimes and call by a lady announcer: "Radio La Americana, Santiago de Chile" at 2300.

In Ecuador, HCJB, 17890 kc, was heard by R. T. Blackmore with a religious service at 2020 on May 22. J. C. Catch reports reception of HC5HC, Riobamba, 4960 kc, with: "La Voz de la Riobamba" at 2315; again, HC2AK, Guayaquil, 4650 kc, with direction "Radiodifusora del Ecuador" was held from 0001 until 0030. The writer's bag has been HC2RL, Quinta Piedad, Guayaquil, 6635 kc, with orchestral music at 0310 and closing with the Ecuadorean national anthem at 0420 on June 1.

More surprising was the logging of HC1AC on 6210 kc, between 0414 and 0500 on May 28. The programme was sponsored, with the usual spate of Latin-American tangos and pasadobles, but at 0430 a series of vibraphone notes preceded the slogan: "La Voz de la Democracia" and a mention of Quito.

In Colombia, both J. C. Catch and the writer have heard HJGB, Bucaramanga, on 4777 kc; its slogan "Radio Santander" was heard quite clearly at 0300 on June 15. HJCT, 6200 kc, was an S9 signal at 0400 on May 26; at 0414 the direction: "Radio Nacional de Colombia en Bogota" was followed by a Spanish announcement about long and short wave channels, and after the words "Muy

buenas noches" came the Colombian national anthem. J. C. C. logged HJBB, 4815 kc, with its lady announcer and call: "La Voz de Cucuta" at 2345; HJAB, 4785 kc, with call: "La Voz de Barranquilla" at 0110; and HJKB, Emissora Nuevo Mundo, Bogota, 6000 kc, at 0215. He also found the following Venezuelans: YVOA, San Cristobal, 4830 kc—Spanish News at 2345; YVMS, Barquisimeto, 4850 kc, with call at 0001; YVMM, Radio Coro, 4910 kc, with call at 2330; YVRC, San Fernando de Apure, with chimes and direction: "La Voz de Apure" at 2345; and finally, YVQL, La Voz del Tigre, 3330 kc, with sirens and whistles just before the call at 0030 and a recording of "Happy Birthday to You" with words in English.

The writer has made a study of these 80-metre Venezuelan broadcasters, with the following results:—

(1) YVOG, Radio Trujillo, 3310 kc—a good signal and closing with a mention of the "National Broadcasting Company de Nuevo York" at 0230.

(2) YVMU, Radio Carora, 3340 kc, is a fair signal, closing with a March at 0230.

(3) YVMI, La Voz de la Fe, Maracaibo, 3370 kc, closes with a March at 0231.

(4) YVKP, Radio Tropical, Caracas, 3400 kc—bells, slogan, mention of long and short wave outlets, and close-down with March at 0331.

(5) YVLI, Radio Maracay, 3430 kc—heard with the playing of "Liebestraume" at 0220.

(6) YVQI, Emisoras Unidas, Barcelona, 3450 kc, giving the same programme as YVRA.

(7) YVRA, Radio Monagas, Maturin, 3490 kc—station identification given just before the close at 0309.

(8) YVKX, La Voz de la Patria, 3505 kc—with slogan "Radio Nacional" and statement of medium and short

wave call-letters before closing with the National Anthem at 0331.

(9) YVKT, Radio Libertador, Caracas, 3530 kc; mention of the capital city and playing of the National Air at 0328.

(10) YVVG, Radio Girardot, Maracay, 3550 kc—closed down at 0240.

#### CENTRAL AMERICA

R. Patrick logged VP4RD, Port of Spain, Trinidad, 9625 kc, at 2345 with an English News broadcast, and E. W. Jordi heard a talk in English from ZQI, Kingston, Jamaica, 3480 kc, at 0130. The writer has heard the News from this station at 0210, and on June 14, this was followed by a report on the Leeds Test Match between England and New Zealand. E. W. Jordi also received PJCI, the Curacao broadcaster on 5010 kc around 0100. In the Dominican Republic, HIIA, Santiago, 4980 kc, was logged by J. C. Catch at 0015 on June 5 with chimes and slogan: "La Voz del Yaque." R. Iball heard HI2A, Santiago, 9680 kc, with direction: "La Voz de Releccion" at 2255 on May 20.

We have been informed that in Haiti, the call signs have been changed; they are now: 4V2S, 5948 kc; 4VA, 6200 kc; 4VCM, 6167 kc; 4VM, 6000 kc, and 4VRW, 10135 kc. A Croydon reader reports that HI2L, La Voz de Trujillo, in the Dominican Republic, is a good signal on 9525 kc at 0200; the half-hour interval signal is a siren note.

Three Cubans are mentioned: COKG, Santiago, 8960 kc, with clear direction, "Cadena Oriental de Radio" at 2300; COCQ, Circuito CMQ, 8825 kc, logged at 0125 (R. A. Savill); COJK, La Voz de El Camagueyano, 8665 kc, was heard with announcements in English before closing at 0400 (R. Iball). Incidentally, it has been suggested that G. Mould's FNRI on 9700 kc was actually Radio Tananarive,

for FZF6 Martinique is no longer on the air due to extensive alterations and re-building.

YSUA, Radio Mil Cincuenta, 6250 kc, is always a good signal before closing at 0500; YSR, 6272 kc, was clearly heard with its call "Yay-Essay-Erray" and slogan: "La Voz de El Salvador" at 0500 on June 24. J. C. Catch noted YSA, Santa Ana, 9490 kc, with a programme of pianoforte music at 0015 on June 12. Nicaragua has YNCNM, 6720 kc, logged by J. C. Catch with direction: "Ecos de Americas" at 0115; the writer heard this one closing with a national march at 0358. It is reported that YNVP, La Voz de Nicaragua, Managua, 6760 kc, has an English language broadcast, 0230-0245. YNZZ, 6460 kc, claimed the attention of J. C. Catch at 0100 on June 12 with chimes and slogan: "Radio Mundial," and YNQ, 6950 kc, was heard for the first time by R. Iball at 0345 on May 27 with the direction: "Transmit La Voz de Victoria, Managua, Republica Nicaragua, America Central." TGWA, Guatemala City, 9760 kc, has sent R. A. Savill its pre-war card depicting in colour the quetzal, an exotic bird found only in the Guatemalan Highlands. TGTA, 6285 kc, was heard by the writer at 0430 on May 29 with four vibraphone notes followed by an English programme and a request for reports; the address given was: TGTA, Radio International, Guatemala City, Central America. One reporter says this one is TGTO, however.

In Honduras, HRN, 5875 kc, was heard closing at 0359 with the call: "Hatchay-Erray-Ennay en Tegucigalpa" and the Ted Lewis "Goodnight Melody," whilst HRA, 5915 kc, closed down at 0405 with the lengthy Honduras national anthem. Finally, in Mexico, XEWW, 9500 kc, was heard

for the first time by E. W. Jordi at 0145, but it was badly heterodyned by HOLA on 9505 kc, and A. Baldwin found XERQ, Mexico City, 9610 kc, closing with mention of "Cadena Radio Continentale" at 0600.

#### NORTH AMERICA

The writer has again heard from CHNX, which operates on 6130 kc; since the days of VE9HX, the power has been increased to 500 watts and the location of the transmitter changed, bringing it within about five miles of the City of Halifax. On June 25, CHNX was excellent at 0415 with a synopsis of the weather for Nova Scotia and giving the temperature as "54 degrees at Downtown, Halifax, at the moment." The Maritime Broadcasting System then asked for reception reports and closed down at 0420 with "God Save the King."

R. T. Blackmore reports CKCX, 15190 kc, with a programme summary at 1520, and C. Costello heard, for him, the elusive CKOB, 6160 kc. We are also informed that another Sackville transmitter, CKRP, 21600 kc, broadcasts United Nations Organisation material from 1400 to 1415.

On the United States Pacific coast, KCBF, 17850 kc, has been heard by J. Brooker (Crawley, Sussex) most mornings between 0600 and 0800, and he has also logged KCBA, 15150 kc, carrying the same AFRS programme. The latest official list gives KCBF as operating on 17770 kc.

R. Iball has logged several of these in the 13-metre band, namely: San Francisco on two channels at 0345 with the announcement: "KNBA and KNBI on 21460 kc and 21610 kc in the 13-metre band—we now conclude our transmission." KGEX, thought to be on 21590 kc, also closed at 0345, mentioning that reports should be sent "either to KGEX or KGEI."

J. C. Catch found KRHO,

Honolulu, 15250 kc, with Hawaiian music at 1345 on May 29; it is now reported that KRHK on 17800 kc is on the air simultaneously, *i.e.* between 0900 and 1415, and this is confirmed in the latest official list.

R. Patrick gives some interesting information about a new National Bureau of Standards station on the island of Maui, also in the Hawaiian group. This is WWVH, broadcasting on an experimental basic continuous time signals and frequency standards on 5, 10 and 15 mc. Omni-directional aeriads radiate with 400 watts on each carrier frequency, and the National Bureau invite reports on reception of WWVH, particularly with reference to:

(1) Interference experienced by users of WWV.

(2) Beat frequency observed during simultaneous reception of WWVH.

(3) Quality of tone modulation during simultaneous reception of WWVH and WWV.

(4) Special applications required for simultaneous reception of two or more standard frequency stations.

Reports should be sent to: Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D.C.

The last U.S. item refers to a talk on Television given by the Director of Research in the Dumont Laboratory, over WCBN, New York, 15270 kc, at 2000 on June 19. He said that in the United States there are not enough channels for competitive television programmes from each of the main cities; at the moment, there are six channels for television, ranging up to 200 mc, and 400- and 625-line standards were mentioned. Good reception up to 50 miles in flat districts is general. It is expected, however, that UHF transmitters using 60 kW and operating from 500 mc upwards will soon be in use, and in addition, there is a likeli-

hood of colour television ultimately.

#### EUROPE

R. Patrick, quoting the Editor of the *Radio Review* of Ireland, writes: "The Ireland short-wave station on which work was suspended last year has now received official sanction for completion; arrangements are being made to provide experimental transmissions to the U.S.A. and Canada, and it is hoped that they will start in a few months' time."

Budapest now seems to have settled itself on 9831 kc; R. A. Savill has heard its 6025 kc English News at 2220. Bulgaria's second daily English News is usually good at 2145 over 7670 kc, and according to P. D. Lucas (Earlwood, Surrey) Warsaw on 6215 kc gives a readable signal for its nightly English broadcast at 1900; on June 4 they devoted five minutes to the Polish

composer Munyesco, this day being the 77th anniversary of his death.

J. C. Catch reports Roumania with News in English on 11900 kc at 2100, and R. A. Savill has received from the Netherlands a picture of PCJ's rotary beam aerial. R. A. S. says that LLG, Oslo, 9610 kc, is outstanding in volume and quality at 2300 when it broadcasts in English to the peoples of America; his bag also includes Valencia, 7035 kc, and Alicante, 7740 kc, both with good signal and a quality better than some other Spanish stations. Then, on May 9, he heard the announcement of the death of Prince Louis of Monaco in about half a dozen languages over Monte Carlo on 6035 kc, and for his pains in reporting Radio Athens, he has received their schedule giving transmissions over 15345 kc, 9607 kc and 7300 kc, all with 7.5 kW power. J. D. Oxenford says that "The

Voice of Greece" can be heard in English, 1545-1600 and 2230-2315; the latter session comprises News (2230-2240), Talks on Greece (2240-2250), Music (2250-2315).

J. D. O. has news from Sweden that they will have two 100 kW transmitters early in 1950; and C. Costello experienced a thrill when he received TFJ's verification from Iceland.

Lastly, Vienna on 11785 kc is easily found when coming on daily at 0540 with church bells and a fine version of Handel's "Largo," but you may not find Radio Makronesia on 7040 kc so easy at 0500 and 1700 when it opens up with the Greek national anthem.

All letters for next month should be addressed to: R. H. Greenland, *Short Wave Listener*, 49 Victoria Street, London, S.W.1, and should reach this office not later than August 15. Good listening!

#### CLUB TOP BAND CONTEST

The Fourth Annual *Short Wave Magazine* 1.7 mc Club Transmitting Contest is to be held during the period November 12-20 next, for which another good entry is expected. Winners during the last three years have been Rhigos (1948), West Cornwall (1947), and Coventry (1946)—the latter have been in the first three every year so far.

#### GIFT SUBSCRIPTIONS

If you have an SWL friend overseas to whom you would like to make a useful present, why not buy him a direct subscription to the *Short Wave Listener*? It costs but 16s for a year of twelve issues, and will be a constant reminder of your thoughtfulness. Order on the Circulation Manager, *Short Wave Magazine*, Ltd., 49 Victoria Street, London, S.W.1.

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# SHORT WAVE BROADCAST STATIONS

Revision 50-26-92-95 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 the sections being given in full in every month. Such revision is necessary due to constant changes of frequency, callsign and operating schedules. All stations appearing in our lists are normally receivable in this country and are under regular observation.

Frequency	Wave-length	Callsign	Location	Frequency	Wave-length	Callsign	Location
5968	50-27	HVJ	Vatican City.	4850	61-86	YVMS	Barquisimeto.
5950	50-42	RIF	Moscow.	4847	61-90	HJGF	Bucaramanga.
5948	50-44	4V2S	Port au Prince, Haiti.	4845	61-92	CSX2	Ponta Delgada.
5942	50-49	OXI	Godthaab, Greenland.			HJCO	Bogota.
5918	50-70	BEA9	Nanking.	4840	61-98	VUC2	Calcutta, India.
5915	50-72	HRA	Tegucigalpa			YVOZ	Valera.
5907	50-78	OAX4V	Lima, Peru.	4835	62-05	HJKE	Bogota.
5900	50-85	ZNB	Mafeking	4830	62-11	YVOA	San Cristobal.
5889	50-94	OAX4Z	Lima, Peru.	4825	62-18	PRJ4	Parnaiba, Brazil.
5880	51-02	YNCS	Managua.			HJED	Calif.
5875	51-06	HRN	Tegucigalpa.				Singapore.
5870	51-11	TIGPH	San Jose, Costa Rica.	4820	62-24	CR7BU	Lourenco Marques.
5855	51-24	CP15	La Paz, Bolivia.			YVRC	San Fernando.
5849	51-37	OAX1B	Piura, Peru.			XEJG	Guadalajara, Mexico.
5800	51-72	CE8AA	Santiago, Chile.	4815	62-31	HJBB	Cucuta.
5758	52-10	YNJAT	Leon Nicaragua.	4810	62-37	YVMG	Maracaibo.
5757	52-11	PZH5	Paramaribo.	4800	62-50	YVME	Maracaibo.
5726	52-41	HCP1M	Quito, Ecuador.	4797	62-54		St. Denis, Reunion.
5660	53-00	HHCN	Port au Prince.	4794	62-58	HUB	San Salvador.
5620	53-38	OAX2A	Trujillo, Peru.	4790	62-63	YVQC	Bolivar.
5580	53-76	HCI	Tulcan, Ecuador.	4785	62-70		Sao Luiz, Brazil.
5200	57-69	YSCP	San Salvador.	4783	62-73	HJAB	Barranquilla.
5090	58-94	YFA10	Makassar.	4781	62-75	YVLA	Valencia.
5060	59-29	YVKD	Caracas, Venezuela.	4780	62-76		Singapore, Malaya.
5030	59-64	YVKM	Caracas.	4777	62-80	HJBG	Bucaramanga.
5019	59-77	YVKO	Caracas.	4770	62-89	YVMW	Punto Fijo.
5010	59-88	PJCI	Willemstad.	4765	62-96	HC4FA	Portoviejo Ecuador.
5000	60-00	WVV	Washington, D.C.	4760	63-03	YVKY	La Guaira.
4990	60-12	YVMO	Barquisimeto.	4752	63-13	YVMA	Maracaibo.
4985	60-18	HCQRX	Quito.	4738	63-31	HCIIM	Ibarra, Ecuador.
			Singapore.	4721	63-53	HC1VT	Ambato, Ecuador.
4980	60-24	HI1A	Santiago, D.R.	4712	63-66	HC2ET	Guayaquil.
4963	60-45	HJAE	Cartagena.	4656	64-44	HC2AK	Guayaquil.
4960	60-48	HC5HC	Riobamba, Ecuador.	4560	65-79	HC4FS	Esmeraldas.
		YVQA	Cumana.	4373	69-60		Johannesburg.
4955	60-54	HJQC	Bogota, Colombia.	4370	68-65		Tananarive.
		ZYFH	Manaos, Brazil.	4170	71-94	TGOA	Guatemala City.
4950	60-61	HI1L	Trujillo, D.R.	4020	74-63	HCIIM	Ibarra, Ecuador.
		ZQI	Kingston, Jamaica.	3935	76-24	HC5EH	Cuenca, Ecuador.
			Bandoeng, Java.	3914	76-56	ZQP	Lusaka, N.Rhodesia.
4945	60-67	HJCW	Bogota.	3800	78-95	ZEB	Bulawayo, S.Rhodesia.
4940	60-73	YVMQ	Barquisimeto.	3658	82-01	ZEA	Salisbury, S.Rhodesia.
4935	60-79	HJAR	Manizales.	3620	82-87	YVLG	Maracay, Venezuela.
4932	60-82	CR7BV	Lourenco Marques.	3530	84-99	YVKT	Caracas.
4930	60-85	HC4LL	Santa Maria.	3515	85-35	YVQG	Barcelona.
		JKG2	Tokio, Japan.	3505	85-59	YVKX	Caracas.
4920	60-98	VUM2	Madras, India.	3495	85-84	VDU2	Delhi, India.
		YVKR	Caracas.	3490	85-96	CR7AB	Lourenco Marques.
4915	61-04	ZOY	Accra, Gold Coast.			YVRA	Maturin
4910	61-10	YVMM	Coro, Venezuela.	3480	86-21	ZOI	Kingston, Jamaica.
		JKF2	Tokio, Japan.			YVLE	Puerto Cabello.
		YDB2	Batavia, Java	3475	86-33	JO9H	Tokio, Japan.
4903	61-19	HGAJ	Barranquilla.	3460	86-71	YVLC	Valencia, Venezuela.
4900	61-22	ZOH	Colombo, Ceylon.	3450	86-97	YVQI	Barcelona.
		YVQE	Bolivar.				Johannesburg.
4895	61-29	PRF6	Manaos, Brazil.				Damascus, Syria.
		HJCH	Bogota.	3440	87-21	YVMC	Maracaibo.
		YDZ	Biak, New Guinea.	3430	87-46	YVLI	Maracay.
			Johannesburg.	3420	87-72	YVOE	Merida.
4890	61-35	YVKB	Caracas.	3410	88-24	YVMK	Cabimas.
4885	61-41	HJDP	Medelin.	3400	88-24	YVKP	Caracas.
4880	61-48	YVKF	Caracas.				Umtali, S.Rhodesia.
		VUB2	Bombay, India.	3395	88-37		Colombo, Ceylon.
4878	61-51		Pietermaritzburg.	3380	88-70	YVQN	Puerto La Cruz.
4875	61-54	HJFH	Armenia.	3370	89-02	YVMI	Maracay.
4865	61-66	PRCS	Belem, Brazil.	3365	89-18	ZEA	Salisbury, S.Rhodesia.
		HJFA	Percira.	3360	89-28	YVOC	San Cristobal.
		YDD2	Batavia, Java.	3340	89-80	YVMU	Carora, Venezuela.
4860	61-73	JKE2	Tokio, Japan.	3335	89-96		Hyderabad.
		YVPA	San Felipe.	3330	90-16	YVQL	El Tiare, Venezuela.
4855	61-79	VQ7LO	Nairobi, Kenya.	3310	90-63	YVOG	Trujillo, Venezuela.
		HJCA	Bogota.	3228	92-95	HDZ	Riobamba, Ecuador.

## SMALL ADVERTISEMENTS

**CHARGES: Readers', 2d. per word, minimum charge 3s. Box Nos. 1s. 6d. extra. Trade, 6d. per word, minimum charge 7s. All advertisements must be of radio interest only. Add 25% extra for Bold Face (heavy type) announcements. Copy date for next issue, August 5, addressed Advertisement Manager, *Short Wave Listener*, 49 Victoria Street, London, S.W.1.**

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**WANTED:** Beg, borrow or buy details of conversion to mains of Receiver Type 78.—M. Holliday, Sticklepath, Okchampton.

**HRO** Junior for sale, excellent condition. Complete in National 3-ft. rack with power pack, nine coils covering 10 to 6,000 metres and felt-lined coil container. Instrument finished in black crackle. £20. Offers?—GM3AWW, Rockfort, Milngavie, Glasgow.

**WANTED:** Copies of *Short Wave Listener* November 1946, February, November 1947, also *QST* January, October 1948. Details and price to:—T.V. Attwood, 32 Park Lane, Netherton, Liverpool.

**EDDYSTONE 5/10** converter, £8. Eddystone two-stage preselector, £8. Webb's power pack, £2 10s. All built to Webb's specification. As new.—S. Hughes, 137 Widdenham Road, Holloway, N.7.

**WANTED:** Copies early issues *Wireless World* (not later 1920), *Radio Review* (any issue), *Amateur Wireless* (not later 1925), *Modern Wireless* (not later 1928), *QST* (not later 1923), *Radio Amateur Call Book* (all issues Vol. 1), *Proceedings I.R.E.* (not later 1926). Good price paid for issues in clean condition, unmarked. Offers, with dates and price asked, to:—Collector, Box 013, *Short Wave Listener*.

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**EX-GOVT. NEW E.H.T. CONDENSERS,** all hermetically sealed, —1 mfd. 2.5kV, 2/6; —1 mfd. .5kV, 3/9; .02 mfd. 8kV, 3/9; .02 5kV, 1/6.

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5V4	13/6	6J3	8/6	6SQ7	7/6	80	10/-
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8 mfd. 450V ..	1/11	16 mfd. 350V ..	1/11
16 mfd. 450V ..	2/8	32 mfd. 350V ..	1/11
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**12" P.M. SPEAKER "TRUVOX."** 10,000 lines flux density—handle 10 watts—2.3 ohm voice coil. Price 42/6, plus 2/6 packing and insurance.

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- 3/9003
- 9002

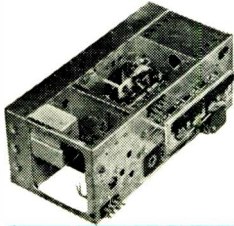
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Clydesdale's  
Price only

**37/6**

Carriage  
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Plus, Free Gift of BC-624-A, Transmitter Chassis, partly stripped, but containing many useful parts, R.F. section in good order. No valves, modulation trans. or xtal switch. Dimensions as recvr. Circuit supplied.



**E.549.** Philips miniature short wave aerial coil, chassis mtg. As used in model 170A. Range:—16-50 metres for 470 kc. I.F. Dimensions, dia. ½", former length 1¼", overall length 1½".  
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R1132 Frequency 100-124 mcs.

Each a 10-Valve (plus stabilizer) superhet. Enclosed chassis 19" × 10½" × 11" finish (R1481 dark grey) (R1132 light grey). Circuit supplied, all units tested and guaranteed working before despatch.

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Receiver and Power Unit.

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Completely self-supporting, laminated wood, hollow, three section telescopic mast. Ideal for that beam antenna. Base dia. 5", top dia 4", with adjustable tripod base (11' spread), anchor chain assembly, base footings and spikes. Mast sections are interlocking and the tripod holds the mast about 4' above ground level, allowing the aerial feeder wires to be run through it.

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Frequency 7-3-9 mcs.

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