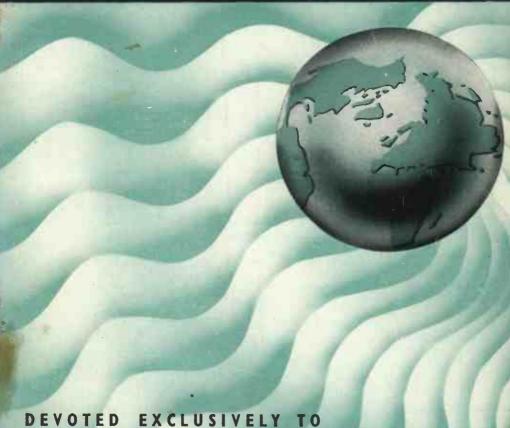
SHORT WAVE LISTENER



DEVOTED EXCLUSIVELY TO SHORT WAVE RECEPTION

APRIL 1948

PREMIER RADIO

MORRIS AND CO. (RADIO) LTD.,

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

LONDON, E.S. (Amherst 4723)

Callers To: 169 FLEET STREET, E.C.4 (Central 2833)

OUR NEW LIST IS NOW AVAILABLE. All enquiries must be accompanied by a $2\frac{1}{2}d$. stamp. SPECIAL OFFERS. 807 (Ceramic base) Tubes. 15/ each.

MIDGET RADIO KIT. Build your own midget radio. A complete set of parts, including valves, loudspeaker and instructions. In fact, everything except cabinet necessary to build 4-valve Medium and Long Wave T.R.F. radio operating on 200-250 v. mains, A/C or D/C. Valve line-up, 6K7, 6J7, 25A6, 25Y5. Wavelengths covered 200-557 and 700-2,000. Size 10×6×6in. Completely drilled chassis. Price, including tax, £8/0/11.

SUPERHET MIDGET RADIO KIT. A complete kit of parts for a 5-valve superhet. Covers 16-50 and 200-557 metres, AC/DC 200-250 v. Size, $10 \times 6 \times 6$ in. Completely drilled chassis. Price including tax, £9.

An attractive brown bakelite cabinet can be supplied for either kit at a cost of £1/7/3.

ALUMINIUM CHASSIS. Substantially made of bright aluminium, with four sides, $10 \text{ in.} \times 8 \text{ in.} \times 2 \frac{1}{2} \text{ in.}, 7/-; 12 \text{ in.} \times 9 \text{ in.} \times 2 \frac{1}{2} \text{ in.}, 7/9 ; 16 \text{ in.} \times 8 \text{ in.} \times 2 \frac{1}{2} \text{ in.}, 8/6 ; 20 \text{ in.} \times 8 \text{ in.} \times 2 \frac{1}{2} \text{ in.}, 10/6 ; 22 \text{ in.} \times 10 \text{ in.} \times 2 \frac{1}{2} \text{ in.}, 13/6.$

SHORT WAVE CONDENSERS. High-grade; Ceramic insulation. Super Midget type. Singlegangs available in 10, 20, 50, 75, 100 p.f. (75 p.f. has double spindle for ganging). Price 2/6.

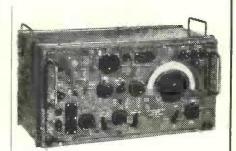
2 GANG, in 4.8, 9.6, 27.1, 50, 75 p.f. Price 5/-.

TEST UNIT TYPE 73, consists of a special purpose Oscilloscope that requires only rewiring and the addition of a few condensers and resistors to convert into a standard oscilloscope, input 230 v. 50 c/s. A 34 in. C.R. tube and 1 SU220A, 1 EB34, 1 5Z4, 3 SP41, 2 EA50, are included. Controls are "Brightness", "Velocity", "X Shift", "Y Shift", Focus Amplifter "in/out", "Calibrate", "on/off Tx". Price £8/8/-. Carriage and packing 20/-.

HIGH VOLTAGE BLOCK CONDENSERS. 1 mf. 2,500 v., working size 5 in. \times 3½ in. \times 3 in. \times 5 in. \times 5/-; 1 mf. 5,000 v., working size 8 in. \times 5 in. \times 4 in., 5/-; 4 mf. 2,000 v., working size 5 in. \times 5 in. \times 2½ in., 12/6; 8 mf. 750 v., working size, 4¾ in. \times 4 in. \times 2½ in., 7/6.

ALL-WAVE SUPERHET KIT. A Kit of Parts to build a 6-valve (plus rectifier) receiver, covering 16-50 metres. Medium and Long-wave bands. Valve line-up 6K7, 6K8, 6Q7, 6J7, two 25A6 in pushpull. Metal Rectifiers are incorporated for H.T. supply. Output impedance is for 3 and 15 ohms. The latest Wearite Coil Pack incorporating Iron Dust Coils is used, making construction and alignment extremely simple. A pick-up position on the wavechange switch and pickup terminals is provided. A complete kit including valves but without speaker or cabinet. Chassis size 14×6 in. Overall height, 9 in. Price £11/16/3.

Suitable loudspeakers are the GOODMANS 10 in. 6-watt. P.M. at 47/6 or for superlative reproduction, the Goodmans 12 in. P.M. at £6/15/-.



RIO7. ONE OF THE ARMY'S FINEST COM-MUNICATIONS RECEIVERS. (See "W.W.", August, 1945). 9 valves, R.F. amp. osc. Frequency Changer, 2 I.F.'s. (465 kc). 2nd Detector, AVC. Aframp. A.C. mains, 100-250 v. or 12 v. accum. Frequency range 17-5 to 7 mc/s., 7-25 mc/s. to 2-9 m/cs., 30 to 1-2 mc/s. Monitor L.S. built in. Complete. Write for full details. £16/16/-. Carriage paid.

RELAY UNIT TYPE 9, consists of a 24 v. operated relay unit incorporating 3 KT33C valves, a telephone line (Uniselector) switch with 6 poles, 26 contacts, 5 P.O. type relays, 2 high-speed relays, and a quantity of other material. Contained in an attractive relay rack type metal case $19 \times 9 \times 9\frac{1}{2}$ in deep. Price £4/5/-, or without valves, 30/-. Carriage and packing 5/-.

OSCILLOGRAPH FOUNDATION KIT. Comprises a transformer giving an output of 800 v, Condensers, Metal Rectifiers, 3½" Cathode Ray Tube and Base, and L.T. Transformer. Price 55/-

MAINS TRANSFORMERS. Military surplus, All 230 v. 50 cycles input.

All 230 V. 30) cycles input.	
Type No.	Output.	Price
	500 v. 150 m/a. 4 v. 2½ a. 4 v. 1 a.	
4 865-0-8	5 a	
	760 v. 4 v. 3 a. 4 v. 4 a	
	300 v. 250 m/a. 4 v. 3-5 a. 6-3 v.	
5-7 a	ı. 6·3 v. 1-2 a	35/-
	t 30 v. 4 a	20/-
	t 40 v. 3 a. and 104 v. 1 ½ a. (auto-	
wou	nd),	21/-
32 Output	nd)	,
30 m	ı/a. 4 v. 1 a. 4 v. 4 a	40/-
	38 v. at 2 a. tapped at 32, 34,	
36 v.		15/-
34 1500-0-	-1500 v. 5 m/a. 4 v. 2 a., 2 v. 2 a.	
	a	25/-

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

THE SHORT WAVE LISTENER

A MONTHLY MAGAZINE FOR THE LISTENING AMATEUR

VOLUME 2

APRIL 1948

NUMBER 17

Conducted by the Staff of The Short Wave Magazine.

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

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

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

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

CONTENTS

APRIL 1948

Editorial 129 Obtaining VHF 130 Reception

Amateur Transmission for the Beginner (The Radio Amateurs' Examination—Part II)

133 Have You Heard? 136

Calls Heard 142

"Pse OSL" 146

SWL Stations—No. 10 147

The VHF End 148

American VHF

Broadcasting Stations (42.1-49.5 mc) 150

DX Broadcast 152

Broadcast Station List, Revision

31 ·12 · 41 - 32 metres 160

EDITORIAL

Portable

This is being written on a warm sunny day when one's thoughts turn to the prospect of summer activities—and the possibilities of portable operation.

In the main, SWL's have not taken to portable work with quite the enthusiasm which is shown by many transmitting operators. This is understandable, since to go out portable with a transmitter is to have a definite object in view. But operation under outdoor conditions can be just as interesting for the SWL, provided that he, too, has some objective which cannot be achieved under normal conditions at the home location.

The intention of this note is to suggest to SWL's that for going portable they have a distinct advantage over their transmitting brethren-all the gear required can easily be carried on the back of a bicycle, and the transport problem is not the bogey which (without basic) it has become this year for those who wish to do serious work under /P conditions. A small "dry" accumulator and a 120-volt block is all the power supply required; 50-ft. of insulated wire is ample for running up an aerial; and the receiver itself can be a TRF in a small metal cabinet, with plug-in coils; a pair of lightweight 'phones and an earth rod complete the accessories. The whole outfit can be made up into a pack weighing but a few pounds, and presenting no more difficulty in regard to transport than a week-end case.

We envisage for the coming summer a wide interest in the practical problems (and results) attaching to SWL work under portable conditions. We have it in mind to run some SLP's for portable operators only; there is also the possibility of a contest under strictly portable conditions.

In the meantime, we shall be glad to hear from readers who have looked into this portable business from the practical point of view.

Obtaining VHF Reception

Modifications to the RF Unit Type 25

by L. N. GOLDSBROUGH, M.A., B.Sc.

(Our contributor has for long been a regular correspondent to "Have You Heard?" Here he discusses one way of getting going on VHF.—Ed.)

HE writer is at present faced with the economic difficulty of maintaining two complete receiving stations some eighty miles apart, one at the (home) base HQ, the other in lodgings near the scene of his labours. For 3.5, 7 and 14 mc reception a by-now much modified R1155 is available at HQ, and for the latter his pre-war battery 1-V-2 has been resurrected. As interest in the higher frequencies developed, a commercial 28/58 mc converter was purchased and arranged to feed into the 1-V-2; this, unfortunately, meant that these interesting frequencies could not be covered at home unless further equipment was purchased. For a variety of reasons, extensive constructional work was out of the question, and for some months the only solution to the difficulty appeared to lie in transporting the converter backwards and forwards.

Last year, however, the ex-Government RF Units Types 25 and 27 appeared on the surplus market at absurdly cheap prices. The Type 25 is the equipment discussed here; it employs three SP61's as RF amplifier, mixer and transitron-type local oscillator cathode coupled to the mixer. It is pre-tuned on five channels between 30 and 45 mc by means of concentric air-spaced trimmers selected by a 5-way ceramic switch. Although replacement of the trimmers and switch by a threegang 15 $\mu\mu$ F condenser is said to produce results on 28 mc, this did not appear a wholly satisfactory method.

The trimmers and switch were therefore first removed, also the front panel and the coaxial input socket. The coils were taken out and re-wound with 22 SWG tinned copper wire to fill the whole of the ribbed space, and replaced. Coupling of the aerial to the RF stage was provided by a two-turn rigid coil wound over the earthy end of the RF section. The oscillator coil had originally a centre-tapped HT connection, and this arrangement was preserved on the re-wound coil.

A new aluminium panel was provided, by which the side of the unit now became the front (see drawing). Three 15 $\mu\mu$ F

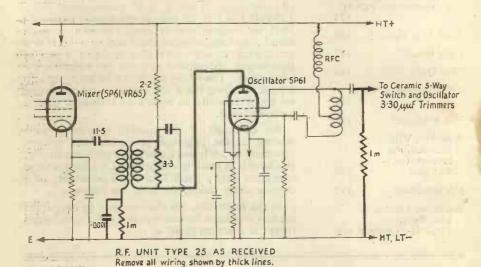


Fig. 1. Mixer-oscillator circuit before modification, RF Unit Type 25.

midget condensers, each with one of the original trimmers wired across it. and the aerial input socket, were mounted on the panel as shown. The RF and mixer tuners were provided with direct drive. the oscillator with a 100-1 Microdial. Connections were taken from the Jones plug to the HT and 6.3v filament supplies, a coaxial lead being provided for connection to the 1155.

Modifications

At first, results were poor, and it was assumed that the trouble was in the oscillator stage; as time was short and major modifications out of the question, the procedure shown in the circuit dia-

gram was adopted. The mixer-oscillator coupling coil and its associated wiring were removed. The oscillator screen and were strapped and the HT lead from the centre-tap of the oscillator coil was connected via the existing choke to the low potential end of the 2,200-ohm oscillator anode decoupling resistance. The $11.5 \mu\mu F$ condenser removed with the coupling coil was connected close to the mixer grid (top cap) and led through a small hole in the screen direct to the top cap of the oscillator. The resulting oscillator circuit may be a little unconventional, but results, as will be seen later, were very gratifying. The total time taken for the whole conversion was less than three hours, including the preliminary dismantling—and it will be found that much valuable time will be saved by observing exactly how the switch and trimmers are mounted before commencing operations!

Results

The performance of the unit, as fed into the R.1155 at an arbitrary IF of 7 mc, was very good; the earliest opportunity to test the rig occurred at 1815 on the first Sunday of the ARRL DX 'Phone Contest. In the first 75 minutes, mainly spent, searching 28,100-500 kc, YN, XE (2), VP4, VP5, PY, KP4, CO, OX, WØ, W5 (9), W6 (5), W7 (2), VE4 (2), VE5 (2), VE6 (3), VE7 (10) and W1, 2, 3, 4, 8, 9, VE1, 2, 3, were logged—and twenty minutes were spent getting the YN call right!

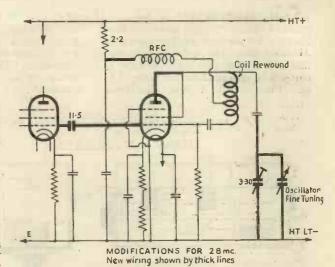


Fig. 2. Circuit modified as described in the text.

The 28 mc band occupied 150 deg. of the 180 deg. tuning dial, giving very adequate band-spread, the associated trimmer being about half in (15 $\mu\mu$ F). The coverage of the mixer and RF tuning was much wider, small adjustments only being required to peak the signal on the latter. Mixer tuning was less critical, though it was found that interference to a weak signal could be very much reduced by slight detuning—a useful asset.

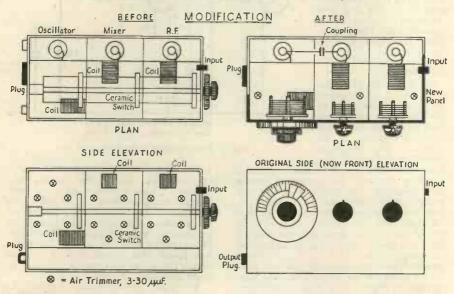
As these modifications render the original case unusable, a new one will be made up out of sheet aluminium. It seems quite likely that a unit of this type could be modified even more advantageously by 1155 owners to cover the range 18-35 mc; the air-spaced trimmers should be omitted, and 100 $\mu\mu$ F condensers used as band-setters on all stages—the 15 $\mu\mu$ F oscillator tuning, of course, being retained. In this case, the mixer and RF tuning should be provided with small epicyclic drives.

The writer is of the opinion that separate converters to cover the 28 and 58 mc bands are preferable. The companion unit Type 27 is the same size as the Type 25, and is tunable, covering the range 60-80 mc as it stands; it uses EF54's as RF and mixer, with an EC52 as oscillator. The bandspreading arrangement is unconventional, and might be improved for precise work; the band-setting condensers are the 1.5° 7.5 $\mu\mu$ F ceramic trimmers mounted under the chassis. As yet, no major modifications have been made to this unit; while increasing the size of the coils by two turns

will bring the unit on to 58 mc, the writer prefers to employ plug-in coils; as their design is not yet finalised, they cannot be described here. The writer is convinced that with a little more work the Type 27 unit will be very good for the range 35-85 mc. The two units together thus cover

18-85 mc—the total outlay, including the cost of the extra components, was just over £3 los., against which must be set one 5w, 1 p, 3b ceramic switch and 12 air-spaced trimmers! This is obviously a great saving on far less flexible commercial convertefs.

Fig. 3. Sketches showing main layout modification, RF Unit Type 25.



"PSE QSL"

The heavy demand by transmitters the world over for space in this feature has now become embarrassing—having just checked the backlog, we find there is a carry-over of nearly 200 requests for publication. As mentioned before, the policy is to give preference to G's and D2's within the limits of the available space. Readers will probably agree that one page is as much as we should devote to this feature, but we should be glad to have a line—on a postcard, please—from all SWL's interested in "Pse QSL" as to how useful they find it and whether they think we ought to give more space for this service.

SLIP-UP SECTION

It may fairly be said that we don't often make 'em, but mistakes nevertheless do occur occasionally. The eagle-eyed did not fail to notice that in the circuit on p. 103 of the March issue of the Short Wave Listener, there are two slip-ups calling for immediate correction. In the EF50 RF stage, there should be a small fixed condenser, say 20 µµF, in series with the control grid, with an 0·25 megohm resistor from the grid side of this condenser to earth. In the EF9 detector stage, that

choke RFC in the cathode should go straight down to the base-line (earth), with another 20 µµF fixed condenser between the bottom end of L3 and the cathode side of the RF choke; R4 should then be returned to earth. With these necessary modifications, the circuit will work!

Sorry that this happened—and thanks to several readers who wrote us on the point, with letters starting "What the heck . . ." or words to that effect! But we did notice these mistakes before anyone else pointed them out.

POSTAL TUBES

Only those who have had our Zone Maps through the post are likely to appreciate the point of this one! Which is that if by any chance you still have yours—or have'nt used it to wind up a 1.7 mc coil—we would be very grateful if you could let us have it back. These tubes, round which the Maps are wrapped to prevent damage in transit, are very difficult to obtain, and it is obviously a considerable waste of valuable material if they are used once only. What we should have done in the first place was to provide a return-address label, so that the tubes could be returned for further deliveries until finally worn out—or intercepted as coil formers!

Amateur Transmission - for the Beginner

The Radio Amateurs' Examination

Set of Specimen Answers

by THE OLD TIMER

contributor (In March our covered Questions 1, 2, 3 and 4 of the last Radio Amateurs' Examination paper. Here are the answers to two further questions-Nos. 6 and 7.-Ed.)

QUESTION 6: Describe, with the aid of a diagram, the circuit arrangement of a low-powered crystalcontrolled transmitter for the 58.5 to 60 mc band.

ANSWER: Any crystal-controlled transmitter for the 58.5 to 60 mc frequency band may be reduced to the simplest terms by constructing a crystal oscillator (using a crystal of the order of 7400 kc) and a set of frequency-doublers. The detail merely resolves itself into a matter of convenience and economy.

For the purpose of this answer, therefore, the transmitter can be designed as a three-stage unit by first using a Tri-Tet type of crystal oscillator, which permits of doubling in the first stage, and secondly employing a double-triode as a pair of

frequency doublers.

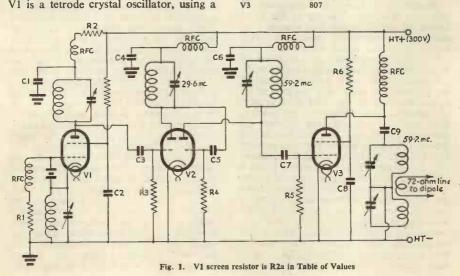
Fig. 1 shows the full circuit diagram. V1 is a tetrode crystal oscillator, using a 7.4 mc crystal. In the cathode lead is the 7.4 mc resonant circuit. Thus the grid, cathode and screen (the latter being at earth potential with regard to RF) comprise a simple triode type of crystal oscillator. The output is taken from the anode circuit, and a circuit tuned to the second harmonic (14.8 mc) gives the first stage of frequency-doubling here.

V2 is a small double-triode, of which the first grid is driven at 14.8 mc, the first anode circuit being tuned to the second harmonic, 29.6 mc. This is capacitycoupled to the second grid, and the second anode is similarly tuned to the second harmonic (now 59.2 mc). Although the output will not be large, there will be enough power available to drive a small tetrode in the final stage, which operates as a power amplifier and not a doubler. This final stage might with advantage

TABLE OF VALUES

Fig. 1.

250,000 ohms, 1-watt R1 R2 10,000 ohms, 2-watt R2a 35,000 ohms, 1-watt R3) 30,000 ohms, 1-watt R4 R5 5,000 ohms, 1-watt 6,000 ohms, 2-watt R6 C1, C2, C4, C6, C8 C3, C5 0.1 µF ·0001 µF C7, C9 ·00025 µF 6V6 or 6AG7 6A6 or 6N7 V2



consist of a pair of similar tetrodes in push-pull, but as "low power" is considered to mean 25 watts or less, it is not necessary to use such an arrangement, a single tetrode of the 807 type being more than

capable of handling this input.

To overcome the disadvantage of an unbalanced output (the usual arrangement with a single-ended stage), the final tank circuit is shown as being of the full-wave variety. In other words the centre of the coil and of the split-stator condenser is earthed, both ends of the coil being "live" at RF. This permits the use of a coupling link, at the centre of the coil, which may be connected directly to a length of 72-ohm coaxial feeder which is suitable for feeding a simple dipole aerial at the centre.

It is suggested that an HT supply of 300 volts will be more than sufficient; the screens of the two tetrodes are fed from this through series resistances, and "grid-leak bias" is utilised in all stages.

The full table of values appears with the

circuit diagram.

QUESTION 7: Describe four types of aerial commonly used for amateur transmission and how they may be coupled to the transmitter. What are their relative advantages and disadvantages?

ANSWER: Fig. 2 shows four well-known types. Fig. 2 (a) is a voltage-fed dipole or "Zepp"; (b) is a centre-fed dipole; (c) is a Marconi aerial; and (d) an "off-centre single-wire fed" aerial, or

"Windom."

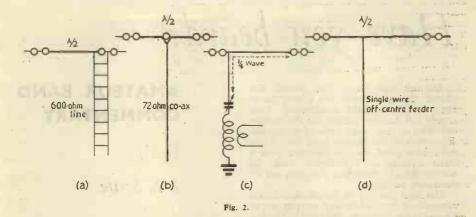
Dealing with these types separately, we will first take (a). The top is fed by a length of 600-ohm line (air-spaced conductors and insulated spreaders). This feeder is of the tuned variety; if it is half-a-wavelength long, the condition of high voltage and low current obtains at the transmitter end, and it is therefore tapped on or near the ends of a parallel tuned circuit coupled to the final tank circuit. If, however, the feeder is one-quarter, three-quarters or any odd number of quarter-waves long, the condition at the transmitter end is one of high current and low voltage. It is then coupled by means of a coil with a series condenser in each feeder, the coil itself being coupled to the final tank. Although the diagram shows the top as being half-a-wavelength long, it can, in fact, be any number of halfwavelengths long. This is the chief advantage of this type of aerial—that it can be used on many different wavebands if they are in harmonic relation; i.e., a halfwave "Zepp" on the 7 mc band becomes a

full-wave aerial on 14 mc, a two-wave aerial on 28 mc and so on. The same feeders are simply retuned for each of the bands. Another advantage is that the tuned feeders make the top somewhat "flexible" as regards resonant frequency, and it can therefore be used at various frequencies within a given waveband simply by retuning the feeder coupling circuit. Its only disadvantage (if it can be so termed) is the somewhat clumsy nature of the feeder system.

Fig. 2 (b)—the centre-fed dipole—is strictly an aerial for one waveband only. It is critical for length, its feeder being untuned. The 72-ohm line is coupled to the transmitter by a single-turn link coil, preferably at the centre of a double-ended tank circuit. The chief advantage of such a dipole is its extreme simplicity; another point is that there is little possibility of vertically-polarised radiation from the feeder. Conversely this means that the aerial is good for reception as the feeder will not be prone to pick up local interference and static. The disadvantage is the inflexible nature of the aerial, limiting operation to one waveband and probably to one end of the band, according to the length to which the dipole has been cut.

Fig. 2 (c), the Marconi aerial, is indispensable for use on the lower frequency bands where it is not practicable to erect an aerial half-a-wavelength long, due to the dimensions required. The horizontal portion and the downlead comprise the aerial, which may be exactly a quarter-wave long or less. The series-tuned circuit shown at the bottom of the feeder is connected to earth and tuned until the aerial draws the maximum current as indicated by a thermo-ammeter between the variable condenser and the bottom of the aerial. The advantage of such an arrangement is often the inescapable one -that it is the only aerial practicable for use on the 1.7 mc band. Its disadvantage lies in the fact that for low-angle radiation it is preferable to have at least half-awavelength of wire in the horizontal plane. For use on 1.7 mc, however, low-angle radiation is not of much importance, and the strong ground-wave radiated by the vertical portion of the aerial will often be an advantage. A good earth system is essential, or a counterpoise may be used.

Fig. 2 (d), generally known as the "Windom," operates by virtue of the fact that a point can be found, on any dipole, at which the impedance of the aerial will match that of a single-wire feeder. It is generally considered that the system operates as a symmetrical arrangement,



the earth-lead being the "image" of the feeder. Strictly speaking, this aerial can only be used on one frequency band, since the correct tapping point for the feeder when the top is half-a-wavelength long is not the same as when the top is a full-wave long. By using a feeder of smaller gauge than the aerial wire, however, and tapping it on a point exactly one-third of the way from one end, an approximate match may be obtained under a variety of conditions. Such a tapping point is also one-third of the way from the centre to one end, and so on, and in practice this arrangement does serve well for harmonic operation. At the transmitter end the feeder is simply tapped on to a tuned circuit, the lower end of which is earthed. The tapping point must be found by experiment, and is usually not more than one-quarter of the way up the tuned circuit. When both tapping points have been correctly placed there should be no standing waves on, and therefore little or no radiation from, the

The chief advantage of this system is its

BARNES RAD-ELEC & WHOLESALE CO., 2 Elmdale Road, Penn, Wolverhampton

We are specialists in R1116 R.A.F. receivers and have good stocks (at present). This famous set is "Double Superhet," "Air tested," aligned, 8 new valves, connectors, etc. (not speaker or batteries), for 15-2,500 metres covering all broadcast, amateurs, etc. Send for special leaflet and catalogues. £10 delivered free, plus 30/- for fine returnable (optional) transit case (C.W.O.).

Also coils for T1115 transmitter (12) available in special case, 30/-; 200V 50 m/a motor generators (24V D.C. input) 11/-, or smoothed, complete in case with stabiliser valve, 30/-.

Valves, condensers, sets, components, coils, etc. in List.

flexibility for different wavebands; its disadvantage the fact that when it is incorrectly adjusted the feeder will radiate and the radiation pattern of the system as a whole will then become somewhat unpredictable. Probably the remarkable results claimed for it in some quarters may be explained by the fact that the feeder is radiating.

Obtain the P.M.G. CERTIFICATE with the personal assistance of E.M.I. Scientists—

A special correspondence course for those wishing to take the P.M.G. certificate has been planned by E.M.I. Institutes. It brings you tuition under the personal supervision of E.M.I.* scientists, several of whom hold the transmitting licence. College and other correspondence courses, covering basic radio and basic television are also available.

Write for details to: — The Principal: Professor H. F. Trewman, M.A. (Cantab), M.I.E.E., M.I.Mech.E., M.Brit. I.R.E.

E.M.I. INSTITUTES LIMITED
Dept. 51, 43, Grove Park Road, Chiswick, London

* The E.M.I. Group includes "H.M.V.", Marconiphone and other important electronic interests.

Have you heard?

Another very interesting month has passed, though without any events calculated to cause great excitement. Nice steady DX has been there for the listener with ears to hear—and most of the regular supporters of this feature have been doing well. It is good, too, to welcome quite a large number of newcomers, many of whom show by their logs that they are by no means novices.

The total scrutiny of the amateur bands represented by the hours of activity put in by our regular readers must surely be such that nothing can ever again pass unnoticed

by someone!

Zones Heard

All owners of "little sets" should rejoice this month to see that an 0-V-1, in the hands of D. W. Bruce (Eltham) has rocketed its owner to the head of both lists. I am never surprised when an 0-V-1 or 0-V-0 shows a top score on CW, but it is rather the fashion nowadays to say "Ah, but you need the selectivity of a superhet to log weak 'phone signals." Well, D.W.B.'s answer to that is to collect a score of 37Z, 115C for the 'Phone Only list—1948 figures, of course. A very fine show; but he'll find it a hot seat up there on top. Who will be the challenger next time?

Two readers, the same D.W.B. and our old friend N. A. Phelps (London, N.10) have succeeded in reaching the total of 40 Zones this year in the 'Phone and CW list. We really shall have to devise something much more difficult than the Zone scheme—if you can reach top score in the first two months of the year, it's time to search for something really hard! After a month's head-scratching I will have something more to say about that.

Several new countries have cropped up during the month. Most of them will be dealt with as the individual letters come up, but among those worthy of mention is FQ3AT/FE, who has been active both on 14 and 28 mc CW. He is, of course, FQ3AT in the Cameroons, where he is working under cover. His QTH cannot therefore be published; suffice it to say that this station is perfectly genuine. An exchange of air mail letters has been going on—which discloses that he reads the Short Wave Listener.

AMATEUR BAND COMMENTARY

by the

DX Scribe

SLP's

The 7 mc band has become terribly unpopular again! Only two lists of Calls Heard for the 7 mc SLP reached us by the deadline, although there was plenty of activity in connection with the 14 mc period. Of course, I'm not surprised; personally I think 7 mc is just a pain in the neck. Every time I say so, I receive rude letters—but I would far sooner spend my time reading rude letters than scraping about in the European QRM on 7 mc! Several readers have asked for an SLP on 1.7 mc, so I have obliged this time; but please let us have some support for it. After all, "GDX" on 1.7 mc is a pretty good test of receiver and operator.

The Month's DX

Several readers query HL1AR and other HL stations. They have probably discovered by now that they are the J8's in Korea proudly flaunting their new callsigns. I found out about the coming change just too late to report it last month. J8AAR is HL1AR, and probably the best-heard of the bunch as yet.

D. L. McLean (Yeovil) reports some nice ones on 14 mc 'phone, such as CT2AB, ET3AE, HH2CW, KG6AI, KH6IJ, VP2AB, VP2KS, ZD1BD, ZD3B and ZP8AC. (Quite a bit of real DX in that little list!) D.L.M., among others, also tells us that MI6ZJ, in Eritrea, is now MI3ZJ, so apparently the Eritrean prefixes have been stabilised as MD3 and MI3. Referring back to the old "EDZ" question, D.L.M. says that he heard this station saying that his call was changed from EA7EDZ to EA8EDZ to avoid confusion with EA7 stations in Spain.

J. Read (Norwich) "came on the air"

for the first time since the war on February 27, using an R.208. He sent in lists for the SLP, which, unfortunately, just missed the 'bus. J.R. mentions, as an outstanding feature of the 14 mc SLP, the 'phone signal of ZL2BT and the almost universal response of the Scandinavians to the ZL's CQ calls.

E. A. Parkinson (Leeds) heard the mysterious AK7DL being repeatedly called by a W7—shows that he is getting out, wherever he may be situated. R. A. Hawley (Goostrey) comments on VQ4EHG, which is the station of the Hallicrafters

Expedition in East Africa. He heard 'EHG say they carried all their gear in a 25-foot trailer behind a truck. R.A.H. also heard VP2AT (Antigua) and VP2DC

(Dominica)—both 14 mc.

A. W. G. Boulton (Faringdon) queries the OTH of UAØKSA-which Zone is he in? Really, this Zone business is getting a bit too much-there are so many cases of stations which are in the same country but different Zones. We know that UAØKGA and 'KQA are Zone 19, and that 'KAA is Zone 18, but we don't yet seem to have put the finger on 'KFA and 'KSA. Likewise, some of the VE8's may be in either Zone 1 or Zone 2, and are very difficult indeed to sort out. A.W.G.B. heard AC4YN (14 mc CW) on the afternoon of February 29; it seems that 'YN is really having a spell of activity nowadays. No doubt about his Zone, anyway!

W. J. C. Pinnell (Sidcup) queries C4CA, giving his QTH as Canton, which should be C3. On the other hand, many readers have heard him say he is in Shanghai, which should be C1. It all makes you think, coupled with the fact that W.J.C.P. says his accent sounded more Italian than Chinese! Finally, W.J.C.P. says: "I used to think that with the high noise-level, QRN and gabbled call-signs, logging W's and VE's on 3.5 mc was the most difficult form of DX-chasing. But that was before I tried to get some 'phone DX out of 7 mc..."

One of our Northern Ireland readers, G. Braithwaite (Belfast) heard VU, KH6, ZE, ZS, EL and AR8 for the first time on



D. F. Willies (Holt, Norfolk), a regular correspondent to "Have You Heard?" runs a R.103A for 1.7, 3.5 and 7 mc, modified by the addition of a 6V6 output stage. For 10 and 20 metres he has a home-built converter using EF50's, and other equipment includes a W.1191 wavemeter. Aerials are dipoles cut for 7 and 28 mc. The log shows 99C in 32Z.

14 mc during the month. On 28 mc the ZS's claimed the honours for consistency. (Yes—28 mc is showing signs of "summer" conditions already. The W's have not been flooding it as they did last year in February and March. That band is changing very rapidly.)

A long letter from C. S. S. Lyon (Liverpool) brings up some interesting points. Out of 56 hours' listening during the month, he has spent more than 28 on the 3.5 mc band. On this band he has heard all W districts on 'phone except the 6th. On CW, the log includes ZL4GM, ZL4DU, XFIA (Mexico), KS4AI, TG9JK; and C.S.S.L. adds that W stations were calling KH6IJ and KL7DY. (Yes—it is 3.5 mc that we're talking about!) Finally C.S.S.L. brings up some sound points about Calls Heard, which will be discussed later on.

And, talking of long letters, here is the monthly omnibus from Oswestry, in which O. A. Good discusses the month of February. He listened for 35 hours and found the chief characteristic "the appalling severity of the European QRM." But he found conditions good for J, KA, VK, ZL and the West Indies; his log for the latter parts shows 7 CO's, 1 HH, 3 KP4's, an NY4, lots of VP2's, VP4's and VP6's—all on 'phone. ZL2BT's super-consistent 'phone comes in for comment, as does that from VK2GU. HL1AA baffled O.A.G., but he will know by now who he is—our old friend J8AAA. Next, two small queries. A ZS4 (name Dan) was heard working 'phone on 14180, but his full call was QRM'd. Does anyone know

ZONES HEARD

LISTING

Listener	19	948	Post-war	
	Zones	Countries	Zones	Countries
'PHONE and CW				
D. W. Bruce (Eltham) N. A. Phelps (London, N.10)	40 40	144 138	40 40	174 190
L. Collis (Banstead)	39	142	40	161
A. Baldwin (London, E.11) W. J. C. Pinnell (Sidcup)	39 39	120 119	40 39	156 148
M.H.Preston(London, S.W.2) O. A. Good (Oswestry)	38 38	147 109	40 39	194 174
C. S. S. Lyon (Liverpool)	37	126	40	168
G. Curtis (South Harrow) R. A. Hawley (Goostrey)	37	110	40	160
A. H. Onslow (Hove)	37 37	104 92	39 39	154 156
L. N. Goldsbrough (Wirral)	36	111	40	166
A. W. G. Boulton (Faringdon) W. N. Sandeman (Rudyard)	36	107	40	160
A. J. Slater (Southwick)	36 36	104	37 38	114
T. W. Jones (Birmingham)	36	97	38	132
R. S. Stott (Upminster)	35	108	38	127
A. Bannister (Manchester) D. A. Pullen (Coichester)	35 35	101 84	35 37	123 105
M. E. Bazley (Birmingham).	33	110	34	111
A. Levi (Belfast)	32	87	35	109
G. P. Watts (Norwich)	30	84	39	149
N. S. Beckett (Lowestoft) A. W. Robertson (Cranford)	30 30	82 80	38 35	127 110
PHONE ONLY	6			
D. W. Bruce (Eltham)	37	115	38	146
L. Collis (Banstead)	35 35	112 95	36	137 140
D. L. McLean (Yeovil) A. J. Slater (Southwick)	34 34	98 82	36 36	134
A. H. Onslow (Hove)	34	79	37	147
B. Needham (London, W.11) J. M. Graham (Glasgow)	33 33	97 95	35	114
O. A. Good (Oswestry)	33	88	36	118
L. N. Goldsbrough (Wirral) T. W. Jones (Birmingham)	33 33	84 73	-36 36	129 118
K. R. Toms (Boreham Wood)	32	89	34	105
D. Kendall (Potters Bar)	32	85	35	111
A. Bannister (Manchester)	32	73	35	116
E. W. B. Aldworth (Ashford) C. S. S. Lyon (Liverpool)	30 30	81	35 [']	113 124
N. S. Beckett (Lowestoft) L. E. Fisher (Chessington)	30	80	36	114
N. A. S. Fitch (London, E.10)	29	72	32	97
L. Corder (Hadleigh)	28	79	32	85
G. Hare (Leadenham)	27	71	35	
G. P. Watts (Norwich) W. B. Harrald (London,	27	63	35	121 126
S.E.21)	25	49	34	92
	1105 200	The last		

if this was ZS4P? (The point, of course, is that ZS4P is in Basutoland!) Likewise there was a ZS3 on 'phone on about 14170, call-sign jammed again.

A newcomer to the ranks is D. Ruth (London, S.E.5), who reports that the 7 mc SLP was "a complete flop"; but he did better on 14 mc. On the 29th, D.R. says, the Russian stations were all calling WSEM, to be answered every time by another Russian-doubtless some obscure contest in the USSR. They see the Short Wave Listener and the Magazine over there, but we never get an item of news. L. Collis (Banstead), who headed the lists last month, now discloses that he had some slight advantage in the shape of a period of convalescence; now he hasn't so much time on the air. (Wonder what friend Bruce is convalescing from!) L.C. has picked out a few choice pieces like FF8FP, FQ3AT/FE, VQ8AZ, PK6EE, PK4VD, EP3H and SU1ZR—all 14 mc CW. He also found XFIA (who is genuine) and three oddities—OL1XY, IC1A and FB7I—my, my! He strongly disapproves of the restriction of general lists of Calls Heard to one band—see dis-cussion farther on.

E. W. B. Aldworth (Ashford) says the term "DX" has meant very little during the past month, and his log seems to show that he heard practically everything. An interesting one that has cropped up again is CT2AB, who will give lots of listeners another new country. On 28 mc E.W.B.A. found HC1KP, W2EJV/PK3, VP5AL and CR7AD—all rather nice.

The suggestion that

many SWL's cannot really be sure of the calls they hear is put up again by N. A. S. Fitch (London, E.10). He looked over last month's SLP logs and pulled out KA1ABF/ ABX; OQ5BA/BL; VK2AMU/ANU; VK2AKR/AK/HAR ZC6MF/NF; ZL2FL/ 3FL; ZS6FC/FT — to name only a few ambiguities. Another point he makes is that certain Central American countries are probably not in the Universal Postal Union and so will not accept International Reply Coupons; but can anyone please say which they are?* N.A.S.F. has drawn up 'a report sheet giving room for six entries, comparative reports on other the same stations in

vicinity—in fact, the kind of useful "dope" that distinguishes an acceptable SWL report from just another piece of paper.

Andorra Again!

Various readers have heard another station using the PX prefix—this time PX1E. T. W. Jones (Birmingham) heard him on 14 mc CW; he also added a new 1948 Zone with VK6DD during the SLP. J. G. Rowland (Reading) joins us for the first time; he comments on the audacity of the German pirates with their "DA" and other call-signs. And he queries the significance of call-signs like G5BS/A. That's an easy one—"A" means "Alternative" QTH. Such stations are licensed to operate from two locations, but when at the second they have to use the suffix "/A."

D. W. Bruce (Eltham), this month's top-scorer, had a good month of it. His 0-V-1 pulled in KH6DH, LU3EL, OA4Q and three ZL's on 7 mc, and on 14 mc the predominating strain has been the South Americans. Interesting items on the latter band were CP1AQ on CW and EA8AT (Canary Is.). Suspects were AR1BN, YQ5U and XF3A. A "query" was VQ4EHG, but he has been covered. He puts out such a signal at times that I'm not surprised someone gets suspicious. D.W.B. logged VQ8AD on 14 mc 'phone

VE2KG, of Longueuil, Quebec, Canada, is another who QSL's with a photo card. He is anxious to have more SWL reports—see this month's "Pse QSL"

(1705 GMT). He brings up the all-time 'phone total to 38 Zones, which, I think, is a record. At all events, no one else has yet claimed more than 37.

M. Harrison (Darlington) asks whether all stations with calls starting UAIKE... are in Franz Josef Land. Well, we know that UAIKEB is, and that UAIKEC isn't—the latter is at Amderma, in the Arctic Circle. (Incidentally, is it general knowledge that all U stations whose call-letters begin with a K are Club Stations? No, I didn't think it was.) M.H. adds the welcome news that UAØKQA (Zone 19) has been heard on 'phone, thus bringing a 'phone HAZ within the bounds of possibility. Suspects from M.H. are FZQR (14 mc CW) and CR7VJ (too loud to be true on 7 mc CW).

From A. W. Robertson (Cranford) comes a log including XE1AC, HI6CT, ZD1BD, ZD3B, ET3AE, VP2GB, VP2KS, VP9F, VP9Q and TG9RV—all good clean DX!

N. A. Phelps (London, N.10) now uses a 2-V-2 receiver, and gives the very interesting news that he has heard 36Z and 102C on 7 mc, post-war. This, surely, is a monument to operating ability and patience! Of course, 7 mc is a DX band; if only some of that slimy carpet of local froth could be cleared off you would all be amazed to find what is underneath it. It's the difficulty in looking under it that keeps so many off the band—including your Scribe.

RADIO UR "C" SIG.RST DATE TIME WX XMITTER RCVR ANT GRM. LONGUEUIL QUE. CANADA MARC. REMARKS 8ST 73 G.R. MONTGOMERY OF PSE QSL OM TNKS XZO 109" ST CHARLES W. LONGUEUIL QUE

^{* (}According to the latest Post Office Gulde, "All countries, except a few unimportant territories, are included in the Universal Postal Union. . . "—Ed.)

A. Bannister (Manchester) comments that Java is being put well on the map again by PK2RK, on 28550 kc 'phone—best heard about noon. Another good one is ZP8AC (28450), there at about 1730. An idea for DX-jaded listeners is put up by R. L. Skelton (London, S.E.12), who says "How about collecting small islands?" He goes on to quote SM1MM (Gottland), D2IZ (Sylt), G3ARL (Isle of Wight). Then he mentions an unusual "phoney," who was heard on 14 mc calling "CQ 10, this is CR 10 JI on the island of Timor," and a little later was heard calling "CQ DX 10, this is EK1AA calling." The things some of these gentry do!

E. J. Allaway (Smethwick) sends a list of 3.5 mc 'phones, and adds that most of them were heard working G8VB, who only needs two more States for a WAS on that band! J. M. Graham (Glasgow) wants to know which Zone VE8NB (Resolution Is.) is in? (Our atlas isn't good enough.) And he suggests that the recent query about HE1AB is answered by "HZ1AB," who will insist on saying

"Zee."

N. S. Beckett (Lowestoft) sends a card from ZS4P (Basutoland) and the QTH's of ET3AE and ET3AF. And he says he has heard ME6AB (not MI6AB). Now who the heck . .? MI6AB is now MD3AB; MI6ZJ is MI3ZJ. Who, or what, is ME6?

Shorts

A lament from T. H. O'Dell (West Wickham) about the SLP—too many locals—is accompanied by a query on X1MT—any help, please? D. W. Waddell (Nantwich) wants the Zone of VE8OW. R. L. Miller (Bromley) wants a 1.7 mc SLP—he's got it coming. E. W. J. Field (Watford) says that the Hallicrafters station will be in Uganda with the call VQ5GHE. Queries from W. D. Hart (Rugby) answered herewith: VK3DQ is Zone 30, and UAØKGA is Zone 19. R. J. White (Greenwich) sent reports to FT4AI and HK1DZ when they were both failing to raise anyone—he got cards back!

"David" (Whitley Bay) found KG6AW/VK9 on 28 mc for a welcome newcomer, and he was waylaid by the mysterious C4CA, who, I am afraid, is just too good to be true. Most consistent signals of the month with him were VU2GB, CR9AG, VS7PS and ST2CH. K. Parvin (London, W.1) would like to find someone who can give him some information on the R.1116 receiver; if anyone can help, K.P.'s QTH is 33 Thayer Street.

M. E. Bazley (Birmingham) would like QTH's for ZD3AS, MD3AB (in list) and FK8VB. L. Corder (Hadleigh) has logged UB5KAG on 14 mc 'phone—probably a new 'phone country for those who want it. K. R. Toms (Boreham Wood) has topped the 100 mark on 14 mc 'phone only. He mentions VP2GG (\$8 with 15 watts input), PZ1J, YS3PL, XZ2ST, VO2BN, HC2KJ. He would like the QTH of VP2KS (St. Kitts).

I. E. Alfrey (Chiswick) has spread all over the States on 3.5 mc, but says he had a look over "dear old twenty" and found HH2CW, EP2L, ZP8AC and CP5EP. And CE3AE at S9 plus was making the speaker jump off the table. N. Druce (Shirley) queries XF1A (genuine!) and remarks that the silly season for 28 mc seems to have arrived early. On some nights W2 and W8 have been in at 2200, but, on the other hand, on February 28 the W6 and W7 stations were filling the band in the early afternoon.

D. G. Barson (Kingsbury) likes 28 mc, and logged W2WMV/C9 (Manchuria, by the way, not Korea, as he says!), and heard VQ4EHG striving for a 50 mc contact with W1HDQ. D. A. Pullen (Colchester) collected some nice DX during the month, including VQ8AD, FO8AA, ZC2RG, UAØKGA, Y12AM, ZD1KR and VS1BA (14 mc CW). He also logged CT2AG on 7 mc CW.

L. N. Goldsbrough (Wirral) has found 28 mc disappointing, although there have been interesting periods. He, too, comments on the W7's on February 28. He seems to have heard a welter of VE8 and KL7 stations, and among his more unusual ones are YA3B, MD7DA, UI8AE, and two Sardinians. He suggests that all the more exotic countries do their stuff from Monday to Friday, when he can only spend an hour or so on the air.

Calls Heard

And now about this vexed question! Quite a collection of letters has arrived on the subject, and to boil down the conflicting views concerned would bring us nowhere. A few readers object to the limiting of general lists to one wave-band each month, and say they like covering all bands and sending the list in, and don't care two hoots if they never get published! (But not everyone thinks like this.)

One very sound point is this: That many of our regulars follow the SLP's faithfully, and always send in a nice list, but then proceed to duplicate it in their general list. So this suggests the idea that

	NEW QTH'S			
CE5CU	PO Box 3971, Santiago, Chile.			
ET3AE	Box 145, Addis Ababa, Ethiopia.			
ET3AF	Box 858, Addis Ababa.			
HC1JW	Box 2536, Quito, Ecuador.			
HI2S .	Box 103, Port-au-Prince, Domini- can Republic.			
HK1BE	Box 231, Barranquilla, Colombia.			
HLIAR	APO 901, c/o Postmaster, San Francisco, Calif.			
KL7IT	Box 1994, Fairbanks, Alaska.			
KP4EZ	W. T. McAninch, US Army Forces, Antilles (APO 851, c/o Post- master, Miami, Fla.).			
MD3AB	Box 247, Asmara, Eritrea.			
MD5LR	S/Sgt. L. Richardson, H Mess, 5 B.O.D., Tel-el-Kebir, MELF.			
MD5ZC	L/Cpl. P. L. Bennett, Royal Signals, 8 Inf. Bde., MELF.			
MI3BC	QSL via A.R.I. (Station in Eritrea).			
OX3GF	APO 858, c/o Postmaster, New York.			
VE8OG	Cambridge Bay, Victoria Island, N.W.T.			
VP4TT	Waller Field, Trinidad, B.W.I.			
VP5AL	Government Airport, Kingston, Jamaica.			
VP6CDI	F. J. North, Little Kent, Christ- church, Barbados.			
VQ4EHG	Gatte, Hallicrafters Expedition, Private Bag, Nairobl, Kenya.			
VQ4HGB	Baker, c/o Barclays Bank, Nairobi.			
VQ4NSH	Box 571, Nairobi, Kenya.			
VQ5ELD	L. H. Durham, Post Office, Kampala, Uganda.			
VS7AC	P/O Clee, Naval HQ, Trincomalee, Ceylon.			
XE2C	Box 317, Monterey, Mexico.			
YV5AB	Box 1542, Caracas, Venezuela.			
ZC6WF	Don King, c/o 6 Airborne Divn., Postal Unit, Haifa.			
ZS3F	Box 297, Windhoek, S.W. Africa.			

general lists should not cover the same band as that on which the major SLP was held.

I think this is sound enough; and, at the risk of further rudery, I am going to make a decision in this sense: We will never have SLP's for both 28 and 14 mc in the same month; and whichever of these two bands appears for the SLP will be eliminated from the general lists. This applies, of course, only to those who follow the SLP. In other words—28 mc SLP, no 28 mc general list from those who send SLP lists; similarly for 14 mc.

The Rules

This month I had to leave out several

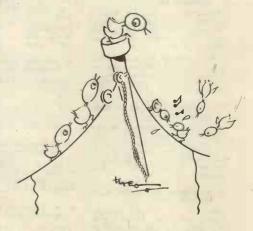
Calls Heard lists for the following reasons:—Lists written vertically (in columns); no name and address on the list; figures left out of call signs; prefixes not alphabetical; lists contained in the middle of letters, sometimes on both sides of the paper! So, I repeat, please send in your lists just as they appear on the Calls Heard pages. Name and address at top; prefixes underlined; type of receiver at bottom; and nothing else. But don't try to condense them into as small a space as possible—spread 'em out! It helps us, and the printers who have to cope with the extremely trying job of setting a feature like Calls Heard.

Set Listening Periods

March 27, 2100-2300 GMT—1.7 mc CW and 'Phone.

March 28, 1100-1300 GMT—28 mc CW and 'Phone (All In). General lists—all bands, but no 28 mc lists from those who take part in the SLP. And, if you like, please follow the precedent set by several readers this month by excluding all "bread-and-butter" stuff from your 14 mc general lists. After all, the object is not to produce the longest possible list, but one that is packed full of meat.

"Zones Heard" claims as hitherto—four sets of figures on a post-card or separate sheet. And everything is wanted, please, by first post on March 31, addressed to the DX Scribe, Short Wave Listener, 49 Victoria Street, London, S.W.1. Until then, Good Luck, Good Listening—and get that call-sign right!



. . . Bit of a racket down on 40 tonight . . .

CALLS HEARD

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

SET LISTENING **PERIODS**

7 mc

Feb. 28, 2100-2200 GMT

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

CW: PY7WS, UB5KAB, UO5AD, W2DCT, 2VZK, 3KBB, 41MN, 4LK, ZC6SM, ZS2EC. (Rx: 0-V-1.)

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

CW: PY7WI, UA6KUA, UR2AC, VE2TM, W1NZO, 1TAH, 2BSS, 2JIB, 3YAW, 4LK, 4MWH, ZC6WF. (2250-2300. Rx: 0-V-1.)

14 mc

February 29, 0800-1000

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

HC2KJ, KG6AI, 3BE, PY6CO, LU2BB, OX3BE, PY6CO, VK2AHA, 2BT, 2NJ, 2WH, 3HG, 3TA, 3TD, 4MW, 4VD, 6DD, ZL2BT, 2GX.

CW: J4AAD, KL7BA, LU8NA, UA1KEC, 9CB, 9KOA, ØKGA, UD6AC, UH8AA, U18AE, VK2CX, 2US, 6DJ, 7DS, ZL2FA, 2QM, 4AG, 4CK. (Rx: 0-V-1.)

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

HA4AB, HC2KJ, KG6AI, MD5KG, OX3BE, 3GF, VK2AGU, 2AHA, 2BTR, 2HK, 2WH, 3HG, 3QA, 3TA, 3TD, 3XE, 4JU, 4MW, 6DD, 6GB, XAFG, XEIAC, ZL2BT, 2GX. (Rx: BC-342-N.)

J. R. Killeen, 101 Derby Road, Hinckley, Leics.

'PHONE: HC2KJ, OX3BE, PY6CO, VK2AGU, 2AGV, 2BM, 2NJ, 3HG, 3TA, 4JU, 4MW, 4VD, 6DD, ZL2AW, 2BT, 2GX. (Rx: 1116A.)

R. A. Hawley, Torview, Brookfield Crescent, Goostrey, Cheshire. 'PHONE: HC2KJ, KG6AI, LU2BB, MD5JH, OX3GF, VK2AHA, 2BT, 2BM, 3DN, 3PA, 4VD, ZL2BT, 3AW.

UA9DP, 9KCA ØKGA, 3JT, ZL2FA. (Rx: VK2TG, 3JT, Eddystone 504.)

A. W. G. Boulton, Faringdon, Berks. 'PHONE: HC2KJ, LU2BB, PY6CO, VK2AHA, 2AGV, 2BM, 3TA, 4MW, 4VD, ZL2BT.

CW: KL7CI, UA9DP, ØKGA, VK2CX, 2EO, 2TG, 3DQ, 3GU, 4CG, 4EJ, 4UL, ZL2FA, 2GL, 3BJ, 3GE, 3GU, 4GA.

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

'PHONE: ZL2BT.

CW: KL7CI, 7OC, UA9KCA, ØKGA, UD6KBA, VE7ZU, ZD4AM, ZL2FA, 3HC, 4GA. (Rx:

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

'PHONE: KG6AI, LU2BB, OX3BD, PY6CO, VE7GQ, VK2AGU, 2AHA, 2HK, 2YF, 3JE, 4MW, 4VD, 6DD, ZL2BT, 2GX.

CW:KL7CA, 7GG, UA9CC, 9KCA, ØKGA, VK2CX, 3JA, 3MC, ZL4GA. (Rx: V55R.)

M. Harrison, 36 Southend Avenue, Darlington, Co. Durham.

'PHONE: FA8WH, HC1FG, VK2AHA, 3TD, 4VD, ZL2BT,

KL7GG. UA9CF. ØKGA, VK3ADE, 3HQ, 3JE, 5JS, ZL2FA, 2VW, 3HC. (Rx: R1155.)

W. B. Harrald, 124 Turney Road, London, S.E.21.

'PHONE: HC2KJ, LU2BB, MD5AP, OX3GF, VK2BM, 2BT, 2NO, 2YS, 3PA, 3TD, 4AHA, 4VD, 6DD, ZL2BT, 4FL. (Rx: R 1155A.)

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

'PHONE: FA8WH, HC2KJ, MD5DA, OX3BD, 3GE, 3GF, PY6JO, VK2AHA, 2BM, 2BT,

2QP, 2YF, 3HG, 3PL, 3SV, 3TD, 4GE, 4MW, 4VD, 6DD, ZL2BT. (Rx: Philips P.C.R.)

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

*PHONE: HC2KJ, VK2HR, 3JE, ZL2BT. (Rx: 2-V-1 mains.)

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

CN8BK, UA1KEA, ØKGA, UB5KBC, SAK, 3PI, ØKGA, UB5KBC, 5KBD, UQ2AH, VK2JT, 2VQ, 3GU, 5JS, ZL2DO, 3GE, 3GU, 4GA. (Rx: Hallicrafters S.20.)

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

HC2KJ, KG6AI, 0X3GF, VESBC, VK2ALA, 2AUG, 2JP, 2NO, 2TI, 3BN, 3DR, 3SB, 3TA, 3WP, 4JU, 4MW, 4VD, 5FL, 6DD, VR2AP, ZL2BT, 2GE, 2GX, 4FO.

3HC, 4DA, 4GA. (Rx: 0-V-1.)

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

'PHONE: VK2AHA, 2MW, ZL2BT.

CW: KL7BR, 7LT, UA1AA, 1AR, 1BE, 1BL, 1CA, 1DR, 1KBA, 1KEA, 1NR, 3AH, 3AM, 3BM, 3EP, 3CA, 3CM, 3KAB, 3PI, 3TA, 4MA, 6LA, 9CC, 9KOA, ØKGA, UB5KBC, 5KBD, UN1AO, UO5AC, UQ2AB, 2AH, UR2KAA, VK2AHE, 2CX, 2MA, 2US, 3BO, 3DM, 3GU, 3JA, XOH1NT, YR51, ZL2BD, 3BJ, 4AC. (RX: Battery 1-V-2. 20ft: indoor aerial:)

E. Nottingham, Lyndhurst, Upper Poppleton, York.

'PHONE: HC2KJ, LU2BB, OX3BE, PY6CO, VK2AHA, 2BT, 3HG, 3TA, 4JU, 4MW, 4VD, 6DD, ZL2BT, 2GX. (Rx: Eddystone 640.)

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

"PHONE: CN8BA, EA9AI, FA8WH, HC2KJ, KG6AI, LUZBB, 2BS, 7FJ, MD5AP, MI6ZJ, OX3GF, PY6CJ, SVIRX, VK2AGU, 2AGV, 2AHA, 2ALP, 2ALS, 2BM, 2BT, 2HK, 2TI, 2WH, 2YF, 3KU, 3TA, 4CG, 4U, 4MW, 4VD, 6DD, XEIAC, ZL2BT, 3AW, 4FO. (Rx: RME 69.)

D. H. Durbin, 84 The Mainway, Chorleywood, Herts.

'PHONE: HC2KJ, KG6AI, VK2ALS, 2BM, 2HK, 2TI, 3SB, 4MW, 4VD, 6DD, ZL2BT, GX. (Rx: G.E.C. BC4650 and EF50 preselector.)

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

'PHONE: CN8BA, FA3GZ, HC2KJ, KG6AI, LU2BB, 7FJ, PY6CO, VK2AGU, 2AHA, 2ALS, 2HK, 3HG, 3JA, 3JE, 3TA, 3TD, 4MW, 4VD, 6DD, ZC6MF, ZL2BT, 2GA, 2GX. (Rx: Marconi CR100.)

W. D. Hart, 5 Barby Road, Rugby.

CW: CN8BK, UA9KCA,

ØKGA, VK3DQ, 4UL, Z1.2GE,

4DU. (Rx: Home-built 2-tube superhet.)

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

CW: CN8BK, KL7CI, MD5AA, UA6AA, 6UC, 9CJ, 9DP, 9KCA, 9KOA, UD6AC, UG6WD, UI8AE, VK2AHR, 2AMZ, 2DI, 2JT, 2RA, 3MC, 4CG, 4VU, ZL2FA, 3GE, 3HC, 4CK, 4GA. (Rx: Modified R1155A.)

J. R. Cooling, 337 Princess Road, Fallowfield, Manchester, 14.

'PHONE: HA4AB, HB9DE, HC2HP, HK4AB LU2BB, OX3BE, PY6CO, VK2AHA, 2HK, 3HG, 4MW, 6DD, XAFG, XE1CQ, ZL2BT, 2GX. (Rx: Modified CR100.)

L. E. Fisher, 45 Botton Road, Chessington, Surrey.

'PHONE: KG6AI, LU2BB, OX3GM, VK2ALS, 3AGV, 3RD, 4DW, 4VD, 6DD, ZL2BT, 2GX.

D. G. Barson, 70 Springfield Mount, Kingsbury, London.

HA4AB, LU2BB, 2AK, MD5JH, L5, VK2HK, 2WH, 4VD, ZL2BT, 3GX, 4FR, 4AS. (Rx: 1155F.)

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

'PHONE: CN8AB, HC2KJ, KG6AI, VK2HK, 3GE, 3HG, 4TM, 4VD, ZL2BT.

CW: UR2KAA, UQ2AH, VK2JT, 2RA, 2RI, 2TG, 6DJ.

GENERAL

3.5 mc

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

'PHONE: PY4QE, 4ZI, VEIGR, 1HB, 1LR, 1PX, 1QW, 2BW, 3FZ, V011, 2BH, W1AAH, 1GIX, 1KCP, 1KQQ, 1KUW, 1MGY, 1PLK, 2BIG, 2CTI, 2CVE, 2DYR, 2ENZ, 2ER, 2HWZ, 2KOX, 2OQO, 2SFT, 2SOV, 3BES, 3FJU, 3IBM, 3KUI, 3OSO, 3PFD, 4BOL, 4BPD, 4COU, 4CPG, 4DCR, 4FMT, 4FQC, 4GHY, 4IWP, 41YC, 4JKY, 4KLL, 4LIL, 5AXI/2, 5BZL, 5CC, 5CUH, 5DNV, 5DVI, 0N, MEXD, 5DVQ, 5EB, 5FNY, 5GG, 5HHT, 5JBZ, 5KJB, 5NUG/5, 7IRX (WyO, 3ECHP, 8HSC, 8KWI, 8MIS, 8NXF, 8CHP, 8HSC, 8KWI, 8MIS, 8NXF,

8QA, 8RHZ, 8VNG, 9GHH, 9GWL. 9JSC, 9NLP, 9OHM, 9UTL, 9UWL, ØAEQ (Mo.), ØEKK (Nebr.), ØKSR (Mo.), ØNNF (Mo.), XFIA.

CW: FA8BG, SIH, KS4AI, OX3MG, TG9)K, VEIKQ, 1RF, 1SW, 3AFW, WIADM, 1AW, 1DLC, 1EFN, 1HNN, 1PEA, 2ANG, 2BXA, 2BXU, 2CUQ, 2HIQ, 2KSL, 3FQZ, 3GAU, 3QV, 3VMR, 4BRB, 4FGC, 4ISR, 4KFC, 4RQR, 4SU, 5KC, 8BHW, 8DMK, 8SAD, 9BMV, ØDWD, XFIA, YU7GR, ZC6BK, ZLIDI, 4DU, 4GA, 4GM. (Rx: 0-V-1.)

E. J. Allaway, 22 Lightwoods Hill, Warley Woods, Smethwick, 41

'PHONE: W3DQ, 4LIL, 5DVI, 5EB, 5HJF, 5HHT, 5JWL, 5KJB, 5MAW, 5NNZ, 5NUG/5, 7CGK, 7DMZ, 7EWX, 7JMQ, 7KHU, 7KYM, 9OHM, 9VMG, 9ZVT, ØAEQ, ØEKK, ØGTO, ØKQX, ØKSR, ØMTS. (February 12-29, 0500 to 0800 GMT. Rx: RSD 100.)

7 mc

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

'PHONE: CO2PC, 6AX, 6ZE, HK3CJ, TG8GL, 9RV. (February 23, 0200-0500 GMT. Rx: V55R.)

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

CW: EA3ZT, FA8IH, MDIE, 5KW, PY2OS, VE1IW, 1KA, 1MU, 2HI, 3BRI, 7ARM, 8NB, 8NN, WIAKW, 1RY, 2FA, 2FCL, 2OQZ, 2WSE, 3BNI, 3EAV, 3JKO, 3RWA, 3VB, 4BYS, 4DHZ, 4EL, 4FNN, 4INS, 4LQJ, 5KGL, 6EFR, 7CDW, 7FA, 7LWB,8ZCJ, 9BOC, 9CXQ, 9DTB, 9JGL, 9JMD, ØGTU, ØMKR, ØNJC, XE1A, ZS1M. (Rx: Hambander.)

14 mc

J. G. Rowland, 203 Beech Lane, Earley, Reading.

*PHONE: CN1Y, 8AG, 8AR, 8BA, 8MA, 8NI, 8MZ, CR6AI, 8FI, CX2BG, EK1AD, 1DI, EL3A, EQ2L, FA1BC, HIIW, HK3DD, HZ1AB, KC4OP, LUZFM, 6AJ, NY4VA, OX3BE, 3CE, PY2AK, 2JU, TI2OA, VE4IOV, VK3DD, 3JD, G80H/VP, VQ4ERR, 4HZ, XAFG, YV1OU, 5AQ, ZA1K, ZBZA, ZC1AF, 1SA, 6JS, ZD2V, ZL3CY. (Rx: 0-V-2.)

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

'PHONE: AR8AB, C4CL, CE2BQ, CO7CX, 8MP, CX2BG, 2CL, EA8EDZ, 9AI, D4AVFJEL, ELZA, 5A, EQ2L, HH2CW, HK1FQ, 4BF, J2AJA, 2RLK, KG6AI, KL7IT, LU2BB, 3AT, 4CN, 5AD, 7CK, 7DG, 7DX, MI6AB, 6CD, OA4M, OQ5AV, MI6AB, 6CD, OA4M, OQ5AV,

OX3BD, 3BE, 3GE, 3GF, 3MC, 3MG, PY1ACQ, 1IK, 2CK, 6CO, 7AD, 7AY, 7VB, VETGQ, 8BC, VK2AGU, 2AHA, 2HK, 2YF, 3JE, 4MW, 4VD, 6DD, VP9F, VS2BD, 2BU, VU2EY, XE1AC, YNILB, YV5AB, 5ABE, 5ABT, 5AY, ZC1AF, 6JM, 6JS, 6LA, ZD1BD, ZL2BT, 2GX, 4AO, 4FO, ZS1CN, 2AF, 3GF, 6DD, 6DW, 6JO.

2AF, 3GF, 6DD, 6DW, 6JO.

CW: CO2BM, CR7AD, 7AG, J2AUA, KL7AR, 7CA, 7GG, KP4DO, LU3EL, 3FP, 4DQ, 8EB, MI6ZJ, OX3GF, 5JJ, OY3IGO, PY1AH, 1GO, 2AJ, 2OW, UA9CA, 9CB, 9CC, 9KCA, ØKAA, ØKGA, OSG, ØSI, UI8AA, UJ8AE, UL7BS, UO5AC, VE7AAD, 8AW, VK2CX, 2DQ, 3KX, 3MC, 4UL, 4VO, 5FL, 5JS, VQ3HGE, 4NET, 4RAW, VU2GJ, YI2FDY, ZL2AW, 2CU, 2FI, 2GS, 2GX, 2ZV, 3AI, 3BY, 3IS, 4GA, ZS1BM, 1DZ, 1EB, 1EO, 1FS, 1HC, 2AV, 5B, 6BY, 6DW, 6EW, 6FN, 6GI, 6GP, 6KO, 6NK, 6OY. (Rx: V55R.)

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

'PHONE: CE2BQ, CO2XF, 7VP, CT2AB, CX2CL, ET3AE, 3AF, FT4AI, HI6CT, HK3AR, KG6AI, OQ5BF, 5CA, ST2CH, TG9RV, TI2OH, TRIP, VK2GU, 3HW, 3JD, 3IE, 3JM, 3SB, 5TR, 6VD, VP2GB, 2KS, 6CDI, 9F, 9Q, VQ4NSH, VS2BU, XE1AC, 1CQ, V24NSH, VS2BU, XE1AC, 1CQ, ZC1AF, 1AL, 6JS, 6JV, ZD1BD, 3BD, ZE2JV, ZL2BT, 2GX, ZS1CN, 1DN, 1T, 3F, 6DY. (Rx: 0-V-1 and 1-V-2.)

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

PHONE: CE2BF, CO2HY, CP5EP, CT2AB, CX2AH, 2BG, CCL, EL2A, ET3AF, HH2CW, 2X, H18WF, HK1BE, 1FQ, 3FO, HZ1AB, J9ABR, 9ABS, KA1AD, AIA, K66AI, LU2BG, 2FN, 3BQ, 3KA, 4DD, 5DJF, 6AJ, 7BG, 7BO, 7DP, 7DS, 7DX, 8FB, MDIA, 1H, 2B, 5AK, 5AM, 5AP, 5FS, 7DA, M16AB, NY4ZQ, OQ5AV, OX3BD, 3GE, 3GF, 3MG, PY1ACQ, 1DC, 1HP, 11K, 1KZ, 1SX, 2CK, 4FT, 4LZ, 4OR, 4QX, 6AW, 6CO, 7AD, 7AY, 7BM, 7DA, 7DM, 7QB, 7VA, 7RIP, UD6BM, VE8MB, VK3JD, 3LA, 3LN, 3SB, 4VD, 6RU, VO2AB, 2BG, 2BN, 2BP, 2GS, 4J2, 4Q, VP2GB, 6CDI, VQ4ERR, 4NSH, VS2BU, 2CD, VQ2BK, 2EY, 2GB, 2LU, 2QV, XZ, 2TH, YV1AU, 3AL, 5AB, 5ABT, 5ABZ, 5AY, 6AI, ZC1AL, 5JM, 61S, 61U, ZD1BD, 3B, ZEJN, ZL1HY, 2BT, 2GX, 3ID, 4AK, 4AO, ZS2AF, 3G, 6CT, 6FT.

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

'PHONE: CE2BQ, 2CC, 3AE, 3CU, 4BP, 5BH, CO2DQ, 21B, 2LY, 2MA, 7CX, 7VP, 8MP, EL2A, 5A, D4AVF/EL, HH2CW, HL1AA, J2AHA, 9ABB, 9ABL, 9ABN, KA1AI, KH6CT, KL7UM, KP4EJ, 4ES, W4LII/KP4, MD7DA, M16AB, 6BC, NY4ZQ, OA4AC,

CALLS HEARD—(contd.)

4BR, 4M, OQ5CF, PK2RK, ST2CH, 2FU, 2GE, TI2MS, 2OA, 2RC, VE5LM, 8MB, VK2AGJ, 2AGU, 2AKR, 2BM, 2GU, 2OQ, 2TI, 2VP, 3AGV, 3BZ, 3EV, 3IE, 3KU, 3LK, 3LN, 3OP, 3TS, 4MW, 4VD, 5FL, VO6AD, VP2DC, 2GB, 2GE, 2KS, 3LF, 4TAX, 4TT, 6CDI, 6JR, 6MO, VQ4KTH, 4NSH, VS1BA, 2BU, VU2AF, 2BK, 2CD, ZC1AF, 1AL, ZD3B, ZE2JV, ZL2BT, 2GX, 3CV, 4FO, 4GA, ZS1B, 1BF, 1BV, 1CN, 1DH, 1DT, 1DY, 1ED, 1GR, 2BV, 2X, 3G, 4D, 6AJ, 6BV, 6CT, 6EU, 6FC, 6J.

R. J. White, 29 Devonshire Drive, Greenwich, S.E.10.

'PHONE: CE2BG, 3AE, CN8AL, 8MB, 8MI, 8MZ, CX2BG, EK1AD, ET3AF, FA3GZ, OX3GF, PY2CK, 2JU, TI2OA, VO2AB, 2BN, ZB2A, ZC1AL. (Rx: Marconi All Wave.)

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

CE2BQ, CO7CX, CX1BZ, 2CO, FO8AA, HC2KM, I6USA, KV4AA, LU4DQ, 5AD, MD7DA, OX3BD, PK2AF, PY1DO, TG9RV, UAØKGA, UD6BM, UO5AD, VK2AGJ, VQ8AD, VS1BA, Y12AM, YV5AB, ZC2RG, ZDIKR, 4AT, ZL2AFK, 2BT, 2BY, 3JA, 4GA, 4IH, ZS2CO. (Rx: R103 Mk. II, plus 3-stage converter.)

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

Nouey, Leeds.

**PHONE: AR\$AB, EL5A, 6A, KP4DV, 4ES, 4GY, MD5GW, 5OV, M16ZI, OQ5BA, PY1JY, 2AC, 2CK, 4RR, PZ1RM, ST2CH, 2FU, 2JF, SV1RX, 1WE, UA1AB, 1BE, VK2ADC, 2TG, 6HL, VO4X, VP2KS, 6JC, 6YB, VU2BF, 2GB, 2GI, YV4AM, ZC1AF, 6AB, 6NF, ZSIP, 1T, 5BZ, 6DW, 6GI, 6JG, 6KS. (Rx: Eddystone 504.)

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

*PHONE: EA8AT, 9AI, EL5A, HC2KJ, KG6AI, OX3GF, PK1VL, PY7AD, VE8AI, 8BC, VK2AGU, 2ALA, 2AMK, 2AUG, 2GU, 2JP, 2NO, 2TI, 2XG, 3BN, 3DR, 3JE, 3SB, 3TA, 3WP, 4JU, 4MW, 4VD, 5AJ, 5FL, 6DD, VR2AP, ZCIAF, ZL2BT, 2GE, 2GU, 2GX, 4FO.

ZLZB1, 2GE, 2GU, 2GX, 4FO.

CW. CPIAQ, J2RLK, 2USA,
3AAD, KL7BA, 7DU, 7LE, 7LL,
7PB, 7UM, KP4GA, OX3BC,
UA9CI, 9CJ, ØKGA, ØKQA,
ØSG, UI8AA, 8AE, VE8NW,
VK2AGW, 2AHR, 2CO, 2HZ,
2JT, 2LZ, 2NB, 3AMP, 3JA, 3VJ,
3WW, 4UL, 5AJ, 5IS, 7DS, YI2AM,
ZD4AM, 4AT, ZLIAT, 1BH, 1BQ,
1DR, 1IH, 1NG, 1OY, 2AO, 2AS,
2BE, 2BH, 2BV, 2FA, 2GL, 2GX,
2IF, 2QM, 2TI, 2UV, 2WP, 3AG,
3AW, 3AZ, 3BJ, 3CP, 3GE, 3GU,
3HA, 3HC, 3LR, 4BN, 4BT, 4DA,
4DV, 4FO, 4GA, 4IW.

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

*PHONE : CE3CT, CN8AB, 8AL, 8AW, 8BA, 8BP, 8BQ, 8BS, 8BV, 8EI, 8MI, 8MZ, CX2BG, EK1AD, FA3GZ, 9JB, KA1AL, LU2FN, MD5JH, OA4M, OX3GF, 3GG, PY2CK, 7AD, 7VB, TF3MB, T12OA, VK2BN, 3HG, VO2BN, 2BP, YV3AY, ZB1AH, 2A, ZC1AF, 6JM, ZS1CN.

28 mc

E. W. B. Aldworth, Longberry,
Bethersden, Ashford, Kent.

'PHONE: CR7AD, CX1GB,
EL2A, HC1KP, HK3BI, J2AMA,
8AFK, 9AAI, KP4ES, M162J,
OA4AK, ST2JF, 2JU, VK2ADC,
6RU, VP5AL, 6CDI, VQ2DH,
2FR, 3PYE, 4GWB, VS7RM,
VU2BG, 2LJ, W2EJV/PK3,
W6FJN/KG6, ZC6MF, ZD44F,
ZS1T, 5BZ, 6GI, 6KK. (Rx:
0-V-2.)

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

'PHONE: ARSAB, CO2GY, FA3JY, HC2KJ, HL1AA, 1AN, 1AR, HZ1AB, J8AAA, 8AAJ, 8AFK, 8ASC, 9AAR, KG6AAF, 6AE, KP4AS, 4CI, 4FP, KY4AD, MD5AF, 5KW, MI6ZJ, PY1JY, ST2FU, 2JF, TG9RV, VK2ADC, 2FP, 2KW, 3KW, 3KX, 5AE, 5GF, 5KL, 6FL, 6HL, 6KW, 6RU, VP4TAI, 4TZ, VQ4EHG, 4ERR, VS7AC, 7FS, VU2AD, 2BF, 2BG, 2BK, 2CQ, 2CS, 2GI, 2LJ, 2QV, W2WMV/C9, 6FMZ/C5, 6JIM/CI, 6PJN/KG6, 6UNH/KG6, 7FS/MM, XEJJE, ZBIAB, 1AC, 1AH, 1KQ, 1E, 1L, ZC1AF, 6JP, 6MF, 6NF, ZL2LM, 3BV, 3CX, 3FL, 3FV, 3GJ, 3LE, 4AO, 4BN, 4CN, 4FO. CW: UAØKFA, VK3MC, 3ZB, 5MP, VS6AC, 6AE. (Rx: Pye BS6 and Eddystone 504.)

D. G. Barson, 70 Springfield Mount, Kingsbury, London.

ARSAB, CN8AB, CO2IJ, CR9AG, EL2A, 5A, 6A, HH1H, 1HH, HZ1AB, J8AAA, 8AAV, 8AFK, 9ABT, KG6CN, KP4CI, 4DV, 4EZ, MD2C, 2JN, ST2JF, 2MP, V4EHG, VK2ADC, 2AMU, 2JN, 6FL, VP4TAX, 4TT, 5AL, 6CDI, VS7AC, 7PS, VU2AF, 2BC, 2BF, 2GI, 2GB, 2LJ, 2MU, 2QV, W2WMV/C9, 3NKS/MM, 5ASJ/MM, 6PJN/KG6, 7FS/MM, 7NJ/MM, ZBIAB, IAC, IAD, IAK, IS, ZCIAF, 6KL, 6MF, 6ZL, ZO2KC, 4AS, ZE2JN, ZL3LE, 3TH, 4BN, 2SIB, 1DH, 5BY, 5OH, 6CY, 6FC. (Rx: 1155 plus 3-valve converter.)

D. H. Simpson, 39 Marina Drive, West Monkseaton, Northumber-

'PHONE: AR8AB, C4CA, CR9AG, EKIDI, EL2A, 5A, F14AI, HK3BI, HZ1AB, KP4AZ, MD2C, 5KW, OQ5BA, ST2CH, 2JF, VK5KL, 6HL, VP4TT, 9F, VQ4ERR, VS7PS, VUZ0B, 2LU,

7BR, 7JU, W3NKS/MM/CR7, ZC1AF, 6JP, 6LA, 6NF, ZD4AL, ZS1P, 6GI. (Receiver: 0-V-1.)

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

'PHONE: CICS, CM9AA, CO2CY, 2EM, 2RW, CXIDB, 2AX, EL2A, 5A, 6A, ET3AE, FA8CF, HCIKW, 2OA, HHIHB, HK3BI, HLIAR, HZ1AB, KGAE, 6CJ, KP4CI, 4DP, 4DV, 4ES, MD2C, 5AF, 5GW, 5KW, 5OV, MI6ZJ, OA4AK, 4CR, OQ5CA, PY1AJ, 2JJ, 4RK, 4RR, STZCH, 2FU, 2JF, TG9JK, 9JW, TIZWR, VE5AZ, 6CR, 6GY, 7EL, VKSKL, 6HM, 6RU, VP4TU, 5AL, 5AS, 6CDI, 6JC, VQ3EDD, 4HRP, VS7AC, 7PS, VU2BF, 2BG, 2CS, 2GI, 2LJ, 2QV, W2DUM/MM, 2TSH/MM, 3NKS/MM, 6ZQM/MM, 7FS/MM, W2JV/PK3, 6PJN, KG6, 6UNH/KG6, XE1A, 1AC, 1CQ, 1QE, XF1A, YV4AM, YR5W, 2C1AF, 6JP, 6MF, 6NF, ZD2KC, 4AS, ZE2JN, ZL3JO, 4FO, ZS1AX/1FD, 1P, 1T, 6DW, 6FC, 6FU, 6LF, 6LK. (Rx: AR88LF)

N. Druce, 13 Nursery Avenue, Shirley, Surrey.

AR8AB, CN8AB, 8BA, CO2IW, EA7BA, EL5A, HC1KP, HK3BI, 3EO, HZ1AB, J9AAI, 9AAR, KP4CI, 4EJ, 4ES, 4FJ, 4FO, KL7FT, KZ5FW, 5RS, MI6ZJ, MD5AF, 5GW, 5KW, 5OV, OQ5BA, PY2CK, 2NX, 4RK, 9AT, ST2FU, T12WR, UA1AB, 1BE VK2KW, VP4TT, 5AL, 5AS, 5RS, 6CDI, 9F, VQ4EHG, 4ERR, VS7AC, VU2GB, 2GI (Pakistan), W2EJV/PK3, W2DUM/MM, W5AXI/MM, YS1AC, YV4AM, ZD2KC, 4AS, ZSIP, IT, 6DW, 6LF.

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

*PHONE: CO2IW, 2JJ, 2OM, CR9AG, HH2CW, HK3BI, 5EM, HL1AM, 1AR, KA1ABX, LU2DM*3DH, OQ5BA, PK2RK, PY1JY, 2JU, 4RR, VP3LF, 4TT, 4TU, 4TZ, 5AL, 6CDI, 6HR, 6JC, 6KM, 6YB, 9F, VS7PS, XZ2KW, YV4AM, ZD2KC, 4AS. (Rx: Marconi CR100).

1.7 mc

Sgmn. Bennett, Wireless Wing
(D & M), RAC Centre,
Bovington Camp, Dorset.

'PHONE: G2DTQ, 5MM, 6JQ, GM6SR, GW2BG.

GM6SR, GW2BG.

CW: D2IJ, 21Q, G2AB, 2ALB, 2ALM, 2BMP, 2BVU, 2CPT, 2DTD, 2FBG, 2FFY, 2FMN, 2GA, 2GX, 2JF, 2JT, 2KV, 2NH, 2OO, 2QI, 2SC, 2YY, 3ACK, 3ADJ, 3AFL, 3HLT, 3HLT, 3HLT, 3BGB, 3BZT, 3CHY, 3CJ/A, 3CLG, 3COF, 3CPJ, 3CUI, 3DCD, 3DKS, 3GW, 3NA, 3PU, 3ZY, 4AQ, 4AU, 4AY, 4DC, 4IC, 4LP, 5NF, 5TZ, 5UF, 5XF, 6AB, 6GV, 6VX, 6ZN, 6ZR, 8LX, 8OD, 8TR, 8VZ, GM5BH. (Rx: 0-V-1.)



THE EDDYSTONE '640' RECEIVER IS NOW FREE OF PURCHASE TAX

The Eddystone '640' Communications Receiver (specially designed for Amateur requirements) is now exempted from Purchase Tax. Moreover, by improved line production, we have been able to fall in with the Government's desire for reduced prices and have lowered the price to £39: 10:0. For a specialised 9-valve receiver—(31 Mc/s to 1.7 Mc/s) with electrical bandspread, crystal filter and all essential requirements—that sells in America! This price represents excellent value.

NEW REDUCED PRICE £39:10:0 NO PURCHASE TAX.

See it at your Dealers—as well as the new additions to the Eddystone Range

STRATTON & CO., LTD., EDDYSTONE WORKS, WEST HEATH, BIRMINGHAM, 31

NOW IN STOCK

LATEST 1948 EDITION

THE RADIO AMATEUR CALL BOOK

New and improved. Contains an up-to-date record of over 100,000 Call Signs, Names and Addresses. WORLD WIDE

We are pleased to inform readers of the Short Wave Listener that the latest, 300 page, 1948 Edition of the "CALL BOOK" is now ready.

Send your remittance to the distributors: 10/-POST PAID Order now as supplies are limited

DALE INTERNATIONAL

Publications Ltd.

105 BOLSOVER ST., LONDON, W.I

Telephone: MUSeum 1023

EVERY AMATEUR NEEDS THIS...

We believe in giving service beyond the sale. That's why we back our products with helpful technical literature. Our new 60-page fully illustrated catalogue is a gold mine of information for all radio "hams." Hundreds of items by well-known makers, including DENCO, EDDYSTONE, BELLING-LEE, Q-MAX, RAYMART, WODEN, AVO, COLVERN, LABGEAR, Q.C.C., ROTHERMEL, J.B., N.S.F., WEARITE, etc., and clear illustrations on fine art paper are given with the necessary technical data and hints. We believe this to be the finest "ham" catalogue of goods available in the country, and we have many testimonials praising our effort in producing in these difficult times a really worth while list. Whether you are a "G" or a S.W.L. you are bound to find plenty of interest. Please send 9d, and a request for catalogue No. 6, and we will mail by return. From no other single source is such Information available.

ORDER YOUR COPY NOW

SOUTHERN RADIO AND ELECTRICAL SUPPLIES

85 FISHERTON ST., SALISBURY, WILTS
Telephone: Salisbury 2108

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 useful-ness of this section, please make your reports as comprehensive as possible.

CIAN P.O Box 409, Shanghal, China. Requests reports on signals heard on any amateur band;

also for C1CH, to same QTH.

CE2BC Av. Bdo Ossandon 275, Coquimbo, Chile.

Operating 14014 kc CW, after 0200 GMT.

AE P.O. Box 1544, Santiago, Chile. Operating CW and 'phone on 3520, 7040, 14181 and 28362 kc, times irregular.

CN8BC Appartement 17, Marrakech, French Morocco. Reports requested on CW operation in band 14050-14100 kc, during periods 0700-0900 and 2100-2359 GMT.

CO2BM 254 Villanueva Street, Luyano, Habana, Cuba.
Operating 'phone and CW in 7, 14 and 28 mc

bands.

CO2KO Finlay 870, Habana, Cuba. Reports requested on phone and CW operation on various frequencies in 14 mc band, during periods 1400-1500 and 2300-0500 GMT.

CR7AF P.O. Box 264, Lourenco Marques, Portuguese East Africa. Operating 'phone and CW on 7130, 14054, 14230 and 28544 kc, during periods 1500-2000 and 0400-0530 GMT.

CR7AL P.O. Box 251, Lourenco Marques, Portuguese East Africa. Operating phone and CW on 14102, 14290 and 28270 kc, during periods 1000-1200 and 1500-2100 GMT.

D2CH QSL via G2HIL, 9 Gill Street, Guisborough, Yorks. Operating CW at LF ends 1.7, 3.5, 7, 14, 28 and 58 mc bands, during periods 0530-0630, 1200-1300 and from 1800 GMT onwards.

D2DY W. S. Robinson, Lialson Mess, 609 HQ CCG, B.A.O.R.3. On 3.5, 7, 14 and 28 mc 'phone and CW, during period 2000-2200 GMT. Also transmitting on 3750 and 7500 kc.

D2IJ Capt. C. G. Stephenson, No. 1 Wireless Regt., B.A.O.R.3. Operating on 3.5, 7 and 14 mc from 1820 kc MO, mainly using CW. Periods; 14 mc, 1300-1800; 3.5 and 7 mc, 1800-2100; 1820 kc, after 2100 GMT.

D2IP OSL to 116, Durrington Road, Clapton, London, E.5. Operating 'phone and CW on 3.5, 7 and 14 mc, during periods 1800-2300 GMT on weekdays, and 1500-2300 GMT over week-ends.

D2IW Clo Sgis. Mess, RAF Sylt, BAFO, B.A.O.R.28.
Operating 'phone and CW, VFO-controlled at HF
end 14 mc, during periods 0600-0800 GMT (CW),
1400-1600 GMT ('phone') and 2300-0300 GMT

(CW). 100 per cent. QSL station.

D2JO F/O N. Kay, "B" Officers Mess, Air HQ (Unit),
RAF, BAFO, B.A.O.R.29. On 14020 kc CW, during periods 0900-1100 and 1300-2200 GMT,

three days per week.

G2ASY 8 Grange Gardens, South Norwood Hill, London, S.E.25. Operating CW on 14 and 28 mc bands; reports from any distance will be QSL'd 100 per

G2BTY Kandersteg, Pond Head Lane, Earley, Reading, Berks. Reports requested on CW transmissions in 28 mc band; exact time of reception to be stated. 100 per cent QSL for all genuine reports. G2CHG 4 Grosvenor Road, Market Drayton, Salop.

Reports requested from any distance on 7020 kc CW transmissions.

G2DHK 1 Cornwall Road, Dorchester, Dorset.

Operating 'phone in 1.7 and 3.5 mc bands, after 1730 GMT; all reports QSL'd.

G2FQR 273 Stone Road, Stafford, Staffs. Reports requested on 7140 and 14280 kc 'phone, operating during periods 1445-1700 GMT on Saturdays, and 1100-1300 and 1400-1700 GMT on Sundays.

G2LT 11A Welwyn Close, Intake, Sheffield. Operating CW and 'phone on 7, 14 and 28 mc, during

evenings and over week-ends.

G3AUT 257 Bilton Road, Rugby, Warks. Operating
VFO-controlled CW on 1.7, 3.5 and 7 mc, during periods 0630-0800 and 2000-2330 GMT. Reports on 1.7 mc requested from distances over 200 miles

only, and 3.5 and 7 mc from outside Europe.

G3BUY 25 Kingston Drive, Flixton, Manchester.
Reports requested on 7015 kc CW, operating
1800-2200 GMT on Tuesdays, Thursdays and
Saturdays, and 1000-1800 on Sundays. Any

distance.

G3BYO 52 Prospect Park, Scarborough, Yorks.
Operating week-ends in CW sections 1.7, 3.5, 7
and 14 mc bands, and on 58 mc after May; all accurate reports QSL'd.
G3CFJ 15 Hillcrest Road, Yeovil, Somerset. Requests

reports from any distance on CW signals received during February on 1753, 3505, 3517, 3540, and

3389 kc. 100 per cent. QSL station.
G3CFO 3 Diamond Terrace, Greenwich, London, S.E.10.
Reports wanted from within arc of circle 140-220 degs, from QTH, on 3510, 3550 and 3580 kc CW; all such reports QSL'd 100 per cent.

G3CYK 52 Wakefield Avenue, Marfleet Lane, Hull, Yorks. Operating CW only on 3513 and 3544 kc, after 1700 GMT most evenings. Reports requested from Europe and G areas to the north of QTH.

100 per cent. QSL station.

GC3GS 6 Greve d'Azette Gardens, St. Clements,

Jersey, C.I. Reports requested on VFO-controlled phone, on or near 3790 kc, operating during period 2200-2300 GMT.

G3TA 327 Parkway, Iver Heath, Bucks. Operating 'phone and CW on 1878, 7011, 7073, 7173 and 7190 kc, during period 2100-0100 GMT; reports particularly wanted on 1.7 mc 'phone.

G4BC/P 35 New Road, Wood Green, London, N.22,
Reports requested when using /P call only on
3523 and 7070 kc CW.
GW4FW 13 Howell Road, Ely, Cardiff, S. Wales.
Reports requested on VFO-controlled 'phone on all amateur bands.

G4JS 1 Marsh Terrace, Darwen, Lancs. Operating CW on 7010 and 7020 kc, during periods 0700-0820, 1315-1400, 1900-2000 and 2100-2230 GMT; reports from outside U.K. only. G5VS Redlands Lodge, Maidenhead Court, Maidenhead,

Berks. Operating CW and 'phone on 1781 and 3780 kc, also VFO-controlled on 7, 14 and 28 mc

GW6GW 56 West Hill, Tredegar, Mon., S. Wales. Operating 'phone mainly, on 1.7, 3.5, 7, 14 and 28 mc bands, during period 1900-2300 GMT.

G8UA 406 Higher Brunshaw, Burnley, Lancs. Operating CW on various frequencies in 3.5 mc band, during periods 1400-1530 on Tuesdays, 2000-2100 on Saturdays, and 0900-1200 GMT on Sundays.

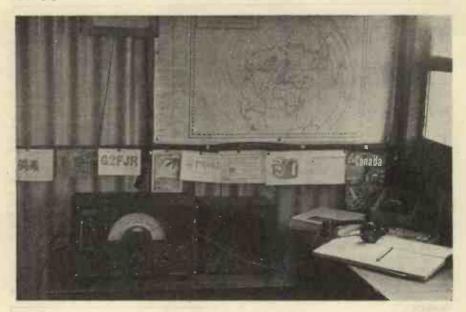
HK1FQ P.O. Box 59, Barranquilla, Colombia, S. America.
Operating 'phone at HF end 14 mc, during periods

1030-1200 and 2200-2359 GMT. LUSCB Garay 2471, Buenos Aires, Argentina. Operating phone and CW on 14048 and 14384 kc, and in 56 mc band; after 0600 GMT. PYIIK P.O. Box 2443, Rio de Janeiro, Brazil. Reports

requested on CW and 'phone working on various frequencies in 7, 14 and 28 mc bands, operating during period 1800-2359 GMT.

VE2KG 109A St. Charles Street West, Longueutl 23, Quebec, Canada. World-wide reception reports requested, with particular reference to quality, depth of modulation, and strength comparable with other VE2 stations. 100 per cent. QSL station.

VS6AY Box 541, Hong Kong, China. Operating CW on 7019, 7030, 7040 and 7050 kc (and harmonics on 14 and 28 mc) from 1100 GMT onwards.



SWL STATIONS

No. 10

THE photograph is a general view of the receiving station of E. G. Cressey, 141 Leverington Road, Wisbech, Cambs.

141 Leverington Road, Wisbech, Cambs.
Unlike many of us, he is fortunate in having a small "shack" built on the side of the garage, and in addition to this mains power is carried from the house by means of an overhead cable. The workshop is entirely private—in fact, the windows look out on to a three-mile stretch of typical Fen country.

Although it may seem that this station has everything to be desired, until the mains were connected in December, all short-wave sets were constructed by hand and run off HT blocks. Furthermore, E. G. C. started by building the very simplest crystal set. Thereafter, he has worked his way through radio via one-valve receivers up to his latest attempt at a three-valve superhet. Unfortunately, this

was the one that refused to work!

The receiver in use now is the Radiovision "Hambander," which has only been in operation for about a month; until the new aerial has been erected it is impossible to give any good idea of the set's capabilities. Even so, on an ordinary inverted-L type of aerial 10 metres has been providing very good 'phone signals on the speaker.

At the moment, a half-wave dipole array is under erection on a thirty-foot scaffold pole. It is hoped this will give improved results and some interesting signals in the near future.

Most of the QSL cards are on the wall to the left of the receiver and cannot be seen on the photograph. No doubt QSL-kings would not think much of the collection, but E. G. C. is not interested in sending a report to every station heard. His favourite band is 10 metres and he only believes in sending QSL's to the best DX stations. Similarly, he is also a very keen listener to DX broadcast and likes to get their confirmation of his reports. So far, this particular side has realised a 100 per cent. return.

To conclude, E. G. C. would like us to say that he is always very pleased to see anybody interested in radio, either receiving or transmitting. Needless to say, it is hoped to be able to turn the shack into a transmitting station early next year. Well, good luck to you, OM.

The VHF End

Individual Reports—Listening Periods
—Aerial Design—Calls Heard

by A. A. MAWSE

FIRST of all, our thanks to those who have written welcoming the introduction of this feature. It is, indeed, gratifying to know that, as a result of our remarks in the March issue of the Short Wave Listener, at least three readers have built themselves 5-metre receivers and heard their first signals on the band.

From our own observations, it appears that GDX conditions during the past few weeks have been superior to what is normally expected in the winter months, and on one occasion, February 29, we were rewarded with signals from up to

200 miles distant.

Reports

But to turn to reports received from readers. First of all, there is a useful contribution from an experienced 5-metre man, P. J. Towgood (Bournemouth). He has been on 58 mc for ten months, and has heard 24 counties. His present Rx, built after experimenting with several different circuits (including a double-superhet) is a 1-V-2, with an EF54 in the RF stage. P.J.T. finds this a definite improvement over an EF50. For power supply, he finds a well-smoothed and stabilised pack to be essential. On the evening of February 28, he heard 17 different stations including G2ADZ (Oswestry), G3PZ (Gloucester) and G4RO (Welwyn). All these are GDX from Bournemouth. Other signals logged by P.J.T. are included in Calls Heard, and we notice among them G3APY (Kirkby, Notts) who must be over 150 miles from. Bournemouth. Can any of you beat this?

Among the newcomers is D. L. Courtier-Dutton (Herne Bay), who made his debut on 58 mc on February 28 with a 3-valve convertor using SP61's, into a 1-V-2 battery receiver. His best DX appears to be G5RP (Abingdon, Berks) at about 105 miles. He remarks that the RF Unit Type 25 is easily converted to five metres by adjustment of the mixer stage turns on that coil. The grid coil of the RF stage should also be re-wound. See the article in this issue.

On the South Coast we have two new VHF enthusiasts—A. J. Slater (Southwick,

Sussex) and R. H. Onslow (Hove), both familiar to readers of the Short Wave Listener as correspondents to other sections of the paper. Now they bring their skill to the VHF's, so we are expecting great things before long, down Sussex way. A.J.S. is using the EF50 TRF described in the December 1946 Short Wave Listener. which we mentioned last month, feeding into the LF side of an SX24. (We are intending to give details of an improved version of this set in the near future.) For aerial, A.J.S. employs an end-fed 132-ft. single wire running E-W, but has a dipole under way. He also has a 400-ft. wire in view for the LF bands and is going to try it on 58 mc, while a 3-element 5-metre beam will also be going up shortly. His best GDX so far is G2XC (Portsmouth) at 50 miles. He asks who is the commercial at the LF end of the band? Any information?

R. H. Onslow is another who has made up that same EF50 TRF unit and finds it works! Within 30 minutes of switching

Five-Metre Counties Heard

Starting Figure, 10

P. J. Towgood (Bournemouth) 24

on he logged G2XC at 45 miles and has since heard G8TS (Farnham) at 60 miles as well as other nearer ones. (By the way, G2XC says he will QSL all reports received from listeners, near or far.) R.H.O. thinks ten counties is going to be quite a tough proposition under normal conditions from his location. Well, luckily, conditions are not always normal and looking at a recent "Counties Worked" list in the Short Wave Magazine we find that G2NM (Bosham, Sussex) has actually worked 18 counties, from what must be a location very similar to that of R.H.O.'s. So nil desperandum, as they say! The chap we pity is the one in central Yorkshire with only one county all round him for distances up to 60 miles! R.H.O. asks that Calls Heard be listed under mileage headings; say, under 50, 50-100, over 100. Yes, we agree it's a good idea so we'll give

it a try and see how it works out.

N. Druce (Shirley, Surrey) has seven counties so should be in the "Counties Heard" list before long. He bemoans missing G2AJ/P who was operating in Bedfordshire on February 28 and 29.

N.D. also reminds us of the practice of

FIVE-METRE CALLS HEARD

N. Barrett, 2 Hayes Crescent, Temple Fortune, London. N.W.11.

Phone: G2AJ, 2CIW, 2MV, 2NH, 2ZV, 3AYA, 3CWW, 3NR, 4KD, 4NT, 5CD, 5MA, 5PY, 5RD, 6IX, 6LX, 6NF, 6VX, 6XM, 8KZ, 8SM. (January 17-25, Marconi 561 with Radiovision Convertor; 5m. dipole in loft.)

N. Druce, 13 Nursery Avenue, Shirley, Surrey.

'Phone: G2AXG, 2MR, 2NH, 2ZV, 3BLP, 4IG, 6LX, 8KZ.

CW: G2CIW, 2FKZ, 2LC, 2MR, 2MV, 2NH, 2WS, 2YL, 3BLP, 3BOB, 3BUZ, 3HT, 4IG, 4RO, 5MA, 5PY, 5RM, 6HX, 6JJ, 6LK, 6LX, 6NB, 6UH, 6VX, 8SM.

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

CW: G2BB, 2FFY, 2MR, 2MV, 2NH, 3BTL, 3BWS, 5MA, 5RP, 6VX, 6XM.

P. J. Towgood, 6 Guildhall Road, Southbourne, Bournemouth, Hants.

G2ADZ, 2AJ, 2AJ/P, 2BB, 2BMZ, 2CWL, 2DBF, 2FKZ, 2HLF, 2MR, 2NH, 2NM, 2XC, 3AAT/A, 3APY, 3AUS, 3BLP, 3CWW, 3FD, 3HT, 3PZ, 3VB, 4IG, 4KD, 4MR, 4RO, 5BY, 5MA, 5MR, 5PY, 5RP, 5US, 6FO, 6JJ, 6NB, 6UH, 6XM, 8KZ, 8TS. (January 27-March 1, on 1-V-2.)

5-metre stations calling "CQ 5" and finishing with AR—5K. This certainly ensures that the signal is not mistaken for a ten-metre harmonic. Such things do happen. There is a station 35 miles from us who puts in an S8 'phone signal on five whenever he comes up on ten. And he only uses 26 watts!

Others who have written to say they are starting up on the band include J. Edwards (Exmouth), E. A. Kimber (Stockton), F. E. Bodiam (Queensborough, Kent) and N. Barrett (N.W. London). So we are looking forward to receiving lists of Calls Heard, and counties claims, from them

very soon.

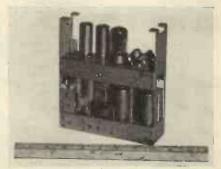
Receiving Contest

In January the Short Wave Magazine ran a 5-metre Contest, which included a section for listeners only. These logs have now been passed to us and we think you may be interested to know how the four competitors who entered on the receiving side fared. Points were scored for distance and number of counties heard. Leading was L. C. B. Blanchard (Coulsdon, Surrey) who logged signals from twelve counties including Devon, G2BMZ (Torquay) being received on three days. In all he recorded 55 different stations. His equipment consisted of a modified HRO using the harmonic of the oscillator (tuned to the 28 mc band), and inserting a new 5-metre tuned circuit in the mixer grid. An EF50 RF stage was also employed. The aerial was a 4-element rotary beam 27 ft. high. Runner-up was F. J. Harris (Sutton) who used a converted Admiralty Responsor Unit, W4790B. As modified this now consists of 6AK5 RF, 9001 mixer, 9002 oscillator, followed by 3 IF stages on 16 mc, into a 6H6 and 6Q7 with 6V6 output. Although the sensitivity is good, F.J.H. says the selectivity is not high enough in his part of the country. This point applies, of course,

to most ex-Service receivers. His best DX heard was G2ADZ and G3APY. All together, he managed 41 stations in 11 counties. The other two competitors were W. H. Pierce (Reigate Hill) and P. J. Towgood (Bournemouth). The former heard G3BK (March, Cambs.) for his best DX, while the latter's "Calls Heard" we published last month.

Listening Periods

We have been asked to arrange SLP's in connection with this feature. At present, we think the best policy is to keep in line with the Short Wave Magazine Activity Week-Ends, which were mentioned last These run from 1500 on the Saturday to midnight on Sunday, once a month. G2XC, who is organising these activity periods, says that good support has been promised by 5-metre operators so signals should be audible in most parts of the country. Activity tends to fall in South-East England during television hours, and the best times for listening will probably be 1800 to 2030 both days during the M.A.W.E., and again after 2230, although it is hoped that there will be something doing all day on the Sunday.



A completely self-contained VHF CC FM Tx/Rx by Tele-Radio Development Co., Ltd.

The next Activity Week-End will be April 10-11, from 1500 GMT on the 10th. Send us your logs of Calls Heard as soon as possible after this date and in any case by the due date given at the end of this article. This is advance warning—we are hoping to see some logs covering the same event on March 13-14, last.

These M.A.W.E's will be a good chance to get those 10 counties and to improve your GDX record. Of course, lists of Calls Heard on other dates are also very welcome. If possible, arrange them under distance sections as suggested earlier in this article—but if you don't know the distances, set them out alphabetically and if they reach us early enough we will work out the distances for you.

Aerial Design

Long-wire aerials, a complete number of half-waves long, can give good results. But such aerials are not omni-directional, having definite directions of major radiation and still more important very definite nulls, and since long wires are usually in a fixed direction, much may be lost in the nulls, even if there is some compensation in the way of increased signal strengths from other directions! The polar diagram of all aerials is much more marked with

VHF GDX than with ionospheric type DX on other bands. This is due to the fact that only near-horizontal radiation is concerned in tropospheric propagation. For this reason even a simple dipole should be made rotatable, for there will be a marked difference between results end-on and broadside.

The enthusiast will of course construct a beam and next month we will give you the dimensions for a simple 3-element beam for 58 mc. You will require three lengths of tubing (duralumin) 8 ft. 6 ins. long and $\frac{3}{2}$ or $\frac{1}{2}$ in. diam, one similar length of $\frac{3}{2}$ -in. tubing, and about 6 ft. of 1 in. tube. It is possible to dispense with the last-named, but get it if you can. Also required will be a sufficient length of 80-ohm twin feeder to connect the aerial to the Rx.

Conclusion

Don't forget those Activity Week-Ends, and be prepared for the European DX which should be with us from May onwards. Now is the time to get ready. Keep us posted with your progress. Latest date for next issue is April 1, but a day or two earlier if possible and the address is, A. A. Mawse, c/o Short Wave Listener, 49, Victoria Street, London, S.W.1.

American VHF Broadcasting Stations

Freq.	Callsign	Power kW	Location	Freq.	Callsign	Power kW	Location
42100	KALW	1	San Francisco.	45100	WHFM	3.2	Rochester, N.Y.
	WNYE	1	Brooklyn, N.Y.		WWZR		Chicago.
42500	WBEZ	- 1	Chicago.		WEAF-FM		New York.
	WBOE	1	Cleveland, Ohio.	45300	WTIC-FM	6.1	Avon, Connect.
42700	KSUI	1	Iowa City.		WFIL-FM	9.3	Philadelphia.
42900	WCAH	1	Buffalo, N.Y.	45500	WTMJ-FM	8.5	Richfield, Wisc.
	KUSC	1	Los Angeles.		WFGG	8.5	New York.
	WIUC	0.25	Urbana, III.	45700	KYW-FM		Philadelphia.
	WBKY	0.5	Lexington, Ken.	45900	WGNB		Chicago.
43100	WFMN		Alpine, N.J.	45000	WQXQ		New York.
43900	WNYC-FM	3.9	New York.	46100	WTAG-FM		Holden, Mass.
	WMTW	31	Sargents Purchase.	46300	KTLO	7	Los Angeles.
44100	WMIT		Clingmans Peak,	46300	WHNF		Cliffside Park.
			Gordon Gray.	46500	KMBC-FM		Kansas City.
44300	WGTR		Paxton, Mass.	46500	WDRC-FM	6.1	Meriden, Conn.
44500	KHJ-FM		Los Angeles.	46700	WABC-FM		New York
	WBRL	8.1	Baton Rouge.		WBBM-FM		Chicago.
	K45SF	10.8	S. Mateo Country.	16000	WBZ-FM	0.2	Hull, Mass.
	WDUL		Superior, Wisc.	46900	WCAU-FM	9.3	Philadelphia.
	WMLL	8.4	Evansville, Indiana.	47100	WBAM		New York.
	WENA	6.8	Detroit, Mich.		WSBF		South Bend,
	WELD		Columbus, Ohio.		************		Indiana.
44700	KSL-FM	0.7	Salt Lake City.	47300	WPEN-FM		Philadelphia.
	WBCA		New Scotland, N.Y.	45500	WABW		Indianapolis.
	WSM-FM	16	Franklin, Tenn.	47500	WBAF	8 - 5	New York.
	WHEF	3.2	Rochester, N.Y.	-	WDLM		Addison.
	WMOT	8.4	Pittsburgh.	10100	KDKA-FM		Allison Park.
	WGYN	8.5	New York.	48100	WIBG-FM	9.3	Philadelphia.
44900	KOZY		Kansas City.	171	WBZA-FM		East Springfield,
	WOWO-FM		Fort Wayne.	40200			Mass.
	WLOU		Detroit, Mich.	48300	WEHS		Chicago.
	WIP-FM		Philadelphia.	48500	WGFM	6.6	New Scotland, N.Y.
	K49LA	7	Los Angeles.	49100	W91NJ	6.2	West Orange, N.J.
	WNBF-FM	6.5	New York State	49500	WAAW	6.2	Montclair, N.J.

FM = Frequency Modulated Station.

CHARLES BRITAIN (RADIO) LTD.

INDICATOR UNIT WITH 6" TUBE

Complete with 6" non-persistent electrostatic Cathode Ray tube, 7 valves as follows: (4) EF50, (3) EB34, contains many useful components, including 12 pot-meters. Tube is sultable for either television or oscilloscope (Type VCR 97), complete in grey metal case, PRICE £2 19 6 size $18'' \times 8\frac{3}{4}'' \times 7\frac{3}{4}''$.

Callers only this item. Diagram can be supplied at an extra charge of 1/9.

COMMUNICATIONS RECEIVER TYPE R1224A

This is a 5-valve superhet receiver operating from 2v accumulator and a 120v high tension and complete with all valves. It covers from I M/c to 9 Mc/s (30 metres to 300 metres) in three wavebands. It is a first-class job with R.F. stage, Muirhead dials. PRICE £4 10 0 Plus 10/- carriage and packing.

R.F. UNIT TYPE 25

This contains (3) VR 65's, 5-way 3-bank ceramic switch, 15 air-spaced concentric trimmers, ceramic coil formers, and other useful items. Could be easily adapted to make 5-metre PRICE 16/6 post free. converter.

TEST SET 74

Consists of a special purpose oscilloscope with 3" cathode ray tube, working directly from 250v 50 cycles A.C. mains. This unit can be very easily converted into a standard scope. PRICE £5 19 6 Plus 15/- carriage and packing.

RII55. Good condition. PRICE £8 8 0, plus, 10/- carriage and packing. (Send for our Components List "S.L.")

CHARLES BRITAIN (RADIO) LTD., RADIO HOUSE, WILSON ST., LONDON, E.C.2. BIS. 2966

INEXPENSIVE BARGAINS

CONDENSERS. 16 m.mfd. Ultra 5/W variable air condensers, ball bearings, Trolitul insulation, new, 5/-. 3-gang 5/W variable condensers, new, 10/-. '0005 variable air condensers, ball bearings, 7/6. AERIALS. 7/122 copper aerial wire, 50ft., 3/-; 100ft., 5/6; 30ft. indoor aerial wire, on reel, 1/-; 30ft. single spiral copper indoor aerial, 1/9; twin with bakelite endpiece and loop, 2/6; Egg and Shell Insulators, 3d. deach. Lead-in wire, rubber covered, 3/- dozen yards. Earth Clips for water pipe fixing, 9d. each. SWITCHES. Dewar key panel type 8-pole C.O.

Earth Clips for water pipe fixing, 9d. each, SWITCHES. Dewar key panel type 8-pole C.O. flush fitting, 5/-. Yaxley 3-pole 3-way, 3/6; 8-pole 1-way, 3/6; D.P.C.O. toggle switch 250 v. i amp, flush panel, 3/3. S.P.C.O. Toggle switches, 2/3. TERMINALS. Belling Lee plated terminals, 5/- doz., heavy bakelite type, 10/- doz. HEADPHONE CORDS. Double 5ft. cords, 2/6 each. Heavy W.D. 5ft. 4-way cord, 2/6. Telephone

flex, single twisted type, 6d. yard. EX-G.P.O. 4-pin telephone plugs with solid bakelite base, as illustrated, 1/- each,

solid bakelite base, as illustrated, 1/= each, postage 3d., 10/- doz.
G.P.O. Connection Strips. Solder tag telephone type, moulded base, 60-way, 3/6.
MICRO MOTORS. Beautifully made. Weight only 10 ozs.; 2" long by 13" dia. A.C./D.C. Ball bearings, laminated fields, totally enclosed, fitted vee pulley. Centrifugal relay speed governor on shaft, removable for second shaft drive. Work off 3 dry cells 4½ volts each. 21/- each.

PARCELS. 7lb. useful oddments for the junk box. All clean, dismantled from Government and other surplus apparatus, 7/6 post free, (Not for Oversegs buyers.)

ELECTRADIX RADIO

214 QUEENSTOWN ROAD, LONDON, S.W.

MORSE CODE Training



There are Candler Morse Code Courses for

BEGINNERS AND **OPERATORS**

Send for this Free "BOOK OF FACTS" It gives full details concerning all Courses.

THE CANDLER SYSTEM CO.

(Dept. S.L.) 121 Kingsway, London, W.C.2. Candler System Co., Denver, Colorado, U.S.A.

> WIND YOUR OWN I.F.'s CHOKES, COILS, Etc.

> > on a

KAYNITE-

WAVE WOUND COIL WINDER

PRICE 50/- (carriage 2/- extra)

Send stamp for details to manufacturers

RICHARD SHEARGOLD & CO., Sunbury-on-Thames

MONTHLY

DX

by

R. H. GREENLAND, B.Sc.

broadcast

Some interesting Australian short wave broadcasting stations have been heard recently. VLQ3, Brisbane, 9660 kc, has been logged with dance music, followed by call at 1345. On another occasion, after ZBW3, Hong Kong, 9525 kc (with excellent signals) had closed down at 1500, another English-speaking station appeared on almost the same channel. This proved to be none other than VLW7, Perth, Western Australia, on 9520 kc. Sports news at 1505 was followed by the Headline News, after which came a final session of dance music. The same station was logged again on February 7 at 2250 with the announcement: "This News comes to you from the A.B.C."

M. Forrest (Laverstock, Wilts.) mentions VLR2, 6150 kc, heard 2015-2020 with musical recordings and the announcement: "This is the A.B.C. National

programme."

A new one to look for in this area is ZM2AP, Apia, Samoa, 7700 kc, with a programme in Samoan on Mondays, Wednesdays, Fridays and Saturdays around 0815-0830. Reports are requested.

Asia

In the Far East, XGOA, Nanking, 11835 kc, has been heard with an English News from 1400 to 1415, followed by the call and direction: "This is the Central Broadcasting Administration, Nanking," and close down. Simultaneously, the News from Chungking has been heard over XGOY on 6140 kc. The writer logged JVW4, Tokio, 9560 kc, with news in Japanese, followed by dance music, at 1425 on February 7, but its signals had faded out by 1450.

Another new broadcasting station is HLKA, Seoul, Korea, 7930 kc, operated by the Korean Broadcasting Association. The schedule is 1100-1330; a three-tone gong is used as an interval signal, and announcements in broken English are made every fifteen minutes. It is understood that an additional frequency of

15900 kc will soon be in use.

World-wide reception of Short Wave programmes

Radio Batavia's broadcasts have been well received over PLS, 10380 kc, during the afternoons. The station closes at 1530 to the strains of the Dutch National Anthem. The same programme can be heard concurrently on 9557 kc. J. P. Burden (Hilsea, Portsmouth), who has sent in a pile of interesting information, notes that YDC, 15145 kc, which also carried Radio Batavia's broadcasts, is often an S7-8 signal. YHN, Djokjakarta, 11000 kc, has again been logged at 2305 with direction: "You are listening to a News broadcast from the Indonesian Broad-

casting Centre."

"The Voice of America" station in Manila, Philippine Islands, has been well received here in the afternoons. On February 8 there was an interesting discussion entitled: "How can Peace be maintained in Palestine?" At 1505 came the final direction: "This concludes our relay of broadcasts from the United States for to-day. This is Manila," and the U.S. National Anthem brought the proceedings to a close. The daily schedule on 11840 kc is 0900-1505, but there is an additional broadcast of United Nations information on 15330 kc from 0730 to 0845. KZBU, Cebu City, 6100 kc, uses a power of 250 watts and broadcasts 0900-1605 daily. Another unexpected signal from Asia was heard recently at 0039 with the announcement: "The time is nine minutes past six (a.m.) and you are tuned to the Forces Broadcasting Service, Radio SEAC, Colombo, Ceylon." The frequency in question was 6075 kc. M. Forrest has logged this one at 0115 with the end of the BBC News, then a "Morning Star" programme. Signals were S9 but with deep and rapid QSB.

More information is to hand concerning Siam. There are two services here, the first operated by the Siamese Publicity Department for listeners overseas, on 825

kc, 5994 kc, and 6130 kc.

The schedule is: 1000-1130, with News in English at 1015 and 1115, and an English talk at 1045. The other service caters for home listeners, is entirely native in character, and is operated by the P & T daily from 1000 to 1145. The frequencies in use are 1000 kc, 4754 kc and 7025 kc.

In India, 19-metre transmitters at Delhi were heard on January 31 at 0830 with the Gandhi funeral ceremonies, and at 0720, on February 12, we witnessed the passing of the sacred white barge bearing the casket containing the Mahatma's ashes towards its final resting place at the confluence of the holy rivers Ganges and Jumpa.

M. Forrest has heard VUM2, 4920 kc, at 1745 with the call: "Madras Calling!" and a subsequent programme of gramo-

phone recordings.

VU7MC is an Indian broadcasting station in the state of Mysore operating on 968 kc (medium-wave) and 6065 kc (shortwave) with a power of 300 watts. There are three programmes daily: 0130-0340; 0830-0940; 1200-1640, with the News in English at 0230 and 1230. It is planned to increase the power to 5 kW shortly; reports are welcomed by: The Akashvani Broadcasting Station, Mysore, India.

Broadcasting Station, Mysore, India.
Radio Tabriz, Iran, has moved from 6090 kc to 6105 kc, radiating on this frequency from 1430 to 1730 daily, with a French news at 1710 and one in English at 1720. L. W. Lowis (St. Leonards) sends the daily schedule for the Lebanese Broadcasting Station, FXE, Beirut on 8036 kc; it is 0500-0615; 1000-1300; 1500-2130, with the English programme

now timed 1500-1600.

Africa

Thanks to D. O. French (Norwich), the writer has logged ZQP, 9705 kc, on numerous occasions between 1615 and 1700, though not on Sundays. The programme usually consists of an English talk at 1615, followed by dance music, with the time at 1630. Then comes a broadcast in a native tongue until 1655: after this you may hear: "This is the Northern Rhodesia Broadcasting station in Lusaka" and a weather forecast. Finally, at 1700, when the time is given as "Seven o'clock", ZQP closes with the National Anthem.

Here is some information regarding two new stations. First, at Pretoria, ZRB is a station operated by the South African Air Force on 7445 kc, 9110 kc and 6210 kc, usually 0030-1100. Reports should be sent to: Telecommunications Training and Development Centre, 64th Air Station, Waterkloof, P.O. Odonata, via Pretoria, South Africa.

J. P. Burden (Portsmouth) reports that he has logged the M.E.L.F. Broadcasting station at Benghazi on 11850 kc with a test transmission and a request for reports. Singal strength was \$5-6. Our information is that this station is now transmitting regularly as follows: 1000-1200; 1600-1800; 2000-2200. It can be identified by the following direction: "This is Your Forces Broadcasting Service, Cyrenaica." Reports can be addressed: No. 7 Forces Broadcasting Service, Benghazi, M.E.L.F.

There is another new station in Angola. This is located at Huilla, some miles inland from Mossamedes in Southern Angola. Operating on 9230 kc, it is on daily from 1000 to 1830. The writer logged this one on February 8; the programme consisted of Portuguese talks, fox-trots, and closed with the Portuguese national anthem. Another Angola station, CR6RA, 9470 kc, with a lady announcer, was well received between 1915 and 2000 on a subsequent evening. In Portuguese Guinea, West Africa, another new broadcaster has appeared on 7948 kc. This is CQM4, Bissau, and the schedule is 2130-2400, with the Portuguese anthem terminating the transmission.

ETA, Addis Ababa, Ethiopia, 15060 kc, has been logged again by the writer, and, as before, on a Saturday. A talk in Amharic was followed by native music, and the

broadcast concluded at 1900.

On February 6, OTM2, Leopoldville, Belgian Congo, was logged at 0510 on 9380 ke with a News in French. This station announces as: "Radio Congo-Belge." There are three French-operated stations worthy of mention. L. W. Lowis (St. Leonards-on-Sea) quoted: "Radiodiffusion Française Région de l'Algérie et des Territories du Sud" in Algiers, operating with 10 kW on 11835 kc. He says that two additional 25 kW transmitters are in course of construction and will probably be in service by the autumn. L. W. L. also mentions Radio International, 34 Rue Goya, Tangier, which operates on 6200 kc; there is an English broadcast on Sundays at 2000. FHE3, Dakar, Senegal, 11712 kc, was logged at good strength with a dance session at 2200 on February 8.

Finally, the writer heard VQ4EHG, The Gatti Hallicrafters Expedition, in the 28 mc amateur band at 1435 on February 15. They were about to leave Nairobi,

Kenya Colony, and move through elephant country to Moshi in Tanganyika, and thence to Africa's highest mountain, Kilimanjaro.

Latin America

J. P. Burden sends word that PZH5, Paramaribo, Dutch Guiana, 5845 kc, has been fair recently, closing each night at 0130 with the words: "Gute Nacht" and the Dutch anthem. R. Iball (Worksop) has received information from ZFY that a new verification card is being printed. This station appreciates reports and replies promptly—the address is: J. P. Davies, Manager, Radio Station ZFY, Georgetown, British Guiana. Brazil has been well received over PRL7, Rio de Janeiro, 9720 kc, and particularly on February 6 with a brass band concert at 0535. P. W. Kennedy (Hunyani Point, S.Rhodesia) has heard PRL7 at 0250 with a sponsored programme featuring the Orchestria Zacheria. PRJ4, Parnaiba, Piau, Brazil, 4825 kc, has been excellent here on occasions around 2120; its programme often consists of fox-trots and the like, despite the somewhat "Radio imposing station direction: Educadora de Parnaiba." Returning to PRL7, R. Iball (Worksop) has heard Frank Sinatra and Dinah Shore in songs from this station before 2230; the call is given frequently: "Radio Nacional en Rio de Janeiro, Brasil." R. I. also men-tions PSH, La Voz do Brasil, 10220 kc, with four deep-toned chimes at intervals. Announcements in Portugusee were made at 2245, then music, and after further directions, the station closed down at 2300.

P. W. Kennedy reports LRZ (Ellay Erray Zeta) on 11950 kc with a lady announcer and closing with a march at 0400. It is interesting to read P. W. K's remarks about reception in Rhodesia at this time of the year; he writes: "At the present time reception during the day is greatly affected by the heat and thunderstorms; during the period 0800-1700 reception above 20 metres is practically

HCJB was logged on his latest frequency of 5995 kc at 0430 on February 6, when the time was given as 11.30 p.m. in Quito,

Ecuador.

We wonder how many of our readers heard HCJB's all-night English broadcast from 0600 to 1100 on February 29? Reports are required for the new 500-watt transmitter in use at 0300-0330 and 0400-0600 daily.

In Uruguay, CXA14, 6055 kc, which is

located in Colonia and uses the slogan: "Radio Electrica" was identified at 0025 on February 8.

Two broadcasters in Chile have been logged; CE1180, Santiago, 12000 kc, was easily readable at 2330 on February 7, with news in Spanish, and CE1174, Santiago, 11740 kc, was heard the next night at 2150 with a relay of a sports event. The station's slogan is: "Radio Nuevo Mundo." Venezuelans have been active in the early mornings-YV5RN, Radio Caracas, 4915 kc, with call at 0535; YV5RU, Ondras Populares, Caracas, 4880 kc, also with its slogan; and YV5RM, Radiodifusora Venezuela, 4970 kc. In the 80-metre band, YV4RP, Valencia, 3460 kc, has also been surprisingly good.

In Central America, YSUA, San Salvador, 6250 kc, and YSR, 6272 kc, in the same city, have both been logged around 0445. The former is a much stronger signal, often with such operatic favourites as the Toreador Song, and closing at 0500 after the striking of midnight by the studio clock. YSR's closing announcement is made at 0455. YSW, Santa Anna, 6000 kc, boasts that its studios are graced by the best marimba band in the country, and YSHQ is another new one in San Salvador on 6510 kc, with schedule 0100-0400.

TGLA, 6290 kc, is the short wave outlet of medium-wave TGL in Guatemala City; HRP1, San Pedro Sula, Honduras, 6350 kc, signed on at 0001 on February 21 with gong chimes and the slogan: "El Eco de Honduras." HRQ is a new Honduras station in the same town and can be heard at 0200 on 6125 kc. In the West Indies, the Dominican stations have ruled the roost. J. P. Burden reports HI2T, 7275 kc, after 2300 with the call: "Por la liberdad y la democracia, La Voz del Yuna, en Ciudad Trujillo, capital de la Dominican a en Norte America.

Others he has identified are HIIR, La Voz del Fundacion, in San Cristobal on 6433 kc, and HI9B, Santiago de los Caballeros on 6390 kc.

The writer has heard HIIX, Trujillo, 6385 kc; HI2A, Santiago, 6783 kc, using the slogan: "La Voz de la Reelecion" and HIT, Trujillo, 6630 kc, all around 2330. J. P. Burden mentions HH3W, Port-au-Prince, 10135 kc, as being the most consistent station in Haiti, with its call in French, English and Spanish just before midnight, our time. COCW, Havana, Cuba, 6325 kc, which belongs to the

DX BROADCAST—CALLS HEARD

SET LISTENING PERIOD 1400-1500, FEBRUARY 22

			SET LIST	ENING PERIO	D 1400-1500, FEBRUARY 22	
M.	E. A. P	Matthews, 63 Evesh	am Road.	Stratford-on-Avon	, Warks.	
	1.	XGOY		Chungking	6145 kc	
	2.	YFA4		Macassar	9350 kc	
	3.	VUD5		Delhi	9590 kc	
	4.	KRHO		Honolulu	9650 kc	
	5.	ZHP		Singapore	9690 kc	
	6.	YHN		Djokjakarta	11000 kc	
	7.	1, 1		Singapore	11735 kc	
	8.	VLG10		Lyndhurst	11760 kc	
	9.			Saigon	11778 kc	
	10.	W. I.W. W. III.		Algiers	11835 kc	
	11.	VUD9		Delhi	11870 kc	1
	12.	KZFM		Manila	11900 kc	
					Rx. V55R	
D	W Kon	nedy, Hunyani Poi	nt Salichur	Southern Phoe	lonio	
E .				J. Southern Knoc		
	1.	January 6	1445	HOID	Manila, P.I.	11840 kc, S9
	2.	January 8	0325	HCJB	Qulto	12455 kc, \$6
	3.	January 10 January 11	0325 2030	CE1180	Santiago, Chile	12000 kc, \$7
	5.	January 21	2025	VLA8	Shepparton	11760 kc, S5
	6.		0355	WGEO	Vienna Sahanautadu	11070 kc, S9
	7.	January 23	0250	PRL7	Schenectady Bio do Inteles	9530 kc, \$9
	8.	January 26 January 26	0310	CE970	Rio de Janeiro Valparaiso	9720 kc, S8 9700 kc, S3
	9.	Janaury 26	0315	LRX	Buenos Aires	9660 kc, S8
	10.	January 30	0225	OAX4Z	Lima	5889 kc, S8
	11.	January 30	0250	COHI	Santa Clara	6450 kc, S9
	12.	January 31	0330	KNBI	Los Angeles	11770 kc, S9
	12.	January Di	0330	KINDI	Rx. GEC (6B) BC.4666. Aeria	1 · 130 ft harizantal
					7.4. OLO (OD) DO. 4000. AETIE	
E,	Wicks,	The Nook, Riverso	lale Roads	Bournemouth.		
	1.	February 22	1415		Singapore	11725 kc, S8
	2.	February 22	1435	VUD5	Delhi	11790 kc, S9
	3.	February 22	1600	XGOY	Chungking	6146 kc, S8
	4.	February 22	1615	7001	Munich	6080 kc, S9
	5.	February 22	2050		Warsaw	6220 kc, S8
	6.	February 22	2045	OLR2A	Prague	6010 kc, S8
	7.	February, 22	2050	VLQ3	Brisbane	9660 kc, \$8
				4.	20,000110	3000 110, 00
R.	Iball, 1	Riddel Avenue, La	angold, Wo	ksop, Notts.		
	1.	February 1	1520	KZRH	Manila	9645 kc, S7-5
	2.	February 1	1815	OTC2	Leopoldville	9745 kc, S9
	3.	February 1	2040	ZYB8	Sao Paulo	11765 kc, S6
	4.	February 8	2130	PRL7	Rio de Janeiro	9720 kc, S7
	5.	February 9.	0410	CFRX	Toronto	6070 kc, S3-1
	6.	February 9	0430	НСЈВ	Quito .	9958 kc, S8
	7.	February 9	0430	НСЈВ	Quito	5995 kc, S6
	8.	February 10	0445	CBFW	Montreal	6090 kc, \$4
	9.	February 14	2230	LRAI	Buenos Aires	9690 kc, S6
	10.	February 15	2150	PR13	Bello Horizonte	5995 kc, S6
	11.	February 21 February 21	2045	WRUW	Boston	17750 kc, \$7-4
	12.	rebruary 21	2100	ZYC8	Rio de Janeiro	9610 kc, S8
					Rx. Bush 5V (Mains). Aerial	2011., centre-tappea
C.	A. Wh	arton, 14 Vicars Te	errace. Han	ehllis, Leeds, 8		
-	1.	January 27	2243	HOLA	Colon	0606 1- 54
	2.		1710	RAD	Colon	9505 kc, S4
	3.	January 28 January 28	2208	SVM	Tashkent Athens	6820 kc, S6
	4.	January 29	2142	F.B.S.		9850 kc, S9 plus
	5.	February 17	2010	VLQ3	Benghazi Brisbane	11850 kc, S5 9660 kc, S6
	6.	February 22	1410	VLQ3	Saigon	11780 kc, S4
	0,	L COLUMIY LL	1-10		Rx. Eddystone 640. Aeria	
					Ave. Zanaystone 040. Ateria	120 /1. 11/2/124-23
· J.	P. Bure	den, 12 Firgrove Cr	rescent, Hil	sea, Portsmouth.		
	1.	February 8	1615	TFJ	Reykjavik, Iceland	12235 kc, S9
	2.	February 10	2005	PZH5	Paramaribo	
	3.	February 12	2252	ZPA5	Encarnacion	5775 kc, S7-8
	4.	February 13	2330	CXA19	Montevideo	11950 kc, S8-7 11835 kc, S7-8
	5.	February 16	0030	PJC1	Willemstad	2318 kc, \$7
	6.	February 16	0040	PJC1	Willemstad	7250 kc, S8-9
	7.	February 16	2320	PLS	Batavia	10380 kc, \$7-8
	8,	February 18	2210	VLW7	Perth, W. Australia	9520 kc, S4-5
	9.	February 23	2000	VLR2	Lyndhurst	6150 kc, S4-5
	10.	February 24	2359	TIPG	San Jose, Costa Rica	9620 kc S8
	11.	February 22	2330	TIGPH	San Jose, Costa Rica	5870 kc, \$7
	12.	February 19	2345	FZF6	Fort-de-France, F.W.I.	9700 kc, \$3-5
	13.	February 24	2230	VP4RD	Port-of-Spain, Trinidad	9625 kc, S7-8
					Rx. Phillips 10V Communication.	Aerial: 20 ft, vertical

Cadena Rojo (Red Network), has been heard with news in Spanish at 2335.

North America

Canadians again provide the bulk of the news here. The European service is now as follows: CKNC, 17820 kc, 1415-2305: CKCX, 15190 kc, 1415-1600 (Sundays 1630): CKCS, 15320 kc, 1600-2305 (Sundays from 1630). M. Forrest has logged CBLX, Montreal, 15090 kc. between 1800 and 2000 with programmes in French, and the call at the quarter-hours: "Ici Radio Canada, CBLX, Montréal." J. P. Burden says the best time for reception of CBLX is 1230-1400. J. P. B. notes CFRX, 6070 kc, soon after midnight with a regular Sunday feature entitled: "On the Air." R. Iball (Worksop) mentions that CFRX was heard closing down at 0537 on February 14 and asking for reports. On February 8, the writer logged CFRX with sacred music at 2315, and identified it by the following direction at 2330: "This is CFRX, Toronto." CJCX, 6010 kc, has been quite loud on occasions with the call: "CJCB and CJCX in Sydney, Nova Scotia." You can hear a programme preview at 2340, followed by an interview with prominent ice hockey players on Sundays.

At 2159½ you may tune to 5970 kc to hear the announcement: "The time is 29½ minutes past six. This is the Broadcasting Corporation of Newfoundland, Stations VONF and VONH at Saint Johns."

J. P. Burden says that KRHO, Honolulu, Hawaii, has been coming in quite well about 1200-1230 on 9650 kc. The English news is given at 1300. KWID, San Francisco, 9570 kc, is usually good for a similar News at 1500, and WGEO, Schenectady, 9530 kc, may be heard with an early morning News in English at 0512. There is information that we now have a broadcasting station in the out-of-the-way country of Greenland. It is located at Godthaab, the capital, and operates on a frequency of 5945 kc, from 2145 to 2245 daily.

Europe

Our good friend Arne Skoog (Sweden) informs us that the Swedish Radio is now conducting a weekly programme in English dedicated to DX'ers around the world. This programme is broadcast three times each Saturday as follows:

aerials and two transmitters each using 12 kilowatts. Two new transmitters of 100 kW power are being built, and these will be used in conjunction with curtains of horizontal dipoles with reflectors. Reception reports on the DX programme and items of short wave broadcast interest are much appreciated, but International Reply Coupons must be enclosed if a reply is desired. The address is: DX Editor, Swedish Broadcasting Service, Stockholm 7, Sweden.

There is a daily English broadcast from Bucharest, Roumania at 1715. The station

In the first of these DX broadcasts, the

announcer stated that Sweden's present short-wave system comprises rhombic

is Radio Dacia Romana, 9255 kc, and it can be identified by the playing of the musical notes: soh, doh, ray, me, fah, me, ray, doh in that order. The writer logged TFJ, Reykjavik, Iceland, 12235 kc, on February 15, in the second of a regular series of Sunday afternoon broadcasts extending from 1615 to 1645. All announcements are in Icelandic, with a mention of: "Utvap Reykajavik," and there is a news in the same language, sandwiched between some fine orchestral and vocal works. Radio Vaticano's transmissions, including the following English broadcasts, 1815-1830 on 5950 kc; 1500-1515 on 6190 kc and 15095 kc, are given by L. W. Lowis (St. Leonards-on-Sea).

J. P. Burden (Portsmouth) confirms my earlier remark that Warsaw III is now using 6215 kc, and that this is the only short wave frequency in use is contained in a communication just received by us from the Polish capital.

A. W. Mann (Middlesbrough) sends a pile of news about PCJ, The Happy Station, Hilversum, Holland on 17775 kc, 15220 kc, 11730 kc, 9590 kc, and 6020 kc. Further details will be given next month.

P. A. Finn (Iver, Bucks) has received a photograph of Oslo on his verification card from the Norwegian Broadcasting Service. The following information is given on the Frederikstad—Kortbolgekringreverse: kaster-9610 kc (31.22 m.)-Call-letters: LLG-Power: 100 kW. L. W. Lowis (St. Leonards) mentions this one and Radio Luxembourg, which is on the air 1100-1330 (15350 kc) and 1630-2400 (6090 kc). Each Wednesday at 1130 you can hear the band of "La Garde Grand-Ducale": Reports should be sent to: M. Emile Pauly, Directeur, Association Radio-Luxembourg, Case Postale 182, Luxembourg.

^{(1) 0745} SBO (6063 kc) and SBT (15155 kc). (2) 1500 SDB2 (10780 kc) and SBT.

^{(3) 0100} SDB2 and SBU (9535 kc).

STILL THEY COME!

APRIL brings still further opportunities for the short wave fan to acquire useful equipment at prices far below its original cost-thanks again to keen buying on the part of M.O.S.

WESTERN ELECTRIC BC733D LOCALISER RECEIVER

An aircraft blind-landing equipment as used by the U.S.A.A.F. Supplied complete with 10 valves, 3 crystals, and built-in 24v Dynamotor power unit. Operates on any one of 6 pre-determined crystal controlled frequencies in the range of 108-120 Mcs. Ideal for conversion to 144 mcs. ham-band. Size 144" x 7" x 48". New and unused. Valve line up 3 W.E.717A, 1 12SQ7, 12A6, 2 12SR7, 1 12AH7GT, 2 12SG7. £6/19/6 carriage pald.

PACKARD BELL BC357 MARKER BEACON RECEIVER

Ideal for control of remote circuits. Operates about 75 mcs. Signal easily altered to 144 mcs. Complete with 2 valves, types 12C8 and 12SQ7. Very sensitive relay incorporated. Circuits provided inside lid of receiver. For 24v operation. Size $5\frac{\pi}{8}$ × $3\frac{\pi}{8}$ × $5\frac{\pi}{4}$. 25/- carriage paid.

MORSE OSCILLATORS

We still have available the very fine ex-R.A.F. morse training and practice set, supplied complete with two valves, which are guaranteed for 12 months. Price complete, ONLY 27/-. Morse keys 2/6, Phones 5/-. Transit cases 2/6. Carriage and Packing, 2/6.



MAIL ORDER SUPPLY CO., Dept. SWL London, E.I 24 New Road

Telephone:

Stepney Green 2760-3906

ORDERS to 3 Robert Street, Hampstead Road, London, N.W.I POST

RECEIVERS—INTERCOMMUNICATORS & DATA

Communications Receiver Type R208

This is a very fine set built with precision; the frequency coverage is from 10-80 mc/s, s.g., 5-30 metres. The receiver with power supply for working off mains or 6v battery and 6' loud-speaker is built on a steel chassis and boused in a steel cabinet. The chassis slides into for working or mains or ow cattery and 5 isour-speaker is built on a steel chassis and notised in a steel chassis sides into the front of the cabinet and has handles for withdrawsi. The circuit is: —Stage of R.F., combined frequency changer and mixer, two stages of I.F. detector, A.V.O. and first A.F. and 6V6 output. The range 10-60 me/s is covered by a three-position wave-changes witch. Other controls include Mutting, Phone jacks, Battery mains on/off switch, A.F gain, R.F. gain and B.F.O. The set will work with open arrial or dipole. The sets, which are in tip-top condition, weigh 80 ibs. and measure 23' x 12½" x 17½".

BC.348. This much coveted receiver has a frequency range of 200-300 Kc. and 1.5-18 a.e.a. Bix position switch brings separate frequency calibrated dial into position and superfine Vernier tuning unit gives 90 turns of tuning for each band—two stages R.F.—three stages I.F.—crystal filter—voltage stabiliser—automatic noise compensation—constant sensitive on all bands—phone and speaker output—all standard 6.3 volt valves—complete with plug-in Dynamotor for 28 volts. Noie this can be removed and standard 6.0 mains equipment an easily based fixed in Its place. for 28 voits. Note this can be removed and standard.
A.O. mains equipment can easily be fitted in its place.
(We will supply details, or do the job if required.)
Brand new and complete. PRICE 528 10s., plus 10fcarriage, plus 10f- packing (case returnable).

INTERCOM. All34 complete with valves 15/-. Or if you want to build a loudspeaking intercom, we can supply a complete kit comprising two loudspeakers in veneered oabinets, the amplifer 1134 and diagram with full instructions. PRIOE 24, post paid.

R1155. We can supply this famous receiver which is doing good service the World over complete with ten valves and in tip-top condition, tested before deepatch. PRICE 212 10s. plus 21 carriage, 10f-of which we will refund if you return the transit case.



Carriage LI extra

Also 21/0/0 should be sent for packing case, this will be refunded just as soon as the packing case is received back.

DATA BOOKS. Copied from official publications, giving circuit diagrame, component values and useful notes; BC.342 — BC.348 — BC.312 — BC.221 — B.208 — B.103A - R.107 - M.C.R.1 - R.1155 - W/S.22 - RT.18 W/S19-B.1116A-all at 2/3 each, also Walkie-Talkie 58, 3/6 .- "Demobbed" Valves, 2/6. WINTER LIST free on application with stamp.

W.D. SALES

(FORMERLY BULL'S EX-GOVT, DEPT.)

Section L, 42-46 Windmill Hill, RUISLIP. MIDDLESEX

J. Holden (York) has asked for further addresses and here they are:

CBC International Service, P.O. Box 1. CKCS.

7000, Montreal, Canada. The Belgian National OTC3. Belgian Broadcasting Service, Leopoldville, Belgian Congo. Radiodifusora Sao Paulo, Rua Senador Feijo 144, Sao Paulo, Brazil. 3. ZYB7.

4. Radio Andorra. Roche d'ells Escolls, Andorra la

Vieja, Andorra.

Tail Points

Here is some later information from readers. M. E. A. Matthews (Stratfordon-Avon) has listened to Radio SEAC's Sunday evening 1830 transmission to the United Kingdom and found that reception was very good on 9825 kc. He notes. too, that Radio Tabriz's signals on 12180 ke were due to harmonic radiation; 6105

ke is now the correct channel.

D. O. French's (Norwich) usual batch arrived just in time to go to press. He thinks H12T, La Voz del Yuna, Dominican Republic, is now using the additional channel of 9740 kc around 2100. D. O. F. has just received a verification (dated January 12, 1948) from the Northern Rhodesian Broadcasting Station ZQP at Lusaka. Channels in use are: 9710 kc, 7220 kc and 3914 kc; power 25 kW. The schedule is: Sundays: 0900-1030 (English); 1530-1630, Weekdays: 1500-1700 (English on Tuesdays and Saturdays only). D. O. F. also includes a list of stations giving mailbag programmes: Radio Ankara, Radio Canada, Radio Moscow, Léopoldville, and The Voice of The Andes. We can add Radio Saigon; has anyone any others?

J. M. Simpson (London N.W.6) sends a budget of news, some of which will have to be reviewed in the next issue. He reports that OTC2, Léopoldville, has moved to 9767 kc, and can be logged 2145 to 2155 with an English programme entitled: "Amongst Friends," including the answer-

ing of listeners' letters.

The response to the recent SOS for reports by Léopoldville has been so overwhelming that it will take months to wade

through the backlog!

A. Baldwin (Leytonstone, E.11) recently logged OTC2 in a broadcast in which one of our readers, F. W. Hardstone (Streatham, S.W.16) was thanked for his "comprehensive report, as it was interesting to our engineers." Well done, F. W. H! A. B. has logged the elusive ZQI, Kingston, Jamaica, 3480 kc, with news at 0200 and close at 0300 with the National Anthem (S8). He also asks about the 7300 ke Swiss station broadcasting International Red Cross information at 2215 and asking for letters from listeners about future programmes. Is this HEU3 on 7380 kc, we wonder?

J. M. Simpson hears "La Voz del Yuna" at 2030 on 9760 kc with an S9 signal, but imagines it could be TGWA relaying

HI2T'S programme.

Just a reminder that all correspondence for this column should be addressed to R. H. Greenland, c/o The Short Wave Listener, 49 Victoria Street, London, S.W.I, and please remember that March 27 is the closing date. Incidentally, the next Broadcast SLP will be on Tuesday, March 23, from 2230 to 2330—frequencies 10000 kc to 3000 kc inclusive, and no Europeans!

DIRECT SUBSCRIPTIONS

Since we still receive almost daily complaints about the difficulty of getting the Short Wave Listener regularly and on time, may we once again suggest a direct subscription as the easy way out? For 16s., twelve issues will be sent you direct by post on publication day (the third Thursday) regularly every month. The time factor, due to the inevitable and unavoidable delays in indirect distribution, mean that many readers do not get their copies soon enough to join in the various monthly activities we run. All we can do is to produce the Short Wave Listener on the due date please don't blame us if you do not get it when expected; if you are a direct subscriber, we guarantee that you receive it on time. Write the Circulation Manager, Short Wave Magazine, Ltd., 49 Victorla Street, London, S.W.1.

IT MAY BE HELPFUL

Several thousand copies of our Principles of Short Wave Reception have been sold since this booklet was first brought out in July, 1946. It is a well-produced publication, of 32 pp. with colour cover, in four chapters covering the essentials of short-wave receiver design and construction. The treatment is essentially practical, and it can be recommended with confidence to the reader who wants to make a start by building something which will work on the short-wave bands.
The price is 1s. 8d. only, post free. Send your order to
the Circulation Manager, Short Wave Magazine, Ltd., 49 Victoria Street, London, S.W.1.

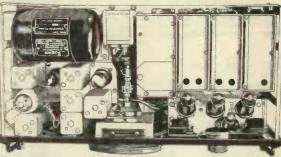


MAINS/BATTERY MOTOR

Fitted reduction gearbox. Suitable for driving medium-size models. Runs off 6 or 12v. batteries or 200-250v. mains (A.C. or D.C.); overall 30/-measurements 8" x 4" x 4" Post free ELECTRICAL EXPERIMENTERS ASSORT-MENT. More than 100 parts, including Resistors Switches, Relays, Plugs, Contactors, Term inals, etc. Post free DINGHY MASTS (ex-R.A.F.). Telescopic Aluminium, 15" long, opens to 9". Very strong, Ideal fishing rod, flag mast, etc. Post free 10/6 MERRIBULL PRODUCTS (Dept. F.F.)., 242 Cromwell House, Wood End, Green Rd. Hayes, Middlesex

BC348 COMMUNICATION RECEIVER





BC348 COMMUNICATION RECEIVER. Made for U.S. Signal Corps but eminently suitable for short wave listening. Frequency range 200-500 k/cs and 1-5 - 18 mc/s. Ample band spread, Vernier tuning—2 stages R.F. 3 stages I.F. Crystal filter. Voltage stabilising, Aut. poise compensation. Constant sensitivity on all bands. Fitted with dynamotor for 24 volts operation, but easily convertible for mains. Brand new perfect receiver, complete with instruction book, \$28/10/0. Carriage, etc., 10/-. Packing case 10/- extra—returnable.

BC221 FREQUENCY STANDA

U.S. manufacture. Accuracy 005%. Frequency range 125 k/cs-20 mc/s. Crystal controlled and temperature compensated. Makes an excellent V.F.O. without impairing its use as a frequency meter.

Price for brand new instrument complete with instruction book,

CALLERS ONLY

Write to Dept. " L "

244 HARROW ROAD, LONDON, W.2. Telephone: Cunningham 0508



Get this FREE Book!

"ENGINEERING OPPOR-TUNITIES" reveals how you can become technically qualified at homefor a highly paid key appointment in the vast Radio and Television industry. In 108 pages of intensely interesting matter it includes full details of our up-tothe-minute home-study courses in all branches of RADIO AND TELEVISION, A.M.Brit.I.R.E.
A.M.I.E.E., City and Guilds,
Special Television, Servicing, Sound-film Projection, Short Wave, High Frequency and General Wireless courses.

We definitely guarantee "NO PASS—NO FEE"

If you're earning less than £10 a week this enlightening book is for you. Write for your copy today. It will be sent FREE and without obligation.

BRITISH INSTITUTE OF **ENGINEERING TECHNOLOGY**

926 Shakespeare House, 17-19 Stratford Place, London, W.I

HERE IS A FURTHER SELECTION FROM OUR FREE COMPONENT LIST "S.L. YAXLEY PATTERN SWITCHES, single bank, 1-pole, 12-way; 2-pole, 6-way; 3-pole, 4-way; 4-pole, 3-way. 5/3 each.

Dank, 1-pole, 12-way; 2-pole, 4-way; 3-pole, 4-way; 4-pole, 3-way, 5/3 each, MAINSTRANSFORMERS, 275-0-275v, 80mA; 6-3v, 3-5A; 5v, 2-5A; 29/6. 350-0-350v, 80mA; 6-3v, 3A; 5v, 2A; 30/-. SMOOTHING CHOKES, 10H 150mA, 300

ohms, 15'-.

EDDYSTONE Metal Cabinet, No. 644, 25'-.

EDDYSTONE Die Cast Chassis for above, No. 643, 8½" x 5½" x 2½", 9/6.

Eddystone "640" Communications Receiver.

New reduced price and free from Purchase Tax. £39/10/-.

POLYSTYRENE COIL FORMERS with dust iron cores, 1" long × 7/16" diam., adjustable core.

VIBRATOR PACK, 6-volt for AR88 Receiver, complete, new and unused. One only, £4/10/-. ERICSSON HEADPHONES, best for DX.

30/- pair.
UNIVERSAL AVOMINOR Test Meter, £8/10/-TAYLOR JUNIOR TEST METER, slightly

used, perfect condition, £6/10/-.
WHARFEDALE 3½" P.M. Speakers, 25/-.
"S" METERS for Eddystone 640 Receiver,

Cat. No. 669, £5/5/-.

(Please include sufficient for postage on above items) Our complete Catalogue "S.L." gladly sent on request to A.C.S. RADIO

44 WIDMORE R? BROMLEY, KEN Phone RAVensbourne 0156

SHORT WAVE BROADCAST STATIONS

Revision 31-12-41-32 Metres

Giving Frequency, Wavelength, Callsign and Location

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

Fre-	Wave-		Fre-	Wave-	4
quency	Length Callsign	Location	quency	Length Callsign	Location
9640	31 ·12 CXA8	Montevideo.	9500	31.58 CJCA	Edmonton.
	YVKC	Caracas,		XEWW	Mexico City.
9635	31 · 13 LRX	Buenos Aires.	9480	31.64	Moscow.
9630	31-15 CKLO	Sackville.	9470	31.67 CR6RA	Luanda, Angola.
	XUPA	Taiwan, Formosa.	9465	31 · 69 TAP	Ankara.
	VUD10	Delhi,	9460	31 · 71 GRU	Daventry.
	VUB2	Bombay.	9455	31.73 LRY	Buenos Aires.
		Rome.	9440	31 · 76 FZI	Brazzaville.
9625	31 · 17 GWO	Daventry.	9437	31 · 77 COCH	Havana, Cuba.
	XEBT	Mexico City.	9430	31.81 CP21	Sucre, Bolivia.
	XGNC	Kalgan, China.	9410	31 ·86 GRI	Daventry.
9623	31.18 CXA6	Montevideo.	9380	31-96 OTM2	Leopoldville.
9620	31·19 TPB24	Paris.		OAX4W	Lima, Peru.
9618	31.19 TIPG	San Jose, C.R.		COBC	Havana,
9615	31 · 20 VLC6	Shepparton,	9370	31-99 EAQ	Madrid.
	VLB9	Shepparton.	9345	32.06 .	Sofia.
9610	31 ·22 LLG	Frederikstad.	9330	32·15 OAX4J	Lima, Peru.
	ZYC8	Rio de Janeiro.	9315	32·20 LRS	Buenos Aires.
	CHLS	Sack ville.	9290	32·29 HI2G	Trujillo, D.R.
		Moscow,	9265	32-37 COCX	Havana.
9608	31.23	Cape Town.	9260	32.40 YFA4	Macassar.
9605	33.23 JKE	Tokio,	9255	32.41	Bucharest.
	HP5J	Panama City.	9248	32-47 CR8AA	Macao.
9600	31.26 GRY	Daventry.	9235	32 48 COBQ	Havana.
9590	31 · 28 PCJ	Hilversum.	9210	32·57 OTH1	Leopoldville.
	WLWO	Cincinnati.	9165	32.73 CR6RB	Benguela, Angola.
	VUD5	Delhi.	9123	32.88 XGOUS	Nanking.
	VUM2	Madras.	9080	33-04 CNR3	Rabat.
9585	31·30 CE960	Santiago.	9025	33·24 COBZ	Havana.
9580	31.32 GSC	Daventry,	8955	33.50 COKG	Santiago, Cuba.
	VLH3	Melbourne.	8910	33.67	Moscow.
	CR7BE	Lourenco Marques.	8825	33-99 COCQ	Havana.
9575	31 · 33	Linz, Austria.		XRRA	Peiping.
9570	31 · 35 WRUW	Boston.	8700	34.48 COCO	Havana.
	WRUS	Boston.	8500	35-29 XGOI	Shanghai.
	KWID	San Francisco.	8320	36.06 HTX1	Managua.
	KWIX	San Francisco.	8190	36-63 YNXW	Managua.
	KZRM	Manila.	8036	37·34 FXE 37·52 PMD	Beirut. Bandoeng.
9560	31·38 JVW4	Tokio.	7995	37.78 PMD	
		Paris.	7940	37.81 PSL	Alicante, Spain. Rio de Janeiro.
9557	31 · 40	Batavia.	7935	38-16 SUX	Cairo.
9555	31 ·40 JHKD	Singapore.	7865 7852	38·21 ZAA	Tirana, Albania.
9550	31 · 42 OLR3A	Prague.	7700	38-96 ZM2AP	Apia, Samoa.
	JO9K	Tokio.	7670	39.11	Sofia.
0545	21 42 MEET	Paris.	7660	39.16 YNDG	Leon, Nicaragua.
9545	31 ·43 XEFT	Vera Cruz.	7625	39-34 YNLAT	Granada.
9542	31·44 31·45 VLB	Rangoon, Burma.	7558	39.69 EAJ43	Teneriffe.
9540		Shepparton.	7500	40.00	Damascus.
	VLC5 LKJ	Shepparton.	7413	40.47	Santiago, Chile,
	LNJ	Oslo, Munich,	7410	40-49 YNAO	Masaya.
		Moscow.	, ,,,		Moscow.
9535	31.46 HER4	Schwarzenburg.	7380	40.65 HEU3	Schwarzenburg:
9000	SBU SBU	Motala.	7340	40.87 XMNG	Nanking.
9530	31 · 48 WRUX	Boston.	7330	40.93	Moscow.
9330	KGEI	San Francisco.	7320	40.98 GRJ	Daventry.
	VUC2	Calctta.	7315	41.01 YSN	San Salvador.
	VLR	Lyndhurst.	7300	41.10	Moscow,
9525	31 · 50 ZBW3	Hong Kong.	7295	41-12 ZOY	Асста.
9343	WGEO	Schenectady,			Port Louis, Mauritius.
	GWJ	Daventry.	7290	41-16 VUD2	Delhi.
9523	31·51	Johannesburg.		VUD5	Delhi.
9523	31 51 VLW7	Perth, W.A.		VUDII	Delhi.
9320	OZF	Copenhagen.		HI2A	Trujillo, D.R.
	SEAC	Colombo.			Munich.
	SEAC	Paris.	7283	41 · 19 ZQP	Lusaka, N.R.
9510	31 -54 GSB	Daventry.	7 80	41 · 1 GWN	Daventry,
	31.54 GSB 31.56 YUC	Belgrade.	7270	41 · 27 HI2T	Trujillo, D.R.
9505	CP38	La Paz.			Rome.
	JVW2	Tokio,			Moscow.
	HOLA	Colon.	7260	41.32 GSU	Daventry.
9500	31.58 ODX2	Biorneborg.	. = 0.5	VUM2	Madras.
9300	31 30 OLAZ	ajo, neodig,			

ALEC DAVIS SUPPLIES LT

18 Tottenham Court Road, London, W.I

Tel.: MUSeum 4539. Business hours: 9 a.m.-5.30 p.m. Mon./Fri.; 9 a.m.-1 p.m. Sat.

STOCK

Atkins Dust-cored Coils. Single "Spire-Nut" fixing. Size 14 in. long by 4 in. dia. Range 4: 800/2000 metres. Tracking freqs. 150, 200, 250 kc/s. Padder 200 pF, Trimmer 60 pF. Range 2: 200/540 metres. Tracking freqs. 605, 1025, 1350 kc/s. Padder 450 pF, Trimmer 75 pF, Range 3: 16/47 metres. Tracking freqs. 7'04, 12:57, 16-8 kc/s. Padder 5000 pF, Trimmer 50 pF. In three types. Activity HF or Open Trimmer 50 pF. In three types, Aerial, H.F. or Osc. All at 3/7 each.

Atkins Standard 456 kc/s I.F.'s for use with the above or similar coils. End or side permeability tuning.

Per pair 16/6.

J.B. Square plane Drive. Oblong clockface type drive, ratio 8-1. Scale $4\frac{5}{16}$ in. \times $3\frac{1}{4}$ in., printed two wavebands and station names. Bronze-finished escutcheon with glass. Price 12/-.

LINES

Wright & Weaire P Coils, all ranges, all types, 3/J.B. Full Vision Drive. Simple reliable friction drive.
Ratio 8-1. Scale size 7\frac{1}{2}\text{ in. } \times 3\frac{1}{2}\text{ in. } \times 1\frac{1}{2}\text{ in. } \times 1\frac{1}{2}\text{ in. } \times 1\text{ in. } \text{ in. } \text{ fin. finished escutcheon and glass. Price 12/6. Goodman celebrated twin cote 12 in. P.M. Speaker for

high-quality reproduction. 15 ohm speech-coil.

Price £8/8/-.

Celestion 5 in, speaker. Weight 1 lb., 3 ohm speech coil. Price £1/3/6.

Celestion 31 in. speaker. Weight 3 lb., 3 ohm speech coil. Price £1/9/6.

Valradio 200 watt D.C./A.C. non-rotary converter, Size 14; in. × 6 in. × 6 in. Weight 18 lb. Specially designed for television and radio receivers. Efficiency over 80 per cent. full load, £14.

SURPLUS

Meters: 0.5 amp. Sangamo Western Thermo-couple meters, 2 in. square face type. New and boxed 7/6 (postage 6d.) 5 mA Metropolitan Vickers moving-coil meter, 2 in. square face type. New and boxed 7/6 (postage 6d.) type. New and boxed

Condensers: Bakelite-cased high-voltage condensers (postage 3d. extra):

extra):— 2 mfd 200 volt D.C. wkg. Size 1½ in. dia. × 3½ in. long, 1/-1 mfd. 2500 volt D.C. wkg. Size 1½ in. dia. × 3½ in. long, 8d. 1 mfd. 1500 volt D.C. wkg. Size 1 in. dia. × 2½ in. long, 6d. 1 mfd. 1500 volt D.C. wkg. Size 1 in. dia. × 2½ in. long, 6d. 03 mfd. 2500 volt D.C. wkg. Size 1 in. dia. × 2½ in. long, 6d. 01 mfd. 5000 volt D.C. wkg. Size 1 in. dia. × 2½ in. long, 6d. 01 mfd. 3000 volt D.C. wkg. Size 1 in. dia. × 2½ in. long, 6d. 01 mfd. 3000 volt D.C. wkg. Size 1 in. dia. × 2½ in. long, 6d. 6d.

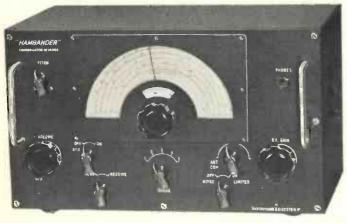
Miscellaneous: Exide new and unused accumulators in moulded case. Size 2½ in. square by 6½ in. high, 2 volt type, 7/6 (postage 1/-).

//o (postage 1/-). Inert cells, 15 volt type. Size 9 in. × 1 in. × 3 in., 1/6 (postage 6d.). Set of four 15 volt cells in sealed can, 5/-(postage 1/-).

Plessey 5 in. Electrodynamic Speaker with 4 ohm speech coil. Complete with transformer for 4,500 ohm load. All brand new, a real bargain for those in need of an extension speaker, 19/6 (postage 1/-).

AT T SURPLUS PRICES — STOCKISTS COMPONENTS AND TEST EQUIPMENT SURPLUS EQUIPMENT OF VALVES. BATTERIES.

You will be Wise to Choose



COVERING ALL HAM BANDS 10-160 METRES AT A PRICE TO SUIT THE AVERAGE POCKET. SEE TEST REPORT IN FEBRUARY SHORTWAVE MAGAZINE. Prompt Delivery

Send 6d. Stamps for illustrated brochure.

H.P. Terms available

THE PRICE

Plus 10/- Carriage and Packing Charge

RADIOVISION (LEICESTER) LTD.

58-60 RUTLAND STREET, LEICESTER. Phone 20167

CLYDESDALE

GM3ASM, GM3BL

The Radioman's Shop For Bargains in Ex-Services

Electronic Equipment

Ex. U.S.A.A.F. B.C. 348 Receiver

A Communications Receiver, covering 200-500 Kcs. and 1-5-18-0 mcs. in 6 switched bands. 8 Valves plus voltage stabilizer, Vernier tuning control, crystal filter, noise limiter, A.V.C., M.V.C., and B.F.O. controls, metal case, 18"×9"×9", finish black, with circuit. Tested in operation before despatch. For A.C. mains 200-250 V. operation. Built-in Powerpack.

Price only £27.10. each

Carriage Paid For D.C. 28 volts operation. Clydesdale's £19.10. each

Carriage Paid Circuit available at 1/3, post free.

BRAND NEW

R.1224A Receiver

Battery superhet with 5 valves, 2/VP23's, FC2A, HL2, 220 P.A. Three wavebands, 30-300 metres (9-0-1-0 mc). R.F. stage, Muirhead dials, 2 output choke capacity and 600 ohms line, in grey finish wood case, $14\frac{1}{2}" \times 9\frac{1}{2}" \times 8\frac{1}{4}"$, with circuit. Batteries required: H.T. 120 volts.

GB 9 volts, L.T. 2 volts.
Clydesdale's £5.15. each
Price only £5.15. Carr, paid Circuit and data for R.1224A at 1/3, post paid.

Stabilized Eliminator

Type A.I. Input 200-250 volts. Output stabilized 120 volts, 30 ma. Double smoothing V.S.IIO. Stabilizer, housed in ventilated metal case, $11\frac{1}{4}'' \times 7\frac{3}{4}'' \times 6\frac{1}{4}''$.

Clydesdale's 47/6 each Post paid

High Voltage Condensers

Transmitting Ceramic Hanged Pot Type

750 pf. 15 K.V.D.C. Wkg. 3\frac{2}{3}" long, 1\frac{1}{2}" dia. max. 750 pf. 15 K.V.D.C. Wkg. 3½" long, 1¾" dia. max.

500 pf. 15 K.V.D.C. Wkg.

500 pf. 15 K.V.D.C. Wkg. 24" long, 14" dia. max. 0-0015 mfd. 4 K.V.P.K. Mod. max. 3" long, 3" dia. 25 pf. 4 K.V.D.C. Wkg. 2\frac{1}{4}" long, 1\frac{1}{4}" dia. max.

Clydesdale's Price only All at 3/11 each

Post paid 36/- per dozen.

BRAND NEW

Mic. and Headphone Assembly in Maker's Box

Carbon Power Mic (Tannoy) in diacast hand piece with press switch. Moving coil headphones (40 ohm. coil) sealed and moisture proof, with rubber earpieces all wired to a 5-point moulded rubber plug.

Clydesdale's Post 15/6 per set Price only

Ex. ARMY Reception Set R.109

For R.T. and C.W. A Receiver, covering 1-9-8-5 mcs. in 2 switched bands, with 9 valves. S.M. tuning, crash limiter, for phone and speaker operation. L.S. fitted. In metal case, 15"×11"×10". Input 6 V.D.C.

Clydesdale's £6.9.6 Special light-weight model, smaller. Case $10\frac{3}{4}" \times 10" \times 9"$. Pen 25 output. Valve in place of L.S., same price.

BRAND NEW Dipole Aerial

Half-wave Dipole Aerial, with reflector, and crossarm, for approx. 6 metres, either vertical or horito metres, ettner vertical or nortangual pracket or mast. Robust construction dipole, 9' 3". Crossarm dipole, 9' 7" with 39' of co-axial cable and co-axial plug.

Clydesdale's 21/- each Carriage

or packed in a stout 28/6 each wood case (non-returnable). Carriage Paid

Co-axial Cable

Coil (12 yds.) first-class co-axial cable, approx. 80 ohms, at special price, 7/6 per coil, post free.

BRAND NEW

Slow Motion Drive (Muirhead)

Ratio 48-1, dia. 3" for 4" spindle drilled for escutcheon, milled edge on main drive, metal locking tongue.

Clydesdale's 7/6 each Price only

Send now for New Illustrated Lists. Please print Name and Address

SUPPLY 2 BRIDGE STREET. CO LTD GLASGOW

'Phone: SOUTH 2706/9

VISIT OUR BRANCHES IN SCOTLAND, ENGLAND AND NORTHERN IRELAND