SHORT WAVE LISTENER



DEVOTED EXCLUSIVELY TO SHORT WAVE RECEPTION

MARCH 1950 VOLUME 4 · NUMBER 4

PREMIER RADIO

MORRIS AND CO. (RADIO) LTD.,

All Post Orders To: JUBILEE WORKS, 167 LOWER CLAPTON RD. (Amherst 4723, 2763, 3111) LONDON, E.S.

152 & 153 FLEET STREET (Central 2833)

207 EDGWARE ROAD, W.2 (Ambassador 4033) (OPEN UNTIL 6 p.m. SATURDAYS)

THE BIRMINGHAM VERSION OF THE "PREMIER" TELEVISOR KIT

IS NOW READY

The price is the same as the London Model

£17 - 17 - 0

Five Easy to Assemble Kits are supplied £3/13/6 £2/14/6 £2/7/6 Vision Receiver with valves, carriage 2/6 ... Sound Receiver with valves, carriage 2/6 ... Time Base, with valves, carriage 2/6 ... Power Supply Unit with valves, carriage 5/-£6/3/0

for Television. The Instruction Book costs 2/6, but is credited if a Kit for the complete Televisor is purchased

Any of these Kits may be purchased separately; in fact, any single part can be supplied. A complete priced list of all parts will be found in the Instruction Book.

20 Valves are used, the coils are all wound and every part is tested. All you need to build a complete Television Receiver are a screwdriver, a pair of pliers, a soldering iron and the ability to read a theoretical diagram.

WORKING MODELS CAN BE SEEN DURING MITTING HOURS AT OUR FLEET STREE EDGWARE ROAD BRANCHES. TRANS-FLEET STREET AND

TV PRE-AMPLIFIER FOR FRINGE RECEPTION AREAS. We can supply the complete kit of parts to make this wide band width Pre-amplifier, using 2 EF54 Pentoles. Powered by the TV kit, it is completely screened. With all parts, valves, chassis, diagrams, etc., 27/6. All parts available separately.

The New Premier Catalogue, now ready, includes all the new TV Kits, Receiver Kits and thousands of component bargains. Send 3d, for copy.

MAGNIFYING LENSES for 6" CR Tubes. Increase picture size to that of a 9" Tube. Best quality, 25/- each.

WHITE RUBBER MASKS for VCR97 Tubes. 7/6 each. 9", 9/6.

NEW 2-VALVE ALL WAVE KIT. 16 to 2,000 metres. Switched Coil Pack ready wired and tested. 2 Mazda HL23 Valves, Phones, H.T. and L.T. Batteries, Coolnelerers, resistors, diagrams and steel case, all ready to assemble, \$3/10/-, including Purchase

METER KIT. A FERRANTI 500 MICROAMP M/C METER, with separate high stability high accuracy, resistors to measure, 15, 60, 150 and 600v D.C. Scale length 12", diameter 24", 10/the complete kit.

GRAMOPHONE AMPLIFIER KIT
Consists of Complete Kit of Parts for a 2½ watt, Mains-operated
2-stage Amplifier for use with any type of pick-up. Volume and
tone controls are incorporated. Output impedance is 3 ohms.
Cat. No. AMPLI47. Price complete, 85/-. For 200-230v mains with valves and diagrams.

TELEVISION AERIALS. The K.A. Loft Aerial for those close to the transmitter. London or Birmingham frequency, 20/-.
Wall Fixing Dipole, 32/6. Wall Fixing Dipole with Reflector, 60/-.
See our Catalogue for complete range.

R107. ONE OF THE ARMY'S FINEST COMMUNICATIONS RECEIVERS. (See W.W., August, 1945.)
9 valves, R.F. amp. osc., frequency changer, 2 IF's (465 kc), 2nd detector, A.V.C. Ar. amp, B.F.O. A.C. mains, 100-250v or 12v accum., frequency range 17.5 to 7 mc/s, 7.35 mc/s to 2-9

mc/s, 3.0 to 1.2 mc/s. Monitor L S. built in. Complete. Write for full details. Price \$12/12/-, plus 21/- carriage and packing.

PREMIER MIDGET RADIO KIT. Due to greatly increased PREMIER MIDGET RADIO KIT. Due to greatly increased production, we are now able to offer this kit at a greatly reduced price. Including an attractive Bakelite case, 12° long × 5° wide × 6° high. The valve line up is 6K7, 677, 6V6 and a Selenium rectifier in the A.C. model; and 6K7, 677, 6V6 and a Selenium rectifier in the AC/DC model. Please state which is required. Both are for use on 200 to 250v mains. The dial is illuminated and the receiver presents a very attractive appearance. Coverage is for the medium and long wavebands. Complete kit of parts with cabinet in brown or ivory and diagrams, £4/19/6, inc. P.Tax.



PREMIER MIDGET SUPERHET KIT. This powerful Midget Superhet Receiver is designed to cover the shortwave bands between 16 and 50 metres and the medium wavebands between 200 and 557 metres. Two models are produced, one for 200-250v AC mains, and the other for 200-250v AC or DC mains, Please state which is required. Both are supplied with the sans, Please state which is required. Both are supplied with the sans 6K8, 6K7, 607, 6V6 and a Selenium rectifier. The AC/DC line up is the same, with the exception of the output valve which is a 25.46. The dial is illuminated, making a very attractive receiver. Complete kit of parts with cabinet in brown or ivory, and diagrams, £6/19/6, inc. P.Tax.

C.R. TUBES VRC517E, 20/-; VCR522, 15/-; VCR112, 15/-; ACR8, 15/-VCR521, 5/-.

CIRCLE CUTTER

Used with ordinary hand brace, will cut circles between \(\frac{1}{2} \) and 3\(\frac{1}{2} \) diameter in aluminium or steel up to 16 gauge, 5/-.

MAINS NOISE ELIMINATOR KIT

Two specially designed chokes with three smoothing condensers with circuit diagram. Cuts out all mains noise. Can be assembled inside existing receiver, 6/- complete.

THE SHORT WAVE LISTENER

A MONTHLY MAGAZINE FOR THE LISTENING AMATEUR

VOLUME 4

MARCH 1950

NUMBER 40

Conducted by the Staff of The Short Wave Magazine.

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

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

The British Short Wave League is associated with the Short Wave Listener. Inclusive BSWL membership 17s. 6d. (Half-year 9s.)

All editorial and advertising matter should be addressed to The Short Wave Listener, 53 Victoria Street, London, S.W.1.

3

i

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

CONTENTS

MARCH 1950

Editorial	97
R.A.E. Questions	
Answered, Part II	98
" Pse QSL"	102
Have You Heard?	104
Country List by Prefixes	108
Calls Heard	113
Broadcast Station	
List, Revision	
49.69-62.73 metres	116
SWL Stations-No. 30	117
VHF End	118
Be A Good SWL	121

122

DX Broadcast

EDITORIAL

Competition

Taking an objective look at Amateur Radio, one cannot fail to see the extent to which the competitive angle has been developed during the past few years.

There are those—and their opinions are worthy of respect—who regard the competitive aspect of the game as tending to bring it into disrepute and so likely to be harmful to Amateur Radio as a hobby. On these grounds we are sometimes castigated by well-meaning readers who feel it their duty to point this danger out to us.

Now, while there is obviously much to be said for both sides on an issue of this kind, the essential truth of the matter is that a high standard of achievement can best be obtained by encouraging keen competition—it is true of all walks of life. In turn, the striving for high achievement encourages efficiency, both personal and technical. The net result is Progress, even if certain undesirable characteristics (latent in the human race) are inflamed thereby.

As Amateur Radio must progress if it is to live, it has always been our policy to maintain competitive interest in those various aspects of Amateur Radio to which the competitive factor can usefully be applied.

But this does not necessarily mean that everyone, everywhere, should be trying feverishly to outsmart his neighbour. These competitive activities can all be followed in moderation, or not at all, as the individual feels inclined. There are, indeed, many who make their own way along the paths of fascination offered by a great scientific hobby such as ours without feeling the slightest urge or need to join in on the competitive side.

R.A.E Questions Answered

FROM THE MAY 1949 EXAMINATION

PART II

by THE OLD TIMER

(Here is another selection of questions, with their answers, the like of which can be expected in the next Radio Amateurs' Examination. It is not suggested that these specimen answers would have been the only way to satisfy the Examiner, in the sense that there are several ways of answering the same question. And this is our last opportunity to remind readers at home that applications to sit the May 1950

R.A.E. must be in by March 1.—Ed.)

QUESTION 2. What type of message may be exchanged with other amateur stations? For what purposes is the use of the station prohibited?

(Examiners' Report: "Very well done by practically all candidates.")

ANSWER: Messages exchanged with other amateur stations must relate to the private (but not business) affairs of one or both of the amateurs in contact, and they must be in plain language. Test records (e.g. modulated tones) may be used, and ordinary gramophone records can be employed for test purposes but are limited to one record per day, with a playing time of less than ten minutes.

The use of the station for advertising, business purposes, sending or reception of news, sending or reception of messages from persons other than the two amateurs in contact, sending or reception of broadcast programmes, sending or reception of social or political propaganda is forbidden.

The licensee is not allowed to receive payment in any way for the use of the station.

QUESTION 7. Describe a method of obtaining the high-tension supply for an amateur transmitter from alternating current mains. Include particulars of the smoothing circuit. Illustrate your reply with a diagram.

(Examiners' Report: "Very well done by all candidates.")

ANSWER: The power supply described and illustrated is intended to supply the hightension for a final PA stage capable of running at about 100 watts and using, for example, a pair of 807 valves in push-pull. The HT available is roughly 550v at 180/190 milliamps, and a tapping for the screen-grid voltage has also been provided. It is recommended that the preceding stages of the transmitter—

master oscillator, doublers and buffers—should be supplied from a similar unit of smaller type. For simplicity only the one power supply is shown.

This is entirely conventional and consists of a full-wave rectifier and a single-section filter with capacity input. Such a filter, used into a load resistance of not less than 10,000 ohms, reduces the percentage of ripple to about 0.05; with a load resistance of 5,000 ohms not more than 0.1 per cent. of ripple is present.

Assuming that a voltage of 500 DC appears across the second smoothing condenser C2, the two 25,000-ohm resistors R1, R2 will together take a drain current of 10 mA and are therefore conservatively rated at 5 watts each. The HT terminal +1 is used for screen voltage supply and therefore increases the current flowing through R1.

The chief points to note in a simple power supply such as this are (a) Adequate smoothing; (b) The provision of a double-pole switch in the mains input; (c) The fitting of a warning lamp across the transformer primary; and (d) The continuous use of a bleeder (formed in this instance by R1 and R2) across the HT output terminals.

It is suggested that the earlier stages of the transmitter be fed by a similar power supply, the transformer of which is rated at 250-0-250 volts. Screen supplies for these valves may well be arranged by potential dividers within the transmitter itself.

QUESTION 8. What do you understand by "overmodulation"? Describe a simple modulation meter and explain how it is used to indicate depth of modulation.

(Examiners' Report: "First part of question fairly well done by most candidates. Very few answered the second part correctly.")

ANSWER: To describe what is meant by "over-modulation" it is first necessary to explain what is meant by "full" or "100 per cent." modulation. When an RF carrier-wave is amplitude-modulated by speech, music or tone, the amplitude of the carrier-wave is made to vary upwards and downwards, following exactly the audio frequencies that are being superimposed upon it.

Modulation is said to be "full" when the positive peaks of the modulating wave-form

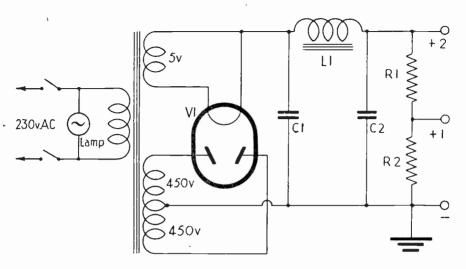


Fig. 1. Circuit for a suitable power supply unit (Ques. 7).

increase the carrier wave to twice its normal amplitude, the negative peaks then reducing it to zero.

If the amplitude of the modulating signal is now increased further, it is obvious that the positive peaks will reach a value of more than twice the carrier amplitude, and that the negative peaks will cut off the carrier altogether. A downwards swing of the modulation will actually produce a complete "break" in the carrier-wave, and it is these breaks that cause the objectionable distortion characteristic of over-modulation. The radiation of harmonics of the modulation frequencies, as well as all sorts of spurious frequencies and transients, will also cause serious "spreading" of the transmission.

To keep a continuous check on modulation percentage, a simple device such as that shown in the diagram (Fig. 2) may be used. With the switch S in the left-hand position, and the input loosely coupled to the output circuit of the transmitter (or to the aerial), an arbitrary reading on the meter will be derived from the carrier-wave, the RF being rectified by the first "crystal-diode," X_1 . The setting of R_1 can be adjusted so that the normal carrierwave gives a full-scale deflection on the meter.

The switch S is then thrown to the right, and the modulation applied to the carrier. The meter will now read zero when the modulation is zero, and the 100 per cent. setting will be shown by the same deflection as was formerly caused by the carrier wave. (The meter is now reading on audio frequencies, across the second crystal diode, X2). Such a

TABLE OF VALUES

Fig. 1. The HT Power Supply Unit

C1, C2 = 8 μ F, 500V working L1 = 12-henry 200 mA choke R1, R2 = 25,000 ohms, 5 watt

V1 = 57.3, or 5U4G

simple instrument can be calibrated, with a little care, to indicate percentages of modulation fairly accurately, but its main use is in showing a very definite reading which represents 100 per cent., and precautions can, of course, be taken to see that this setting is never exceeded (or even too closely approached). Failure to show a zero reading, when in the "audio" position, indicates the presence of ripple or undesirable noise on the carrierwave.

QUESTION 4. Discuss the advantages and disadvantages of a tuned radio-frequency and a superheterodyne receiver for amateur reception on the 14 mc band.

(Examiners' Report: "Well done by most candi-

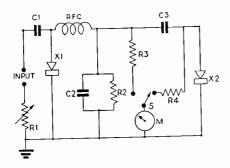
ANSWER: Bearing in mind the usual conditions obtaining on the 14 mc band (or, in fact, any amateur band) to-day, it is very difficult to advance one single point in favour of the TRF type of receiver. Such a receiver usually scores over the superheterodyne for fixed-frequency working and for use in which extremely good quality of reproduction is desired. When designed for fixed-frequency use, RF stages may be added at will, using push-pull circuits and so on, to produce an

enormous amount of gain with complete likewise the circuits may stability; staggered to give any desired band-width.

This kind of requirement, however, is hardly ever suitable for the average amateur, whose chief interest is communication (either on CW or telephony) in various parts of the frequency-band, with other amateurs whose signals may be very weak and subject to severe interference.

The requirement is therefore for a receiver with easily adjustable selectivity, which must be very sharp indeed in the "maximum selectivity" position, sacrificing all pretence of high-fidelity reproduction under such conditions.

It must also be easily tunable with singleknob control, and it must be instantly switchable for CW or telephony reception. In this the modern quartz-crystal superhet, sometimes using double-conversion (i.e. two IF channels), excels. Variable selectivity is easily



provided, the ultimate sharpness being provided through the crystal filter. A phasing control applied to the latter makes possible the tuning-out of one beat-note, whether on a CW or telephony transmission; and the tuning is a single-control adjustment all the

The chief use of a TRF set to the amateur is for portable work, the set then being quite small and probably using only one RF stage. Under such conditions—particularly for CW work-it may well be capable of giving an excellent performance, though making no great claims to selectivity. The current consumption, both for heaters and HT, may be made extremely low, and, of course, if limited to battery power supplies of small size, such a set is probably the only possibility.

For unrestricted use, however, the well-

designed modern superheterodyne has usurped all the former functions of the TRF receiverparticularly where a band such as 14 mc is concerned.

TABLE OF VALUES

Fig. 2. The Modulation Level Indicator

 $C1 = 50 \mu\mu F$

C1 = $0.01 \mu F$ C2 = $0.01 \mu F$ C3 = $0.1 \mu F$ R1 = 10,000 ohms variable

R2, R4 = 50,000 ohms

R3 = 150,000 ohms

X1, X2 = Crystal diodes $M = 0.0 \cdot 1 \text{ mA meter}$

RFC == 2 mH RF choke

Fig. 2. Circuit for a modulation level indicator, as described in Question 8.

S/W BC FROM EGYPT

It is reported that the Egyptian Government has placed a contract for the supply of two high-power short wave broadcast transmitters with Standard Telephones & Cables, Ltd., of London. These are twin-channel units for operation in the 13-49-metre BC band, and have a power output of 100-140 kW. The transmitting point will be at Abu Zabal, just outside Cairo.

STANDARD FREQUENCY TRANSMISSIONS

The Department of Scientific and Industrial Research announces that with effect from February 1, an experimental standard frequency service of high precision was put into operation for the purpose of improving calibration facilities in the European area. Technical responsibility for the service has been assumed by the GPO, and transmission is from Rugby, with continuous monitoring at the National Physical Laboratory. Since the service is experimental and exploratory, and the possibility of mutual interference between WWV and MSF has to be considered, the times and frequencies are at present restricted to: 60 kc (1029-1045); 5 mc (0544-0615); 10 mc (0629-0700). The D.S.I.R. announcement, while regretting the inconvenient times (GMT) at which the HF transmissions are being made, asks for reports on them to The Director, National Physical Laboratory, Teddington, Middlesex,

with particular reference to interference from WWV. All MSF's transmissions are being made with an input of 10 kW.

JOIN THE LEAGUE!

The British Short Wave League is a membership association open to all in any way interested in short wave radio. The League is associated with the Short Wave Listener, in which the BSWL Review (for League members only) is incorporated.

> For Further Information and Form of Application write:

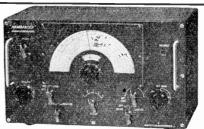
> > The Manager.
> > British Short Wave League. 53 Victoria Street, London, S.W.1.

combined (Specimen copies of the Short Wave Listener and BSWL Review, price 1s. 6d. post free—limited number only.)

" HAMBANDERS "

" HAMBANDERS "

" HAMBANDERS "



WILL BE ROLLING OFF THE ASSEMBLY LINES AGAIN IN MARCH !!! Constant demand has forced us to increase our production capacity and re-introduce this "DOUBLE WINNER" (I.S.W.W. DX CONTEST WINNER 1948 AND 1949) COM-MUNICATIONS RECEIVER. THE "HAMBANDER" is the only new FULLY GUARAN-TEED RECEIVER specially designed for the HAM and SHORTWAVE LISTENER covering the 10 METRE DX and all other HAM BANDS at a PRICE BELOW £49 WE GIVE YOU THE NEW "HAMBANDER" MODIFIED FOR BOTH A.C. MAINS OR EXTERNAL VIBRATOR UNIT OPERATION

FOR £6-7-6 DEPOSIT AND 12 MONTHLY PAYMENTS OF £1-15-3 (8/9 weekly) CASH PRICE £25-10-0

Please Note that, owing to the LARGE EXPORT DEMAND for our "COMMANDER" Receiver, quantities of "HAMBANDERS" will be LIMITED SO YOU ARE ADVISED TO ORDER WITHOUT DELAY SEND 21d STAMP FOR ILLUSTRATED BROCHURE

RADIOVISION (LEICESTER) LTD., 58-60 RUTLAND ST., LEICESTER.

PHONE: 20167



Get this FREE Book!

ENGINEERING OPPOR-TUNITIES" reveals how you can become technically qualified at home for a highly paid key appointment in the vast Radio and Television industry. In 176 pages of intensely interesting matter it includes full details of our up-to-the-minute home-study courses in all branches of RADIO AND TELEVISION, A.M.Brit.-I.R.E., City and A.M.I.E.E., Guilds, Special Television, vicing, Sound-film Proje vicing, 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 to-day. It will be sent FREE and without obligation.

BRITISH INSTITUTE OF ENGINEERING TECHNOLOGY

149 Shakespeare House, 17-19 Stratford Place, London, W.1

Come to SMITH'S of **EDGWARE ROAD**

THE FRIENDLY SHOP

FOR ALL RADIO COMPONENTS

We stock everything the constructor needs -our 25 years' experience of handling radio parts and accessories enables us to select the best of the regular lines and the more useful items from the surplus market in:

Loudspeakers and Phones Transformers and Chokes Meters and Test Equipment Pickups and Turntables Switches and Dials Metalwork and Bakelite Books and Tools

Plugs and Sockets Aerials and Insulators Motors and Generators Books and Tools
Valve Holders and Cans
Metal Rectifiers
Sleeving, Nuts and Bolts, Tags, Clips, Grommets and all other bits

Valves and CR Tubes

Cahinets and Case Capacitors and Resistors Coils and Formers

and piec NOTHING TOO LARGE-NOTHING TOO SMALL! Everything you need under one roof-at keenest possible prices

No general catalogue is issued owing to constantly varying atocks and prices, but we shall be pleased to quote you. Lists are available for the following lines, in which we specialise, and can thoroughly recommend :-

- The increasingly popular "Electro-Voice" range of Transformers and Chokes. "As good as the best—yet cost little more than the cheapest!"
- The "G.L.G." 16-gauge Aluminium Chassis. "For the man who takes a pride in his rig."
- 3. "K-A Products" Television Aerials. "A real engineering job."

H. L. SMITH & Co. Ltd. 287/9 Edgware Rd., London, W.2

Telephone: Paddington 5891

Hours 9 till 6 (Thursday, 1 o'clock)
Near Edgware Road stations, Metropolitan and Bakerloo

PSE QSL

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

and the second s

CR6AI Box 51, Lubango, Angola. Reports on 14 mc CW, and on 14 and 28 mc 'phone.
CT1AL Viv. Luisa, Avenida Combatentes, Amadora, Portugal. Stability of 7045 and 14090 kc CW, Sundays 0800-1200 GMT.
CXICG Carlos Maria Maggiolo 438, Montevideo, Uruguay. 14208 kc 'phone, 2300-0100 GMT.
DL1EH Hainstrasse 1, Nurnherg-O, Germany. 3·5, 7, 14, 28 and 144 mc 'phone and CW.
DL1HV Gildenstr, 24, Heilbronn, Germany. 3·5, 14 and 28 mc 'phone and CW. 1800-0200 GMT.
DL1IZ Marienhofweg 1/5, Husum, Germany. 3·5, 7, 14 and 28 mc 'phone and CW. 1800-0200 GMT.
DL1KB Maybachstr. 88, Koeln, Germany. 3·5, 7, 14 and 28 mc 'phone and CW, 1700 2359 GMT.
DL1ML Wehringhausserstr. 68, Hagen, Germany. 3·5, 7, 14 and 28 mc 'phone and CW, 1600-2200 GMT.
DL1NW Kantstr. 19a, Hemer, Germany. 3·5, 7, 14 and 28 mc CW, 0430-0600 and 1930-2300 GMT.
DL1NW H. Rieke, Im Steinbruch, Schmitte-Hommerich.

DLINW Kantsir. 19a, Hemer, Germany. 3:5, 7, 14 and 28 mc CW, 0430-0600 and 1930-2300 GMT.

DLIWR H Rieke, Im Steinbruch, Schmitte-Hommerich, Germany. 3:5, 7, 14 mc CW, 1900-2300 GMT.

DL3BD Am Schilde 2, Telgte/Westf, Germany. 3:5 and 7 mc CW, 0600-0800 and 2000-2359 GMT.

DL3HB Farbersir. 11, Ausgburg, Germany. Reports on 3:5 and 14 mc CW.

DL3IR Huntestr. 39, Wildeshausen, Germany. 3:5, 7, 14 mc 'phone and CW, 1700-2300 GMT.

DL7AV Barstr. 30, Berlin-Wilmersdorf, Germany. Quality of 3:5, 14 and 28 mc 'phone and CW.

DL7BX Muellerstr. 135, Berlin-N.65, Germany. Reports on 3:5, 7, 14 and 28 mc CW.

EA2CB P.O. Box 115, San Sebastian, Spain. 7100 kc 'phone and CW, 1300-1500 and 2000-0200 GMT.

F9OU 13 rue Boulard, Paris 14, France. 'Phone, all bands, 2000-2359 GMT. Report quality.

GCVVO 13 Mount Echo Drive, Chingford, London, E.4. 1800-1900 kc 'phone, 1900-2130 GMT.

GM3ETM Minto Cottage, Boswall Road, Edinburgh, 5. 14 and 28 mc 'phone and CW operation.

7. 14 and 28 mc 'phone and CW operation.

7. 14 and 28 mc 'phone and CW operation.

GM3EVP J. Brown, Police Station, Birkhill, Dundee, Angus, Scotland. 3·5, 7 and 14 mc 'phone and CW 1900-2230 GMT. DX reports only.

G3F0O 8 Withert Avenue, Bebington, Wirral, Ches. 7010 and 7015 kc CW, mornings and evenings.

G3FSF Ferry Cottage, Noss Mayo, nr. Plymouth. 3·5, 7, 14 and 28 mc CW, 1800-2200 GMT.

G3FTO 18 Beechwood Avenue, Thornton Heath, Surrey. 7014 and 7028 kc CW, operating 0600-0730 1900-2200 and 2230-2359 GMT.

G3FXD 14 Uffculme Road, Stirchley, Birmingham. 7010, 7055 and 7064 kc CW, 2000-2130 GMT.

G3GFD 13 Thornbury Grove, Bradford Moor, Bradford. 14092 kc CW, 2100 GMT and weekends.

GGCI 1 Crackley Crescent, Kenilworth, Warks. 144-58 and 145·2 mc 'phone and CW.

GGCI 1 Crackley Crescent, Kenilworth, Warks. 144:58 and 145:2 mc 'phone and CW.
G6VJ M. Downle, R.N. College, Dartmouth, Devon. Reports on modulation. State condx and Wx.
HB9IH Ob. Kirchbergstr. 23. Burgdorf, Switzerland. Reports on 3:5, 7, 14 and 28 mc CW.
HB9JJ Dufourstrasse 15, Aarau, Switzerland. 7 and 14 mc CW, Saturday and Sunday.
11ABQ Via Rimassa 49/4, Genova, Italy. 14 and 28 mc 'phone, 1200-1500 and 2000-2359 GMT.

I1ET Ugo Stringa, Ponte Taro, Parma, Italy. 14000 kc CW, 2100-2200 GMT.

SHORT WAVE LISTENER

I1RDR Via Valtellina 30, Roma, Italy. 7, 14 and 28 mc 'phone, 0700, 1300-1500, 2100-2300 GMT.

pnone, 0700, 1300-1300, 2100-2300 of M1.

IIWBY Via Datillo 8/2, Genova Sampierdarena, Italy.

3.5, 7 and 14 mc 'phone and CW, 0700-0800 1200-1400 and 2000-2359 GMT.

IIYAT Via Apiari 4, Trieste. 7010, 7020 and 7050 kc CW, 1800-2359 GMT.

KH61J Katashi Nose, Lihue, Kauai, Hawaii. 14 mc 'phone and CW.

LA5KB Ullevalsveien 91, Oslo, Norway. 3.5, 7, 14 and

LASKB Ultevalsveten 91, Oslo. Norway. 3·5, 7, 14 and 28 mc 'phone and CW.
LU1BK Chel. Diaz 1755-4 Piso 4, Buenos Aires, Argentina. Reports on 28290 kc 'phone.
MD7GR 28 Evridiki St., Famagusta, Cyprus. 14 mc 'phone and CW, 0800-2100 GMT. Reports on quality, especially from Peterborough area.
OH2SX Nordenskioldinkatu 2.B.32, Helsinki, Finland. 28 mc 'phone and CW, weekends 1300-1500 GMT.
ON4OO Meulemanstraat H-309, Oostkamp, Belgium. 3·5, 7, 14 and 28 mc CW, operation.
OQ5DZ Vanderick, Kabgayi, Ruanda-Urundi, Belgian Congo. 14 and 28 mc 'phone, 1500-2000 GMT.
OO5NK P.O. Box 86, Leopoldville, Belgian Congo.

OQ5NK P.O. Box 86, Leopoldville, Belgian Congo, 28052 kc CW, 28160, 28293, 28424 kc 'phone, 1100-1300 and 1600-2100 GMT, and weekends. OZ2FB Bondehavevel 98, Bagsvaerd, Denmark. Quality

of 14 mc 'phone, evenings at weekend.

PAØUSA Groote Markt 49, Groningen, Holland. 3-5
7 and 14 mc CW, evenings till midnight.
SMAAIJ Nobelgatan 20, Orebro, Sweden. CW and 'phone, all bands, 1500-2200 GMT.
TI2OE P.O. Box 881, San Jose, Costa Rica. 14 mc
'phone, 1200-1330 and 2100-2359 GMT.

'phone, 1200-1330 and 2100-2359 GMT.
VEHW 171 Roseberry Street, Campbellton, N.B.,
Canada. Reports on 3.5, 14 and 28 mc 'phone.
VEILG P.O. Box 70, Bridgetown, Nova Scotla, Canada,
Reports on VFO-controlled 'phone.
VE3BVV A. G. Barker, R.R.3. Weston, Ontario, Canada.

Comparative reports and details of modulation,

Comparative reports and details of modulation, 28292 kc 'phone 1300-1400 GMT.
VE3BYJ 226 Galloway Nth, West Hill, Ont., Canada. 3·5, 7, 14 mc CW, 1200-1300, 2100-0100 GMT. Reports on QSO's with Europe, S. America. VE6MJ Box 373, Edmonton, Alberta, Canada. 14 and

28 mc 'phone, Sunday afternoons GMT.

VK3ARV 18 Madden Grove. Burnley, Melbourne, Australia. 7 and 14 mc 'phone and CW, 0800-1400

Australia. 7 and 14 mc 'phone and CW, 0800-1400 GMT, weekends 0200-1500 GMT.

VK3CO 35 Bertram St., Garden Vale S.4, Victoria, Australia. Comparative reports, 7 and 28 mc 'phone, 0700-1200 GMT, weekends 0100-1200.

VP9D J. A. Mann, c/o Cable and Wireless, St. George, Bermuda. 28 and 60 mc 'phone, 1200-1300 and 2200-2359 GMT.

VS1BJ A.R.C., G.H.Q. Signal Regt., c/o G.P.O., Singapore, Malaya. 14 mc 'phone and CW, 1100-2100 GMT. Modulation and consistency.

2100 GMT, Modulation and consistency.
VS6BO P.O. Box 541, Hong Kong. 7 mc CW, 10001700 GMT. Detailed rpts. of QRK, QSB.

WICDX 219 Concord St., Portsmouth, N.H., U.S.A.
Comparative rpts., 14 and 28 mc 'phone and CW.
WIGOU 95 Utica Street, Quincy, Mass., U.S.A.
28550-28600 kc 'phone, 1200 GMT daily.
WIMIJ 185 Early Street, Providence, R.I., U.S.A.
(MOBILE) 29406 kc 'phone, 1500-2100 GMT.

WIRMS 198 Euclid Avenue, Waterbury, Conn., U.S.A. 28:5-29:7 mc 'phone, Sundays and Mondays, WIWI 7 Baker, Lexington 73, Mass., U.S.A. 7000-7014 kc CW, 0500-0900 GMT. Keying, QSB.

W2AII 32-15 93rd Street, Jackson Heights, L.I., N.Y., U.S.A. 14 mc 'phone and CW.

W2NFU 96-09 66th Avenue, Forest Hills, L.I., N.Y., U.S.A. 28 mc 'phone, 1330-2030 GMT.

W2OAM 154-59 13th Avenue, Beechurst, L.I., N.Y., U.S.A. 28.9 mc 'phone, 1300-1700 GMT.

W2QPN 12-01 Ellis Avenue, Fair Lawn, N.J., U.S.A. Reports on 28 mc 'phone.

W3NWJ 112 W. Albanus Street, Philadelphia, Penn., U.S.A. 29 1-29 6 mc phone, 1500-2000 GMT.

W4HB P.O. Box 1163, Delray Beach, Fla., U.S.A, Reports on 14290 and 28510 kc 'phone.

W4MOC P.O. Box 152, Maxton, N.C., U.S.A. 7 mc and 14100-14150 kc CW, 1200-2359 GMT.

W4NBD 2116 Date Street, Louisville, Ky., U.S.A. VFO-controlled 7 and 14 mc CW.

W4PZV 1751-C Valley Avenue, Blrmingham, Alabama, U.S.A. Comparative reports, 14200-14300 kc phone, 0300-0500 GMT.

W5ERY Box 237, Moore, Okla., U.S.A. 28·5-29·5 W5JCY mc'phone, 1600-1900 GMT. Comparative reports with W5, or with WØJRY.

WSFDZ 2218 Harwell Lane, Houston. Texas, U.S.A. Reports on 28-5-30 mc phone. WSP10 Box 53, High Island, Texas, U.S.A. Reports

on 14 mc CW.

W6UJ 28-3 K Street, 11-C, Taft, Calif., U.S.A. 'Phone and CW all bands, 1.7 to 144 mc.

W6WLO 173 S. Highland Avenue, Los Angeles, Calif., U.S.A. Comparative reports, 14·2-14·3 mc'phone,

0100-0700 GMT.

W7KZS 1059-A West 5th Street, Tempe, Arizona, U.S.A. VFO-controlled 28 mc 'phone.

W8COU 1209 Pater Avenue, Hamilton, Ohio, U.S.A. 28·2 mc CW, 28·68 'phone, 1400-1700 GMT. W9ABA 1606 Lake Ave., Wilmette, Ill., U.S.A. 14 and 28 mc 'phone, 0001-0500 GMT. Quality.

28 mc phone, UNI-USUU GMII, Quality, W9DWD 4232 Hampton Ave., Western Springs., Ill., U.S.A. 7, 14 and 28 mc CW, 0100 GMT. W9IZC 832 Chester, Anderson, Ind., U.S.A. 3-9, 7, 14 and 28 mc 'phone and CW, 0600-0800 and 1300-2000 GMT. Report quality.

1300-2000 GMT. Report quality.

WØCDP 333 "C" Avenue, Limon, Colo., U.S.A. 14 mc 'phone and CW, 0001-0800 GMT.

WØDEA Box 776, Joplin, Mo., U.S.A. 3-9, 14-05, 14-28 mc 'phone and CW, 0600-0900 GMT. YN4CB Colegio San Jose, Bluefields, Nicaragua. 14150, 14171, 14180, 14187, 14198, 14308, 14320 kc 'phone, 1700-1800 and 0001-0300 GMT.

ZLIKW 20 Valley Road, Mt. Maunganut, New Zealand, 14 mc 'phone and CW, 0600-1000 GMT.

ZLIMP D. Mitchell, Poeke Road, Chauiti, Tauranga, New Zealand. 14000-14050 kc, 0700-0930 and 1700-1830 GMT.

ZL4HP T. Nevill, Moa Creek, Otago, New Zealand.
ZL4JE 14:2-14:4 and 28:3-28:45 mc 'phone, 0500-1000 and 1800-2100 GMT. Report on signal strength between various aerials.

ZP2AC Humaita 252, Asuncion, Paraguay, 14, 28 and

50 mc 'phone and CW, weekends. ZS5YF P. Sawyer, Ansonia Hotel, Maritzburg, South Africa. 3520 kc CW at 2000 GMT: 7020 kc CW

at 1900. From Asia, Europe, Pacific. ZS6HN 49 Webber Road, Delville, Germlston, S. Africa.

ZS6HN 49 Webber Road, Delville, Germlston, S. Africa, 7, 14 and 28 mc phone and CW.
ZS6OS 48 Wolmarans St., Potchefstroom, S. Africa, 14 mc CW at 0400 GMT: 28 mc CW at 1800.
4X4AD P.O. Box 2713, Tel-Aviv, Israel. 14360 and 28150 kc phone, VFO. Enclose IRC.
4X4AF 38 Jabotinsky St., Tel-Aviv, Israel. 14 mc phone and CW, 1700-2100 GMT. Modulation.
4X4BC 12 Nordan Street, Halfa, Israel. 3-5, 7, 14 and 28 mc phone 1700-2030 GMT. 28 mc 'phone, 1700-2030 GMT.

4X4CZ 18 Montifiore Street. Tel-Aviv, Israel. Quality of 14 mc 'phone, 1800 GMT: 28 mc 'phone, 1200 GMT. Enclose IRC.

ULTRASONIC SOLDERING IRON

Mullards announce that by the application of the principle of ultrasonics—very low frequency RF energy used to produce molecular agitation in the physical sense-they have been able to devise a method of soldering aluminium.

DATA ON EX-SERVICE EQUIPMENT

Our regular advertisers, Messrs. Clydesdale, now have a very comprehensive list of British and American surplus equipments on which they can supply theoretical diagrams with values and, in some cases, conversion data. Some 60 separate items are shown in the lists.

NOW AVAILABLE!

THE RADIO AMATEUR CALL BOOK



- * This Call Book lists Amateur Stations throughout the world by callsign, name and address
- * Countries listed alphabetically by prefix, showing also Zone areas for each country
- * Amateurs in each country shown alphabetically by callsign. The QTH you want can be found
- ★ The Call Book lists over 100,000 amateur-station addresses
- ★ It is the world's only standard directory to all amateur QTH's
- The Call Book is constantly revised and kept up to date

For a year of four quarterly issues (Winter, Spring, Summer and Autumn)

53s. 6d. 29s, 0d.

For two issues to choice (say, Spring and Autumn, 1950) For a single copy, any issue (immediate delivery on publication)

16s. 0d.

Any American Radio or Technical Publication can now be Supplied Ask for our quotation

> GAGE & POLLARD. Publishers' Agents 49 Victoria Street, London, S.W.1. Abbey 5342

Have you heard)

THE month of January, although not by any means a record-breaker for DX, has produced a greater volume of mail than I have ever received before. This may, or may not, have a meaning; possibly it goes to show that having to "scratch" a bit more for the DX makes people even keener on the subject.

Don't misunderstand me when I say that the DX hasn't been good. It's there all right, all the time; but for long periods it hasn't been by any means easy to deal with. The 14 mc band, as usual, has been cluttered up with short-skip signals for far too much of the time, and 28 mc has often been just plain weak. Those who have recognised the symptoms and gravitated up to 7 mc and 3.5 mc have been well rewarded. If you want proof of this, turn to the Calls Heard section.

It is well to realise that the normal "DX bands" are going to become even worse from now on, and that the next two seasons may well see a complete fade-out of 28 mc, and even a partial eclipse of 14 mc. The DX on the LF bands will be proportionately better, both because of conditions and on account of the movement of more and more amateurs up to the fresh hunting-grounds.

COMPETITIONS

The SLP's were quite well attended last time, although the amount of interest shown in the CW period was disappointing. Some quite nice DX figures in the lists. And the two new Tables displayed this month speak for themselves. The Four-Band list has started off with a goodly crowd and with some very fine scores at the top end. Note that at least nine listeners logged 100 countries or more during the first month of the year.

The extra column in that Table (headed "Total Score") is most revealing. I have adopted it this month for deciding the order of merit, and I am convinced that the best plan is to keep it that way for the whole year. In other words the way to put yourself well up the list is to be a genuine four-bander and to make the most of them all. The fellow with more than 100 countries on 14 mc and a small score on the other bands will soon be passed by the chap who plugs away on all of them.

Now you have seen where you figure at the end of the first month's listening, you know what sort of a goal you have to aim at. Don't be discouraged if the leaders are miles ahead; that merely means that it will be mighty difficult for them to increase their scores as quickly as you can increase yours!

The "Zones Heard" list, embracing all Post-War listening, is quite revealing, the most startling feature being that score of 40 Zones and 193 Countries on *Phone* by E. J. Logan (Hertford). Last year his score Zone was 39, but since then he has logged UAØSI in Zone 18 for his fortieth. Very fine performance, this; but get up there and keep him company, someone!

FORTHCOMING EVENTS

Last month, you will remember, I said that there would be a separate Contest of some sort every month. I added that for this month

PREFIX LIST REPRINT

For the convenience of readers, we have had a limited number of copies of the "Country List by Prefixes, with Scoring Values," as published in this issue, reprinted on a stiff card for wear-and-tear use at the operating position. It is this list which is to be used for scoring in the Dozen DX Contest announced for March 25-26.

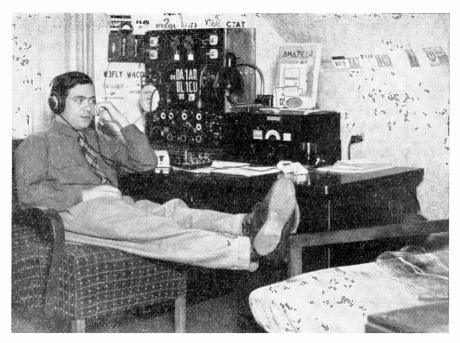
The reprint is obtainable by return on sending 6d. and a card marked "Prefix List Reprint" to the Circulation Manager, Short Wave Magazine, Ltd.,

53 Victoria Street, Westminster, London, S.W.1.
Even if you are not interest in the Contest, this
new Country List is the most complete and up-to-date
of its kind now in print.

(February) it would take the form of Counties and Countries Heard on 1.7 mc. Let us hope that you all have remembered this, and have been logging them since February 1. At the end of the month, send in your list giving one station from each county and one from each country, with dates and times; and state "Phone Only" or "Phone and CW."

Now for March I am glad to be able to announce a much more unusual Contest. Elsewhere in this issue you will find an up-todate list of Prefixes giving all countries in the

AMATEUR BAND COMMENTARY by the DX Scribe



The station of DL1CU, Stuttgart—he worked quite a lot of the stuff as DA1AR!

world as officially recognised by the leading amateur organisations. Against each country you will find a figure giving its "Points Value." This table has also appeared in the Short Wave Magazine, and the "Points" are the score that transmitters in this country can claim for contacts with the various DX countries in a new special type of Contest.

The first Contest of this kind is announced for the following periods:

March 25, 2200 GMT to March 26, 0100 GMT and

March 26, 1700 to 2000 GMT.

This Contest, which we have called The First "Dozen DX" Contest, is open to U.K. stations only, on the 14 mc band only—'Phone or CW or both. The rules for transmitters are very simple; during those six hours they have to work the highest-scoring DX that they can find, and when sending in their logs they will submit only the twelve best.

This is where you come in. We are having our March receiving competition at the same times, and our SLP's! (I fervently hope that 14 mc will have come back into really good shape by then, to justify this feverish concentration on the one band!)

Listen during those hours (I'll remind you again next month) and log all contacts that you hear between a United Kingdom station

(i.e. G, GC, GD, GI, GM or GW) and a DX station. Log the time, the two call-signs and the exchange of RST, and add in a final column the "Points Value." Thus, your logs will not only be an excellent and a most valuable check on the Transmitting Contest, but they will also form an SWL event as well; your scores will be assessed on the best of your best twelve. Don't feel that you have to stick out the entire six hours. Pick the times you like best.

There is only one difference between the two Contests; the transmitters are asked only for their best twelve, but you are asked for a log of all that you hear, and we will extract the best twelve for you. More of this next month—but You Have Been Warned, so brush up your 14 mc technique! And note the "Points Values" of the various DX countries in that list, because we can make them the basis of many more Contests in the future. What would be easier than a Monthly Points Contest, in which the score was derived from Total Points as opposed to the number of countries? Watch for it.

GEN. OF THE MONTH

So many letters list so much DX on the various bands that I can't even decide whether

FOUR-BAND DX
(STARTING JANUARY 1, 1950)

(STARTING JANUARY 1, 1950)						
Listener	28 mc	14 mc	7 mc	3.5 mc	Total Countries	Total Score ★
To G Gray (Winsteador)	(1)	(2)	(3)	30	(5)	261
R. S. Stott (Upminster)		113		20	128	245
D. W. Waddell (Hitchin)	65	103	57			243
W. J. C. Pinnell (Sidcup)	70	100	51	21	121	218
R. A. Hawley (Goostrey)	71	91	40	16	107	218
J. C. Beal (N. Wembley)	53	96	46	19	114	207
N. S. Beckett (Lowestoft)	48	85	54	20	102	
L Singletary (Bicester)	53	75	37	18	100	183
P. H. Strudwick (London, N.3)	55	84	10	11	97	160
E. J. Logan (Hertford)	82	49	14	14	100 (P)	159
M. G. Whitaker (Halifax)	62	62	18	16	96	158
F. K. Earp (London, S.W.11)	54	64	20	13	95 (P)	151
A. M. Norden (London, N.W.11)	57	59	16	16	87 (P)	148
M. S. Gotch (Saffron Walden)	70	53	12	13	100 (P)	147
J. M. Graham (Glasgow)	51	43	27	17	78 (P)	138
A. Bannister (Manchester)	52	50	17	12	84 (P)	131
E. Cafley (Gt. Yarmouth)	58	60	3	6	85 (P)	127
T. W. Jones (Birmingham)	30	55	26	12	74	123
J. P. Warren (Croydon)	31	73	8	10	86 (P)	122
E. J. Parish (Watford)	51	54	8	9	84 (P)	122
L. Tombs (Swindon)	46	49	11	12	76 (P)	118
P. Bysh (Middlesex)	34	44	18	13	64	109
R. J. Line (Birmingham)	46	26	19	14	73 (P)	105
H. M. Graham (Harefield)	26	54	12	11	75 (P)	103
W. Eyre (Whaley Bridge)	44	32	10	11	65	97
D. Shallcross (Derby)	45	31	10	7	64	93
K. Smeeton (Barnton)	25	36	24	7	55	92
D. E. Tomkinson (Brighton)	39	27	12	13	64 (P)	91
A. L. Higgins (Aberkenfig)	. 17	42	11	13	57	83
F. A. Herridge (London, S.W.12)	12	25	27	11	41 (CW)	75
T. Spencer (Slimbridge)	36	23	1	8	58 (P)	68
G. Murray (Newcastle)	. 18	24	10	13	41 (P)	65
N. Roberts (Launceston)	. 3	49	4	8	49 (P)	64
C. A. Naylor (Farnworth)	. 40	14	5	3	47 (P)	62
L. Corder (Hadleigh)	. 14	31	6	11	40 (P)	62
R. A. Fowler (Marlow)	. 21	25	6	9	45	61
D. G. Martin (Cheltenham)	. 19	24	9	8	40 (P)	60
A. W. Robertson (Cranford) :	. 26	25	4	3	45	58
E. A. Parkinson (Leeds)	. 27	23	1	1	41 (P)	52
A. G. Scott (Liverpool)	. 5	23	22	2	35	52
D K. Cocking (Farnborough)	. 10	18	9	2	27 (P)	39
G. Musk (Blackpool)	. 6	23	1	4	27 (P)	34
R. T. Gabriel (Derby)	. 7	5	5	5	17	22
O. R. F. Mason (Prittlewell)	. 2	14	1	3	16 (P)	20
A. O. Frearson (Birmingham)	. 2	8	4	2	12	16
I .	figures i	Cols, 1,	2, 3 and	ı.	•	

a given station is "super-DX" any longer. So I am going to deal with some of your general remarks first, and then try to sum up the various bands at the end.

J. P. Warren (S. Croydon) and others remark on the profusions of FF8 and EA8 stations nowadays. Is it something to do with conditions or is it just an increase in activity down that way? (Practically everybody hears CR5UP most of the time, too.)

Talking of J.P.W., you will remember that he claimed a score of 37Z and 133C on his fifteenth birthday, and wondered if anyone could beat him to it. This has brought in quite a few claims. M. Shortland (Sunderland) is also fifteen, and has a score of 39Z and 138C, heard on a O-v-l since March 1949; this is the best performance yet. B.W. Sutton (Liverpool) is the same age and scores 36Z and 108C. R. J. Line (Birmingham) is only fourteen and seven months; with five more months to go his score is 36Z and 133C, so he is strongly tipped as the winner! He adds that as he is away at school he has only had seven months of listening during the last eighteen.

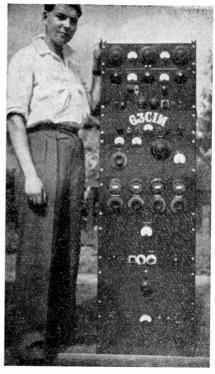
Last month D. K. Cocking (Farnborough) remarked that CX2CO seemed to come in well, irrespective of conditions. This prompts H. M. Graham (Harefield) to agree with him and to add that he has a number of pet "regulars," chief among whom are CO8MP, H16EC, LU6AJ, PY2CK, VEIFQ, VP3MCB, W3LTU, 4DSY and 8BM. More recent additions are CR5UP, ZD1KO and ZS1GG. Has anyone any other particular friends?

Other comments from H.M.G.—DL4EB/ Airborne, over the Atlantic, heard on January 29; VS7SB, steady S8-9 for over an hour on January 28; and the prevalence of EA8's.

Stray remark from T. W. Jones (Birmingham): "TV from Sutton Coldfield breaks through and obliterates half the 28 mc band in the afternoons. Fortunately it is the American half, which is usually a bit of a mess anyway!"

VOICE FOR PERSIA

Funny how some countries suddenly become scarce then blossom out again. Some time back there were a crowd of EP's and EQ's to be heard. Then came a lull; but now I have at least a dozen letters mentioning EP3L, working 14 mc phone. And every one of that dozen heard him say that he was working strictly "under cover" and would shortly be moving into Iraq, from which country he hopes to be on the air as YI2JB. Thanks to the various informants on this story. (His QTH in Persia was Ispahan, in spite of the various versions such as Isaphan and Istafan!)



G3CIM, Barking, Essex, with his transmitter assembly for all-band 'phone/CW operation. From the top, panels are: Aerial tuner unit; 160-metre Tx and modulator complete; Monitor panel; 813 PA, 10-80 metres; Exciter unit; Modulator; and Power Supply.

While we're in that part of the world, let us clear up the MP4 muddle as best we can. MP4BAA, BAB, BAD and BAG are, so far as I know, all in Trucial Oman. The odd man out is MP4BAO, who is definitely on Bahrein Island. A further complication was the appearance of MP4KW during the BERU Contests. In spite of the various ideas about his location, varying from "Non-Trucial Oman" to "South Persia," I am sorry to state that he will not give most of you a new country, because he is none other than our friend Ken Ellis of HZ1KE, and located firmly in Saudi Arabia!

Ken was awaiting a Military Call, which he thought would be an MD9, but when BERU started his call had still not arrived. As an emergency measure he suggested using MP4KW, which was officially approved and therefore went on the air. Whether he will stick to it, or whether yet another call will be added to his formidable collection, I don't

COUNTRY LIST BY PREFIXES With Scoring Values

This List has been brought up to date as at December 31, 1949. It is in agreement with the American lists and all amendments. The "points value" given to each prefix in the List below is, however, a purely domestic allocation made by the Short Wave Magazine. It is for use by United Kingdom stations only for the purpose of calculating their scores in DX Contests organised by the Magazine and Short Wave Listener

Prefix	Country	Points Value	Prefix	Country	Point Value
4.63	Sikkim	10	на	Hungary	o
AC3 AC4	Tibet	10	нв	Switzerland	0 5 2 5 5 5 5 5 5 5 2 2 2 2 2 2
AP	Pakistan	2	HC	Ecuador	5
AR	Lebanon	1 2	HE	Liechtenstein	2
AR	Lebanon	-	НН	Haiti	5
C	China	2	HI	Dominican Republic] 5
C3.	Formosa		HK	Colombia	2
C9	Manchuria	5 5 2	HL	Korea	5
	Chile	2	HP	Panama	5
CE CM/CO	Cuba	2	HR	Honduras	5
CN/CO	French Morocco	1	HS	Siam	5
CP	Bolivia	5	HV	Vatican City	2
CR4	Cape Verde Is.	5	HZ	Saudi Arabia	2
	Port. Guinea	5 5 5 2			
CR5	Sao Thome & Principe	5	.	Tank.	0
CR5	Angola	1 5	I	Italy Sandinia	2
CR6	Mozambique	2	IS	Sardinia	
CR7	Goa	5			_
CR8	Macao	5	JA	Japan	2
CR9	Timor	10			
CR10	Portugal	lő		Dales Howland &	
CT1		ĭ	KB6	Baker, Howland &	5
CT2	Azores Madeira	l i	7.04	Phoenix Is. Antarctica	10
CT3		2	KC4	Antarcuca	10
CX	Uruguay	2	KC6	Palau Is.	10
CZ	Monaco	-	KC6	Carolines	10
		0	KG4	Guantanamo Bay	5 2 5 2 10 2 5 2 5 2 5 2 5 2 5 2 5 2 5 5 2 5 5 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
DL	Germany	5	KG6	Marianas	5
DU	Philippines -	3	KG6 I	Bonin Is. (Iwojima)	3
		0	KH6	Hawaii	10
EA	Spain	1 2	KJ6	Johnston Is.	10
EA6	Balearics	1 2	KL7	Alaska	2
EA7	Rio de Oro	5 2 5 5 5 0	KM6	Midway Is.	3
EA8	Canary Islands	2	KP4	Puerto Rico	1 2
EA8	Span. Guinea	2	KP6	Jarvis & Palmyra	1 2
EA9	Span, Morocco	2	KR6	Ryukyu Is, (Okinawa)	1 2
EI	Eire	0	KS4	Swan Is.	2
EK	Tangier	1 2	KS6	American Samoa	10
EL	Liberia	2	KV4	Virgin Is.) 2
EP	Persia	2	KW6	Wake Is.) 2
ET	Ethiopia .	2	KX6	Marshall Is.	10
			KZ5	Canal Zone	2
F	France	0		1	
F	Corsica	2	11 * *	Norway	0
FA	Algeria	1	LA	Argentina	ĭ
FB	Madagascar	10	LU	Luxembourg	ō
FC	Clipperton Is.	10	LX	Bulgaria	Ö
FD	Togoland	5 2	LZ	Darbaria	
FE	Cameroons	2		1	0
FF	Fr. West Africa	2	MB9/OE	Austria	0
FG	Guadeloupe	10	MC1/MD1 \	Cyrenaica, Tripolitania	1 1
FI	Fr. Indo-China	5	MD2/MT2		i
FK -	New Caledonia	5	MD3/MI3	Eritrea	1
FL	Fr. Somaliland	10	MD4	Somalia	2
F M	Martinique	5	MD5	Suez Canal Zone	1 2 2 5 2
FN	French India	5	MD7	Cyprus	2
FO	Fr. Oceania	5	MF2/AG	Trieste	2
FP	St. Pierre & Miquelon	10	MP4	Oman	5
FQ	Fr. Equatorial Africa	2	MI	San Marino	2
FR	Reunion	10			
FU (YJ)	New Hebrides	10		Demi	2
FY	Fr. Guiana	5	OA	Peru	ő
			OH	Finland	0
G	England	0	OK	Czecho-Slovakia	0
ĞC	Channel Is.	0	ON	Belgium	1 0
GD	Isle of Man	0	OQ	Belgian Conso	2
GI	N. Ireland	0	OX	Greenland	0 0 2 2 5
GM	Scotland	0	OY	Faroes	0
		0	OZ	Denmark	

Prefix	Country	Points Value	Prefix	Country	Points Value
PA	Netherlands	0	VR1	British Phoenix Is.	10
PJ	Dutch W. Indies	0 5 2 2 5	VR2	Fiji .	5
PK1, 2, 3 PK4	Java Sumatra	2	VR3 VR4	Fanning Is. Solomon Is.	10 10
PK5	Dutch Borneo	5	VR5	Tonga	15
PK6	Celebes & Moluccas	5 5	VR6	Pitcairn	5 10 2 5 5 5 5 2 1
PK7 PX	Dutch New Guinea Andorra	5	VS1, 2 VS4	Malaya Brit. North Borneo	2
PY	Brazil	1	VS5	Brunei	5
PŽ	Dutch Guiana	2	VS5	Sarawak	5
03.5		0	VS6	Hong Kong	2
SM SP	Sweden Poland	0	VS7 VS9	Ceylon Aden	1 1
ST	Sudan, Anglo-Egyptian	2	VS9	Maldive Is.	10
SV	Greece	1	VU	India	1
SV5 SV	Dodecanese Crete	5 5	VU4 VU4	Andaman Is. Laccadive Is.	10 10
34	Crete	'	VU7 (MP4)	Bahrein	5
TA	Turkey	I	H		
TF TG	Iceland	1	W (K)	United States	1
TI	Guatemala Costa Rica	5 5	WE	Noniae	-
ΤΪ	Cocos Islands	10	XE XZ	Mexico Burma	5 2
TT	Tannu Tuva	10		2414	~
UA (LA)	Spitzbergen	5	YA	Afghanistan	10
UA	Franz Josef Land	5	YI YK	Iraq Syria	5 2 5 0 5 0 2
UA1, 3, 4, 6 UA9, Ø	USSR, Europe USSR, Asia	0	YN	Nicaragua	5
UA9, Ø UB5	USSR, Asia Ukraine	2	YO	Roumania	ŏ
UC2	White Russia	ŏ	YS	Salvador	5
UD6	Azerbaijan	2	YU YV	Yugo-Slavia Venezuela	2
UF6 UG6	Georgia Armenia	2	• •	Volichacia	_
UH8	Turkoman	2 0 0 2 2 2 2 2 2 2 2 2 2 0 0	ZA	Albania	0
UI8	Uzbek	2	ZB1 ZB2	Malta Gibraltar	0 0 1 2
UJ8 UL7	Tadzhik Kazakh	2 2	ZCI	Transjordan	2
UM8	Kirghiz	2	ZC2	Cocos Is.	10
UN1	Karelia	2	ZC3 ZC6	Christmas Is. Palestine	10
UO5 UP	Moldavia Lithuania	0	ZD1	Sierra Leone	1 2 2 5 2 5 10 5 5 2 5 10
UO	Latvia	o	ZD2	Nigeria	2
UR	Estonia	0	ZD3 ZD4	Gambia Gold Coast	5
VE	Canada	1	ZD6	Nyasaland	5
VK	Australia	1 1	ZD7	St. Helena	10
VKI	Heard Island	10	ZD8 ZD9	Ascension Is. Tristan da Cunha	5
VK1 VK9	Macquarie Island New Guinea Territory	10 5	ZE	Southern Rhodesia	2
VK9 VK9	Papua Territory	5	ZK1	Cook Is.	5
VK9	Norfolk Island	10	ZK2 ZL	Niue New Zealand	10
VP1	Daitich Hondunce	_	ZM	Western Samoa	5
VP2	British Honduras Leeward Is.	5	ZP	Paraguay	5
VP2	Windward Is.	5 5 5 2 2	ZS	Union of South Africa	1 5 5 1 10
VP3 VP4	British Guiana Trinidad	5	ZS ZS3	Marion Is. South West Africa	5
VP5	Jamaica	2	ZS7	Swaziland	5
VP5	Cayman Is.	10	ZS8	Basutoland Bechuanaland	10
VP5	Turks & Caicos Is.	10	ZS9	Bechuanatand	5
VP6 VP7	Barbados Bahamas	5	3V	Tunis	2
VP8	Falkland Is.	5			
VP8	South Georgia	5	4X	Israel	1
VP8 VP8	South Orkney Is, South Sandwich Is,	2 5 5 5 5 5 5 5 5 5 5		Aldabra Is.	10
VP8	South Shetland Is.	5		Bhutan	10
VP9	Bermuda	2		Comoro Is.	10
VO1	Zanzibar	10		Easter Is. Galapagos Is. (HC)	10 10
VQ2	N. Rhodesia			Ifni	10
VQ3	Tanganyika	2 2 1 2 5 5		Jan Mayen Is.	10
VQ4 VQ5	Kenya Uganda	1 1		Kerguelen Is. Kuwait	10
VO6	Brit, Somaliland	5		Nepal	10
VQ8	Mauritius	5		Outer Mongolia	10
VQ8	Chagos Is. Seychelles	10 10		Tokelau Is. Wrangel Is.	10 10
VO9					

"ZONES HEARD" LISTING (POST-WAR)

Starting Figure: 30

Listener	Zones	Countries
PHONE and CW		
O. A. Good (Oswestry) A. H. Edgar (Newcastle) R. A. Hawley (Goostrey) D. W. Waddell (Hitchin) W. J. C. Pinnell (Sidcup) J. C. Beal (N. Wembley)	40 40 40 40 40 40	206 205 192 189 188 164
N. S. Beckett (Lowestoft) R. A. Fowler (Marlow) M. Shortland (Sunderland)	39 39 39	170 158 138
L. M. Singletary (Bicester)	38	171
F. A. Herridge (London, S.W.12)	37	150
K. Smeeton (Barnton)	36	148
C. J. Goddard (Coventry)	35	120
PHONE ONLY		
E. J. Logan (Hereford)	40	193
M. G. Whitaker (Halifax)	39	150
R. A. Hawley (Goostrey) D. S. Kendall (Potters Bar)	38 38	182 162
D. L. McLean (Yeovil) A. Bannister (Manchester) O. A. Good (Oswestry) K. Parvin (Manchester) F. K. Earp (London,	37 37 37 37	171 168 163 162
F. K. Earp (London, S.W.11) A. Levi (Belfast) L. Tombs (Swindon) J. P. Warren (W. Croydon) D. Vincent (Beckenham)	37 37 37 37 37 37	160 153 141 137 135
J. C. Beal (N. Wembley) R. J. Line (Birmingham) M. S. Gotch (Saffron	36 36	135 133
Walden)	36 36	128 108
E. J. Parish (Watford) D. G. Martin (Cheltenham) R. A. Fowler (Marlow) H. M. Graham (Harefield) A. M. Norden (London,	35 35 35 35 35	161 142 136 133
A. M. Norden (London, N.W.11)	35	131
A. L. Higgins (Aberkenfig)	34	121
C. S. Pollington (Chichester) P. Bysh (Middlesex) A. O. Frearson (Birmingbam) D. J. Williams (Pontyberem)	33 33 33 33	122 121 102 96
D. K. Cocking (Farnborough)	32	93
G. Musk (Blackpool) O. R. F. Mason (Prittlewell)	31 31	103 79
W. C. Askew (Melton Mowbray)	30	105

know. (Remember SUIKE, MD5KW, ZC6NX, ZC4NX, SU5KW/Rhodes—and others?)

THE TOP-BAND NEWS

Of course the chief news on the Top Band has been the fact that the East Coast W's have been coming across fairly regularly. Quite a number of G stations have been working them, too. The frequency-band for the East-Coasters is 1800-1825 kc, and most of the G's chasing them have been piling up on about 1790 kc. J. L. Hall (Croydon) says that the W's often peak S7 at daybreak, and are sometimes audible at 0730.

M. G. Whitaker (Halifax) heard W4FQI on 'phone, and wonders what the DX 'phone record is on that band? He also heard two other newcomers—EK1AO and HB2IW. The EK is genuine enough, but that HB2 is a mighty queer call!

G. C. Allen (Thornton Heath), who probably put in more hours on 4.7 mc during 1949 than any other listener, finds that he recorded the remarkable total of 1,149 different stations from the U.K. On January 22, this year, he logged EK1AO, and a ittle later he succeeded in collecting W1BB, W1EFN, W1PLO, and W4NNN. OK1AA and DL2DV, also active, made the band sound rather like 3.5 mc! All G.C.A. is waiting for is the odd VK or ZL. What really shakes your Scribe is that so few people take an interest in this most exciting band.

SUPER-DX ON 3.5 MC

This band has been terrific, but, again, relatively few seem to have discovered the fact. So many letters dismiss the band by saying "Nothing of interest except a few W's and VE's." Well, look at these lists: CW: AP5B, EK1AO, FM8AD, KZ5DR, MP4KW, TG9RB, VP5BF (Cayman), VP6CDI, VK5KO, XE1A and fifteen ZL's. Phone: OY2RD, FA9RZ. PY4ZI. TA3GVU. VE2ABZ (2005 GMT), W7JBC (Montana.)

These were compiled from the findings of J. L. Hall, T. W. Jones, D. G. Martin, K. Parvin, P. H. Strudwick and your Scribe. Any questions?

FUN ON FORTY

Combined operations on the part of J. C. Beal, A. H. Edgar, J. M. Graham, D. S. Kendall, K. Parvin, W. J. C. Pinnell, A Scott, R. S. Stott, D. W. Waddell and L. H. Waine produced the following interesting lists of 7 mc DX: CW: AP5B, C1KR, CM2SW, 6EL, CO7VP, CP5IM, EA9BB, EA8BC, HZ1CK, KP4HU and 4KD, MD2PJ, MD7DC, MP4KW, UA9KCC, VP6CDI, VS1BX and 1CW, VS6AX, VS7EL, ZD9AA,

ZE2JV plus UF6's, VQ4's, YO's, ZL's and ZS's, also 3V8FF. Phone: CM5AL, CO2EP, 2FF and 8BC, CN8MZ, CR5UP, CT2AE, CT3AV, EA6's, FA's, F9JD and 9QV (both Corsica), I's in Trieste, SP5AB and 5AC, YO3RI, ZB1AJX and 3V8AS.

Yes, all this stuff is there on Forty—but you have to dig for it. And if you want to rise to the top of that Four-Band table you simply must dig! As a change from hearing the same good DX again and again on 28 and 14 mc I strongly recommend 7 mc and a bottle of aspirins.

Remember, too, that the above is only just what has been deemed worthy of mention in letters; you'll find still more in the Calls Heard section.

QUERY DEPARTMENT

We have lots of "answered and asked" this month. Here, first, are some answers. OY1BPD and 1PA are probably phoney. The only genuine ones are believed to be 2RD, 3IGO and 5WS. F9QU/FM8's frequency is 14347 kc. HV1A operates 14 and 28 mc and is genuine. PJ5TR is genuine—QSL via W4BYF or ARRL.

EAØ's are probably in Spanish Guinea; at all events EAØHK definitely is. CR4SS is strongly believed to be phoney. FB8XX and 8BX on 14 mc CW are genuine (although they may, of course, have imitators!)

Practically all the YO's now heard are genuine. V88GH is in the Yukon—QSL via Box 268, Whitehorse. ZC2CZ is active, but may not be genuine.

For the fourth, or fifth, time of asking, AK2CO, AE3US, AE4US and similar stations are in the U.S. Military Network and operate just outside the amateur bands. Some are just below 28 mc—others are just above 14400 kc.

Now for the queries that readers are asking this month: The Zone of VE8MJ, please? Any information on "FKS8AA" calling CQ in French at 1600 (14 mc)? ZC3TA on Christmas Island—being called by W's. Anyone heard him? ST5AB (Yes—Sugar Tare Five A B) giving QTH as Warsaw. Why? Anything about AC4DA? (Should say 100 per cent phoney, because it is very well known just at present that AC4YN and 4RF are the only genuine ones in Tibet.)

A bunch of funny ones: HP9FS/M, PJ5RE, MN2FA, EZ1MS, FN7WE, XL2C, VS5KEA. The latter, queried by two listeners, is surely UB5KEA sending badly?

One or two asked and answered: Does Ruanda-Urundi count separately from Belgian Congo? No. Are the EZ4's in the Saar to count as a country? No. And do MD1 and MD2 count separately. Again, No.

Thanks to readers who have answered

queries, on behalf of those who have asked them.

SLIGHT CORRECTION

Referring to the note from G5QQ last month, concerning reports on QRP transmissions, he asks us to make clear that the call G5QQ belongs to the Benton (Rawdon) Radio Club. The QTH given was that of the operator, for QSL's—the transmitter is at Yeadon, near Leeds.

THE BEST ON 14 MC

Here is some of the Super-DX on 14 mc, as mentioned in letters this month. From R. S. Stott (Upminster): Phone:—FK8AC, EP3L, YN4CB, JA2BL and 2BS, CR5UP. He adds that FA8IH and ZL2GX keep a sked at 0700 (CW) and they arranged for VR3A on Washington Island to call the FA. The VR3 worked him but R.S.S. unfortunately didn't hear him.

From C. J. Goddard (Coventry): CW:—EA9AI and FB8XX; Phone:—XE1HH (0015). From J. P. Warren (Croydon): EA6AP, EL5B, H18WF, HR2RF, KH6CT and KG4AA (all Phone).

A. H. Edgar (Newcastle) also heard FB8XX (1700) and had a fine time sorting out the DX that went back to him, including F08AC. Otherwise his best were ZD1KO, VP9HH and HC5CM (Phone) and XEIRI, SM8AFX (Novaya Zemlya), VP2SI and KX6CG (CW).

C. S. Pollington (Chichester) mentions HSISS, VS6BE and VS6AL; O. A. Good (Oswestry) contributes VP7NU and ZS8A (Phone) and CR7AG, HC7KD, VQ8AX, ZD9AA and ZS9D (CW). D. G. Martin (Cheltenham) seems to be one of the few to mention JA2BL on Phone; P. M. Crawford (Darlington) makes his debut with HPIAD, TI2TG and OY2RD (Phone).

On the CW side we have D. W. Waddell (Hitchin) with CR7RF, FE8AB, FY8AA, KG6GD, PJ5RE, TG9FU, ZS7C and ZD1KO Back on Phone again, K. Parvin (Thornton Heath) singles out UG6AB, UR2KAA, ZEICQ and ZS3Z, D. S. Kendall (Potters Bar) adds HH2X, HH3DL, VP4LL and VP4TB, and P. Fry (Chandlers Ford) rounds them off with HH3DL, TI2ECO and CR4VX.

After that concentrated DX we roll the res into a short list, representing the offerings of F. K. Earp, A. Bannister, D. L. McLean, F. A. Herridge, J. M. Graham, P. H. Strudwick, A. Scott and a few more. Here it is: All Phone:—AR8PP, CE1AR, CR5UP, CT3AN, EA8's, EP3L, F9QU/FM, F9QV/ Corsica, FE9KI, FF's, HI6EC, HP1AP, KH6GS, KG4AK, KL7UM, OQ5DZ, OX3UE, TG5DM, VE8's, VP3HAG, VP3MCB, VP4CO, VP9F, VQ8AX, VR2BM,

VS1DI, VS7SB, XE3AF, XZ2SY, YN4CB and 3V8AP.

M. Shortland (Sunderland) sums up the band, from a Northerner's point of view, by saying that mornings are good for VK and ZL, early afternoons for VS1, 7, 9, VU and AP, and evenings for CR4, 5, 6 and 7, VQ's, ZD's and ZS's.

THE 28 MC DX

And so at last we come to Ten, on which most of the keen types have still been hearing just as much DX as anyone has found on Twenty. There is so much overlapping that I have prepared a consolidated list again. One or two single items, though, are worthy of mention. For instance, R. S. Stott seems to have stolen a march on quite a lot of you by logging W7ABB/DU, DU1AZ, MS4A, XE2KW, HH2W and EQ3SAM. W. J. C. Pinnell heard ZA3C on CW (hope he's genuine!); D. W. Waddell is the only one to mention VS7GD, 7PS, 7PW and 7RF, and he adds XE1PJ on CW for good measure.

Otherwise the DX comes out like this: All Phone:—AP2J and 2N, CR7IL, CT2AE, EL2A, 5B and 9A, F9QU/FM8, FE8AB, FF's, HC1KE, H16EC, HK4DF, HP1LA, HS1SS, HZ1AB and 1KE, KG4AK, KG6SF and 6USA, KR6CO, KZ5's, MP4's, MS4A, OH8OC (Lapland), OQ5AV, OX3BD and 3GE, PK's, TF3MB and 3SF, T12SA, UN1AB, VQ5ALT, VS6AM, VU2GB, XZ2AY, 2DK, 2GM and 2SY, YK1AC, ZD1FB, 1PW and 1SK, ZD2S, ZD4AC and 4AH, ZS9F.

The list above represents the combined offerings of K. Parvin, R. Bastin, F. A. Herridge, J. M. Graham, R. A. Hawley, D. L. McLean, R. J. Line, P. H. Strudwick, A. H. Edgar, R. S. Stott, W. J. C. Pinnell, J. C. Beal, D. S. Kendall and D. W. Waddell, A. M. Norden and H. M. Graham.

One other item is that J. P. Warren heard an American calling UJ8BF on phone, and wonders whether there really is a possibility of finding that country (on phone).

MISCELLANY

F. W. Hardstone (London, S.W.16) says that PK4PQ (14 mc) and PK4RB (28 mc) are one and the same person, but he is coming back home to PA this month, calling in this country on the way. F.W.H. has a card from KG6SF thanking him for "the best and most complete SWL report ever seen," which made him glow with honest satisfaction!

Concerning Top Band excitements, F. W. Hattemore (Winchester) remarks that WWV on 2.5 mc is audible at 0700 GMT, most days, and that WWV on 5 mc is sometimes S5 at 2200.

SSB TRANSMISSIONS

A. Bannister (Manchester) discovered a patch of the most extraordinary conditions on 14 mc. On January 13, he happened to listen on the band between 0410 and 0440 (of all times!) and logged KH6DY, KH6OR, KL7YY, VQ4ERR, ZEIGX and ZS6QJ. The chances of hearing anything at all on the band at that time of night, in January, are very remote. A.B. wonders how many other SWL's are showing an interest in Single Side-Band transmissions. He keeps a look-out for them and supplies the missing carrier with his BFO, finding them rather exciting. In particular the great reduction of background noise has been a revelation to him.

Those who have a good stable frequencymeter (such as the BC-221) will find it much easier to supply the carrier from that, because subsequent alterations in the tuning point of the receiver will not vary the beat-note. But it can be done with a BFO, and very well too, if

you're not ham-handed.

FUTURE CONTESTS?

This idea of a different contest every month has awakened a lot of interest, and I have been sent the following ideas for future months: Best log of stations from one DX country; ditto from one Zone: Largest number of U.S. States heard; ditto on 3·5 mc only: Collection of Maritime Mobiles: Russian districts on 7 mc only; and many more. Don't worry—your Commentator will find something to torture you with each month. Don't forget to get ready for the March one, already announced—times as in the March SLP's, below.

SET LISTENING PERIODS

February 22, 1900-2000 GMT—14 mc CW and Phone (for 0-v-0 and 0-v-1 only). February 25, 2200-2300 GMT—1·7 mc CW and Phone.

February 26, 0900-1000 GMT-28 mc Phone.

į

March 25, 2200 GMT-March 26, 0100 GMT-14 mc CW and Phone.

March 26, 1700-2000 GMT—14 mc CW and Phone.

Deadline for the April issue will be first post on March 1, so, once more, you will have to send your monthly claims a little before the end of the month of February.

Address your letters, Calls Heard, claims and so forth to DX Scribe, Short Wave Listener, 53 Victoria Street, London, S.W.1. Please get your Calls Heard in as early as possible, and please keep your claims separate from your letters.

So, for the present, 73, Good Listening, and may the bands all do exciting things for you!

CALLS HEARD

SET LISTENING PERIODS

14 mc 'Phone

Jan. 21, 1700-1800 GMT

Miss D. M. Winstanley, 8 East Hermitage Place, Edinburgh, 6

FA9KI, HZ1AB, MD7HV, MI3CD, ZD1KO, ZE2JN, ZS6SB, 3V8BB, 4X4AB, 4AG, 4CC. (Rx: 5-valve superhet.)

G. C. Allen. 24 Wiltshire Road, Thornton Heath, Surrey.

VE7AAD, VO1T, VQ4SC, ZB1BD, ZD1KO, ZE1JO, 1JV, 2JN, ZS6SB. (Rx: Home-built radiogram.)

P. H. Strudwick, 18 Elm Court, Finchley, London, N.3.

FA3CF, SVØAJ, ZD1KO, ZS1BV, 3JD, 6DI, 6JB. (Rx: 640.)

A. H. Edgar, 15 Dene Terrace, South Gosforth, Newcastle-on-Tyne, 3.

CN8BG, MD7HV, MT2AM, SVØAJ, VE7AAD, VQ3ONT, 4ERR, ZB1BD, ZD1BB, ZE1JA, 2KH, 3JA, ZD1KO, ZS6KV, 6RH, 4X4AG. (Rx: S.640.)

D. W. Waddell, 53 Orchard Road, Hitchin, Herts.

OX3GE, VE7AAD, VO1T, VP9KK, VQ4ERR, 4SC, W7ADS, 7BVO, 7LAH, 7UO, ZD1KO, ZE1JO, 2JN, ZS6SB, 6UR, 3V8BB. (Rx: S.640.)

J. C. Beal, 24 Woodfield Avenue, North Wembley, Middlesex.

CN8BG, 8MZ, EK1AD, SVØWY, UB5BP, VE7AAD, VO1T, VQ4ERR, W7BVO, 7LAH, ZB1BD, ZD1KO, ZE1JO, 4X4AB. (Rx: BC-224-B.)

R. G. Poppi, 274 Kent House Road, Beckenham, Kent.

CN8BV, 8MZ, EK1AD, OX3GE, MD7HV, SVØAJ, ØWI, UB5BV, VE7AAD, VK3HW, VO1AH, IT, V04ERR, VP9KK, ZD1BD, 1KO, ZE1JO, 2JN, ZS6UR, 4X4CC. (Rx: S.640.)

G. Moses, 65 Railton Avenue, Crewe,

AR8MR, MD2AM, VE7AAD, VQ4ERR, W7ADS, 7BVO, ZB1BD, ZD1KO, ZS2FA, 6UR, 3V8BB. (Rx: S,640.)

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

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

Arrange logs in the form given here, with (a) prefixes in alphabetical order, but not repeated; (b) numbers in numerical order and reneated as part of the callsign; (c) call-signs in alphabetical order. For example :-VK2GW, 3CP, 4UL, VP1AA, VQ3HJP, 4EJT. W6ENV, 7VY. Please underline each prefix, keep each list to one band, and, in short, make your lists exactly like those below, except that the more space you leave, the better.

Ray A. Hawley, Torview, Brookfield Crescent, Goostrey, Cheshire.
3V8BB, FA9KI, F9OV, HZ1AB, MD2AM, SVØWY, UB5BP, 5BV, VE7AAD, VK6PI, VOIT, VO4ERR, VS1BV, W6DI, 7ADS, 7BVO, 7LAH, 7UO, ZB1BD, ZD1KO, ZE1JA, 2JB, ZS6SB. (Rx: AR-88 and S.504.)

W. C. Askew, Melton Mowbray. CN8MZ, EK1AD, FA9KI, HZ1AB, UB5BV, VE7AAD, VO1T, W7ADS, 7BVO, ZB1BB, ZD1KO, ZE1JO, ZS2FA, 65B, 6UR, 3V8BB. (Rx: Commander.)

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

CN8AK, SMZ, FA9KI, FF8CV, MD2AM, VO1T, VQ4ER, VS6UR, W7ADS, 7BVO, 7LAH, 7UO, ZB1BD, ZD1KO, 3V8AJ, 8BB. (Rx: AR88D.)

M. S. Gotch, Eastacre, Chaters Hill, Saffron Walden, Essex.

HZ1AB, VO1AH, 1T, VP9KK, ZD1KO, ZE2JO, ZS2FA, 6SB, (Rx: Hambander with two EF54 preselector.)

J. H. W. Woodcock, 17 Penrith Road, Basingstoke, Hants.

HZ1AB, MD2AM, OX3GE, SVØAJ, WY, VE7AAD, VK6FJ, VO1T, VP9KK, VO4ERR, W7ADS, 7BVO, 7LAH, 7UA, ZB1BD, ZD1KO, ZEZJN, ZS2FA, 6SB, 6UR. (Rx: R107.)

C. J. Goddard, Handcross Grove, Green Lane, Coventry.

EA4CK, MF2AA, SVØWY, UB5BV, VE2HM, W7ADS, 7KG, 3V8BB, 8LD. (Rx : Decca AW-12.)

T. E. Botham, 4 Victoria Terrace, Walsall, Staffs.

CN8MZ, FA9KI, VQ4ERR, W7ADS, 7BVO, ZB1BB, ZD1BD, 1KO, ZE2JZ, ZS2FA, 3V8BB. (Rx: 5-valve superhet.)

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

VE7AAD, W7ADS, 7BVO, 7LAH, 7VO, ZB1BD, ZD1KO, 3V8AI. (Rx: S.640.)

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

AK2CO, MD2AM, OX3GE, SVØWV, VE7AAD, VK6PJ, V01AH, 1T V03AA, 4ERR, 4SC, W7ADS, 7LAH, 7UO, Y07WL, ZC6JM, ZD1KO, ZE1JO, 2JN, ZS2FA, 6SB, 6UR, 3V8BB. (Rx: 12-valve superhet.)

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

MD7HV, OX3GE, VE7AAD, VK6PJ, VOIT, VQ4ERR, 4SC, W7UO, ZB1BD, ZD1KO, ZE3JA. (Rx: V55R with converter.)

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

S.W.10.

CN8AK, SVØWY, UB5BP, VE7AAD, VO1AH, 1T, VP9KK, VQ2JN, 3AA,4ERR, 4SC, W7ADS, 7BVO, 7LAH, 7ROH, 7UO, ZB1BD, ZC6JM, ZD1KO, ZE1JO. 2JD, 2JF, 2JH, 2JN, 2JV, 3JA, ZL1HY, ZS2AO, 2DY, 2FA, 5II. 6CM, 6J, 6SB, 6UR, 6UV, 4X4AB, 4AG. (Rx: R.F. 24 unit into \$\$540.41\$

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

CN8MZ MD2AM, UB5BV, VE7AAD, VO1P, VQ4ERR, W7LAH, ZB1BD, ZD1KO, ZE21V, ZL2ADT. (Rx: AR88LF.)

14 mc CW

Jan. 28, 1700-1800 GMT

D. W. Waddell, 53 Orchard Road, Hitchin, Herts.

CN8BG, VE7AAD, 7KC, 7VO, W6AY, 6GAL, 6SR, 6UJ, 7FS, ZS5YF. (Rx: S.640.)

R. A. Fowler, 1 Dedmere Road, Marlow, Bucks.

FB8XX. OY3OS, VE7AAD, 7ZM, VOITX, VO3SS, W6NNV, 7FS, 7HS, ZLIMP, ZS4FZ, 4X4FR. (Rx: Eddystone

- A. H. Edgar, 15 Dene Terrace, South Gosforth, Newcastle-on-Tyne, 3. EA8AR, FA9DA, FB8XX, FQ8OG, KH6VP, VK7IK, VQ3AK, 3SS, ZD2I. (Rx: S,640.)
- L. M. Singletary, R.A.F., Bicester, Oxon.

VE7ZM, VQ3AK, 3SS, W6GAL, ZB2I, ZD4AM, ZE2JN, ZL1MB, 2FA, ZS2AZ, 5YF. (Rx: 0-V-1.)

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

CN8BG, DU1CW, VE7VO, 7ZM, VQ3SS, W6AY, ZB1BD, 21, ZD4AM. (Rx: V55R and converter.)

C. J. Goddard, Coventry.

EA7AR, FA8JO, FB8XX, K1NAO, 1XAO, OHINK, VE7CC, 7JV, W1BZ, ZL1MD. (Rx: Decca AW-12.)

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

FA8JO, VE7AAD, 7ZM, VK3XQ, VO1T, XZ2FK. (Rx: AR88 and

GENERAL

1.7 mc

M. G. Whitaker, Stile-House, Shelf, near Halifax,

GC2BMU, GM8FM, HB2IW, OK1AA, 1AW, WIBB, 1EFN, 2ZCZ. (Rx: Battery 0-V-1.)

J. L. Hall, 2 Coombe Court, St. Peter's Road, Croydon, Surrey.

CW: DL2DV, EK1AO, GC2BMU, GD3UB, GM2HIK, 8FM, GW8WJ, OKIAA, IAHX, IAJB, IDC, IEA, IJX, 20L, VEIEA, WIBB, 1EFN, 10E, 1PLO, 4NNN.

3.5 mc

J. L. Hall, 2 Coombe Court, St. Peter's Road, Croydon, Surrey.

CW: EKIAO, KZ5DR, MP4KW, TA3GVU, TG9RB, VP6CDI, W5ANE, 5CDU, CPM. 6ZAT, 7MNE, 7SCU, ØSQO, ØZCG, MR, 6CEM, 6ZAT, 7MNE, 7SCU, 6HBG, ØSO, ØSQO, ØZCG, XEIA, ZLIBY, 1CI, 1HM, 1MB, 2NJ, 3GQ, 3JT, 3NH, 3OZ, 4BO 4IE. 4JA.

F. K. Earp, 33 Lavender Terrace, London, S.W.11,

PY4ZI, TA3GVU, VEIJA, IXX, 3AE, VO2CA, WICDL, 1GTY, 1LOL, 1MQ, 1PNM, 2EGM, 2PRO, 2VIM, 3EDA, 4USM, 4TZB, 8CDQ, 8IMD, 6MY. ØSDA. (Rx: Modified R.1224A.)

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

'PHONE: VEIAY, IGD, IHY, IKP, IMH, IYV, VO4AL, WICMN, IDVY, IIDY, IKJ, 2BFL, 2DDK, 2PBN, 2WWE, 3BJ, 4AHY. 4DCM, 4EAV. (Rx: 4P88 and 5V 39.) AR88 and SX 28.)

7 mc

J. C. Beal, North Wembley, Middx. CT2AE, EA6AI, F9QV, FA9WD, ZB1AJX, 3V8AS, CW: CN9AC CW: CN8AQ, EA8BC, KP4HU, 4KF, MD7DC, PX1A, SV1SP, 1VS/MM, UA9CV, 9KCC, UF6AB, UG6AB, VE2ACN, 3DAB, UG6AB, VE2ACN, 3DAB, VP6CDI, W3MPF, 4DFU, 8AQ, 9GVG, ØBJL, ØSO, ZB1AB/P. (Rx:BC-224-B.)

R. S. Stott, 44 Corbet's Tey Road, Upminster, Essex.

'PHONE: CR5UP, CT2AE,

CT3AC.

AP5B, CO7BL, EA6AF, HZ1KE, KP4HU. EA9BB. KP4HU, KZ5DR, 5GT, MD7DC, MP4KW, PYSRT, UD6AH, UF6AB, VK2HZ, 2NO, 7JB, VP5BF, 6CDI, VQ4SC, VS1CW, 6AX, 7EL, ZD9AA, ZL2MM, ZS1BK, 5YF. (Rx:AR88.)

L. Hall, 2 Coombe Court, St. Peter's Road, Croydon, Surrey. CW: AP5B, HC2IH, HZICK, MD7DC, MP4BAD, 4KW, VK2AAH, 2DI, 2HZ, 2RA, 5RN, 6RU, 7JB, VP6CDI, VQ4SC, VSICW, 6AX, 6BK, 7EL, ZD9AA, ZE2JV, ZL4GA, 4HI, ZSIBK, IM, 2A, 4F, 5BK, 5DE, 5YF, 6KC, 6UN.

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

CW: AP5B, CT3AV, EA9BB, HZ1CK, KP4HU, KV4AA, MD2PJ, 7BU, 7DC, 7PE, MP4KW, SV1VS/MM, ØUN, TF3EA, 5TP, UG6AB, VK3AE, 5OU, VQ4SC, ZS1BK, 1GX, 2A, 5YF, (Rx: 0-V-0.)

D. W. Waddell, 53 Orchard Road, . Hitchin, Herts.

AP5B, CM2SW, 7NK, CCT3AB, EA9BB, FA8CR, HZ1CK, 4HII. 4KF, KZ5BE, KP4CC, 4HU, 4KF, KZ5BE, MD7DC, MP4KW, PY1ABT, 2TD, TF5TP, UA6KEA, 9CV, 9KAB, 9KCC, UF6AB, 6KPA, VKZAAH, 2DI, 2NO, 2RA, VQ4SC, VS1BX, 6AX, WSLS, 6PB, 6ZZ, 7DL, ZD9AA, ZE2JV, ZL2FA, ZS1BK, 5DE. (Rx: S.640 and R.1155A) A. G. Scott, 16 Childwell Abbey Road, Liverpool, 16.

PHONE: CN8AI, COSBC, 8GM, CT2AE, FA3DS, 8JO, 9RZ, PYIALS, SP5AB, 5SG, ZBIAJX, (Rx: BC 455.)

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

CW: FA8BG, KP4HU, 4LA, SPICM, 5SG, UA3CR, 3HS, 5FE, UB5BC, 5BT, 5BZ, 5DC, 5KA, VEIGU, W2BSS, 2CTN, 2CUY, 2NUU, 2WAX, 4BGO, 4EJY, YO3GY, YUZAZ, ZBIAJX. (Rx: Hambander and 1155A.)

A. H. Edgar, 15 Dene Terrace, South Gosforth, Newcastle-on-Tyne, 3, CW: CIKR, CN8NU, CP51M, CX1CW, DUILG, EA7AU, KP4HU, UA1AR, 6KBB, 6KEA, UB5DC, UF6KAK, VE3AUE, 3D1, W2FOR, 4ADK, 4BGO, 4NRV, XE2KK, ZP5LA, 3V8FF. (Rx: S.640.)

14 mc

Hay J. P. Colwill, Common, Launceston, Cornwall.

'PHONE: CN8AH, 8AM, 8BG, 8BV, 8EI, 8EL, 8EO, 8MI, CR5UP, EA8CO, 8HS, EKIAR, IHK, FA3FB, 3KC, 8WH, 9WC, 9WU, PYIAQM, IIK, 2AK, 6CO, 7AJ, 7DD, 7QG, 7QR, 7XC, WMBX, ZL4HP, (Rx: McMichael battery model) model.)

M.G. Shortland, 54 Stratford Avenue, Sunderland.

CW: AP2N, CR4SS, 7AG, 7IZ, CT2AA, 3AV, DU1GT, EA9AI, FE8AB, FF3CN, FQ8SN, HC7KD, HZ1KE, KZ5AA, PJ5RE, OOSAV. PK4DA. UAØKFD, UI8KBA, VE8SM, VK2AGW, VP1AA, VQ3SS, 4AQ, 8AX, VS1BX, 5KEA, 6JH, 9AL, VU2BY, XZ2RY, ZEIJO, ZL3CP, ZS3R, 6DW. (Rx: Mains 0-V-1, indoor 33-ft. ant.)

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

'PHONE: CRSUP, 6AI, HI6EC, HZIAB, JA2AZ, 2BL, 2BS, OQ5DZ (Ruanda-Urundi), PY8RJ, 9AE, PZIOY, VESAW, 8OX, VK6PJ, 7AZ, VP3MCB, 7NU, W7FC (Montana), ZEIJO, 1JS, 2JT, 2KJ, 2KZ, ZS4CT, 4N, 8A

CW: CR4AF, 7AG, FB8XX, HC7KD, PK2ZZ, VQ8AX, ZD9AA, ZS9D. (Rx: S.640.)

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

CR5UP, 6A1, EP3L, PHONE: 'PHONE: CRSUP, 6A1, CT2AB, 2AE, DU1AL, EP3L, HK4CF, 4JO, HP1AC, JA2BL, 2BS, KH6CT, KL7PE, MD7HV, PZ1WK, SP5AB, T53EA, TG9RB, UG6AB, UR2KAA, VS7BR, 7SV, YS1GM, ZS3Z. (Rx: S.640.) J. P. Warren, 14 Francis Road, West Croydon, Surrey.

'PHONE: CR5UP, CT2AE, EA6AP, EL5B, FF8CG, 8DA, KG4AA, KH6CT, KL7ZM, H18WF, HR2RF, HZ1KE, JAZBL, 5AB, MD7HV, SP5AB, TF3EA, UQ2AB, VP3MCB, 9G, VQ2JD, VS7SV, XE1AC, ZD4AU, ZE3JF, (Rx: Converted Bendix RA-10-DA.)

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

'PHONE: CE3CZ, CR5UP, H16EC, HK1CK, HP1PH, HZ1KE, KH6DY, 6OR, KL7YY, KR6CC, VR2BM, VS6AL, 6BE. (Rx: BC 1147A.)

G. Moses, 65 Railton Avenue, Crewe, Cheshire,

'PHONE: CO2SG, 6VD, 8MP, CR5UP, CT2AB, 2AE, EAGCT, 8AE, ELSA, HH3DL, KL7PE, KP4AZ, VE7CN, VP3MCB, 4TB, 7NU, 9F, 9KK, W7MBX, ZD1KO. (Rx: S.640.)

B. W. Sutton, 117 Utting Avenue East, Liverpool, 11.

EK1DI, FF8FP, HK4CF, TI2OE, VK6BW, 6KW, VO1YG, VP1KM, 4TB, ZC6DZ, 6ZM, 3V8AA. (Rx: 0-V-1 battery.)

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

'PHONE: CN8MZ, EA8AE, OX3GH, OQ5CF, VP3MCB, VP9II, 9KK, VQ4CJG, W6LBZ, 7FPY, ZDIKO, 3V8AA. (Rx: 1-V-2 all-dry portable.)

P. Bysh, BM/GSWL, London, W.C.1 (QTH 6 miles north of London).

'PHONE: CE2BQ, 3AE, CN8BA, 8MI, 8MZ, CT2AE, JA2BL, PYYVA, VE8MI, VK2QR, 4UL, VP9S, VQ4AI, YV5AG, ZC6DZ, 6JM, ZS1GG, 4X4BL. (Rx: SX-16, SX-24.)

T. E. Botham, 4 Victoria Terrace, Walsall, Staffs.

'PHONE: CO2ID, 3AA, CT2AE, CZIWK, EA8CO, HH3DL, HZIKE, KG4AK, KP4AZ, MD2HN, MI3AM, OA4CN, OX3GH, VP4TB, 4TZ, VQ5ALT, VS7SV, ZDIKO, ZE2IZ, ZS1BV. (Rx: 5-valve superhet.)

P. Fry, 95 Hursley Road, Chandlers Ford, Hants.

'PHONE: CN8BA, 8DO, 8EI CO8MP, CR4VX, CX2CO, FA3CF, SKC, 9KI. HH3DL, MDZE, PY2AK, 4BU, 6CO, 7AG, 7VA, T12ECO, VESMJ, VX2CO, VP3MCB, VU2SA, ZC6DZ, 6JM, ZD1KO. (Rx: Marcontphone T14A.)

M. G. Whitaker, Stile-House, Shelf,

'PHONE: CN8BZ, 8MZ, F9QV**(Corsica), MD2AN, 7HV,

SVØAJ, ØWY, UB6BP, VK3HW, 6PJ, VQ2HW, 3AA, 4ERR, W7ADS, 7UO, 7VDO, YO7WL, ZB1BD, ZC6JM, ZD1KO, ZE1JO, 2JN, ZL4HP, ZS6BX, ZS6SB, 6UR, 3V8AI, 8AJ, 8BB, 4X4AB, 4AD, (Rx: Hambander.)

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

'PHONE: CE2BQ, CR5UP, CT2AE, 3AK, EA8RB, EL5B, FF8CN, 8GP, HC1AB, 1FG, HH3DL, HPIPV, HR2RF, KG4AK, SVØUN, TI2JS, 2TG, VP2CA, 3MCB, 4CO, VO3CJG, 4ERR, 4SC, VS7GR, 7SB, XEIAC, YS1GM, 1MS, ZC6DZ, ZD1KO, 4AU, ZL4AK, 4X4AD. (Rx:1-V-1 (mains).)

28 mc

P. H. Strudwick, 18 Elm Court, Finchley, London, N.3.

'PHONE: AP3G, 2N, EL2A, HC1KE, HP1AAV, HZ1AB, 1KE, KG4AK, 6SF, KP4BU, 4HF, MP4BAB, 4BAO, OX3BD, STZKR, VP4CO, W1GJY/MM, 2LDH/MM (Mid-Atlantic), 2ZBH, 2ZGE/MM, 5AXI/MM (Med.),5OFO/MM (near Hong Kong), YK1AC, ZD1SK, 4AU, ZE1JE, 2KH. (Rx: S.640.)

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

'PHONE: CN8RM, CX5AO, FF3CN, FN7WE, HC2OT, HK4DF, HZ1AB, IKE, KP4JM, MD2MD, MI3GH, MP4BAB, ST2AM' TA3GVU, TF3SF, VE6FJ, VS7GD, ZE1JE, 2KH, ZD1PW, 4AC, 4AU. (Rx: Superhet 6 plus Modified RF24.)

R. G. Poppi, 274 Kent House Road, Beckenham, Kent.

AP2G, 2J, 2N, CR5UP, F9QU FM8, FF3CN, 3PJ, HCISA, HI6EC, HH2W, KG4AK, MP4KW (South Persia), OA4AM, PK3MR, VK6GA, 6HL, 6HR, 6LL, 6JW, 6RU, 6WU, VP4TO, VS6AM, VU2BJ, 2DU, 2GJ, YS2AG, ZD4AD, 4AU. (Rx: S.640.)

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

'PHONE: CR5UP, 7IL, EL2A, 5A, FF8AH, 8FP, HZ1AB, KE, MP4BAB, 4BAO, MS4A, PK3LC, 3MR, VP6GQ, VU2CQ, 2GB, XZ2GM, YS1RR, ZC6JM, ZDIPW, 4AC, 4AH, 4AU, ZS3Z, 9F. (Rx: S.640.)

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

'PHO NE: CO7RQ, CT2AE, FF3CN, 8FP, CR5UP, 7AL, HZ1AB, KZ5MC, MP4BAB, 4BAO, 4KW, PK3LC, 3XE, VK5AE, 6JW, VS6AM, 6BC, 7PW, VU2GB, 2GJ, VQ4AC, 4ERR, XZ2GM, YK1AC, ZD4AU, ZE2JB, 2JK, ZS9F. (Rx: AR:88 and S,504.)

A. H. Edgar, 15 Dene Terrace, South Gosforth, Newcastle-on-Tyne, 3.

'PHONE: AP2N, EL2A, HZ1AB, 1KE, KZ5MP, MP4BAB, OQ5AB, OX3GB, ST2AM, VK2WY, VQ2WP, 4CRE, W5AXI/MM, YK1AC, YS2RS, ZDISK, 4AD, 4AH, ZE1JO, ZL3BU, ZS1HY.

CW: UB5BQ. (Rx: S.640.)

J. W. Cave, 12 Hilda Road, Parkstone, Dorset.

PHONE: AP2G, CE3CZ, CM9AC, CNSEW, CO2JL, EKIRW, HZIAB, KP4AJ, LU3DH, MD2AM, 2MD, MI3SC, MP4BAB, 4BAO, MT2BFC, OQ5AB, 5AO, OX3BD, 3GE, PK3MR, PY7VB, ST2AM, TA3FAS, 3GVU, TF3EA, SF, VE5CD, 6SD, VK5EM, VO2N, VQ4ERR, VS9AH, W5AXI/MM, 5OTF/MM, 6AOR, 6YRL, 7DTB, 7GRU, YKIAC, YV4AN, ZB1AU, 2A, ZC6JM, ZE2JV, ZS9F. (Rx: Home-built 0-V-1.)

T. G. Spencer, Cherry Tree Cottage, Slimbridge, Glos.

AP2N, CR5UP, EQ3SAM, HC1OY, HP1AA, HZ1AB, MP4BAB, OQ5AB, VU2GJ, XE1PA, YS2AG, ZD4AU. (Rx: Commander.)

R. L. Bastin, 83 Guphill Avenue, Coventry.

'PHONE: MT2BFC, OX3BD, 3GE, PK3LC, T12ZZ, UA6SF, VE6WZ, VK5AE, 5JA, VU2GB, W1MCC/MM, 7ABB/KA, ZD4AC, ZE2KJ, ZSSGU. (Rx: RF24 unit into Hambander.)

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

'PHONE: AP2N, CR5UP, FF3CN, 884H, 8FP, HH3L, HZ1AB, 1KE, HPIBR, 1LA, 1LO, HSISS, KG6SF, MP4BAB, 4BAO, OX3BD, PK1UA, 3MR, 4DA, VS9AH, VU2GB, XZ2GM, YS1RR, ZC6DZ, 6JM, ZD1PW, 2S, 4AC, 4AH, 4AU, ZS9F. (Rx: AR88LF and SX-28.)

D. E. Tomkinson, 3 Montpelier Terrace, Brighton, Sussex.

PHONE: CE3AE, CN8EO, CX4CS, EK1RW, FA3JY, FF8FP, HPILA, HZ1AB, KG4AK, KP4DC, 4HZ, KZ5GM, LU3DH, MI3AB, MT2BS, OQ5AB, PY2JU, ST2AM, 2KR, TA3FAS, 3GVU, UA1AA, UP5VV, VP4TZ, 6SD, VQ2JN, 4ERR, VS9AH, YO7WL, ZB1AK, ZD1FB, 4AH, ZE3JA, ZS1HY, 3Z, 6QJ, (Rx: AR88.)

A. M. Norden, 9 Leeside Crescent, London, N.W.11.

'PHONE: AP2G, 2N, CE3CZ, FF3CN, 8AH, 8FP, KG4AK, KZ5CD, 5CP, 5EV, 5GM, 5LS, MP4BAB, 4BAO (Bahrein), 4KW, OY2RD, VK6MO, VQ5ALT, VS9AH, VU2CQ, XZ2SY, ZS9F, (Rx: R208 with extra stage of LF.)

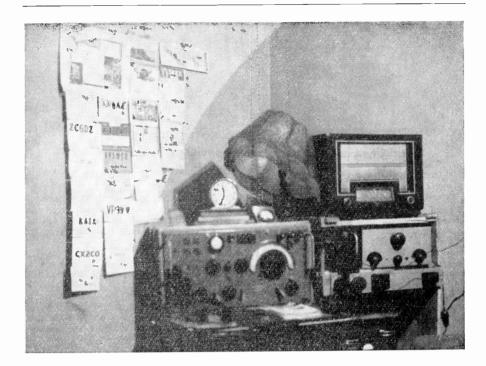
SHORT WAVE BROADCAST STATIONS

Revision 49.69-62.73 Metres

Giving Frequency, Wavelength, Callsign and Location

These lists appear each month, covering the 11-128 metre section of the wave band within which all the short wave broadcasting services of the world operate. For economy of space, this band is dealt with in five sections, a list of active stations in one of the sections being given in full 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-		
quency	Length	Callsign	Location	quency	Length	Callsign	Location
6038	49 69	OAX6B	Arequipa, Peru.	5580	53.76	HCJ	Tulcan, Ecuador.
6035	49.71	CXA30	Montevideo, Uruguay. Rangoon, Burma.	5060 5045	59·29 59·46	YVKD HI8Z	Caracas, Venezuela. Santiago, D.R.
			Monte Carlo.	5029	59.65	YVKM	Caracas.
6032	49 - 73	HP5B	Panama City.	5020	59.76	YVKO	Caracas.
6030	49 75	XEKW	Morelia, Mexico.	5010	59.88	PJC1	Willemstad, Curacao.
6025	49.79	PGD	Stuttgart. Hilversum.	5005 4989	59.93	YVMO	Damascus, Syria.
0023	42 13	HCICR	Ibarra, Ecuador.	4985	60·13 60·18	HCQRX	Barquisimeto. Quito, Ecuador.
			Kuala Lumpur.	1,705	00 10	Qici	Singapore,
6024	49.80	VELINI	Brazzaville.	4980	60.24	HIIA	Santiago, D.R.
6020	49.83	XEUW	Vera Cruz, Mexico. Kiev, U.S.S.R.	4965 4960	60·42 60·48	HJAE	Cartagena, Colombia.
6019	49.84	HJCX	Bogota.	4900	00.40	YVQA HC5HC	Cumana. Riobamba, Ecuador.
6015	49.88	PRA8	Recife, Brazil.			VUD2	Delhi.
6013	49.90	JKK	Nazaki, Japan.	4959	60.50	HICO	Bogota.
6012 6010	49.90	XEOI OLR2A	Mexico City. Prague.	4950	60.61	ZQI HI1L	Kingston, Jamaica.
5010	,, ,,	VUD9	Delhi.	4948	60.63	HJCW	San Domingo, D.R. Bogota.
		CJCX	Sydney, Nova Scotia.	4940	60.73	YVMQ	Barquisimeto.
		HS8PD	Bangkok, Thailand.	4935	60.79	HJAR	Manizales.
		CE6O1 OAX4O	Antofagasta. Lima, Peru.	4932 4931	60·83 60·84	CR7BV HJAP	Lourenco Marques.
		OO2RC	Leopoldville.	4930	60.85	HC4LL	Cartagena, Colombia. Santa Maria, Ecuador.
6007	49 94	ZRH	Johannesburg.			JKM	Kawachi, Japan.
6006	49.95	CECN	Rabat, Morocco.	4920	60.98	VUM2	Madras, India.
6005	49.96	CFCX VE9AI	Montreal. Edmonton.	4919 49 18	60·99 61·01	YVKR VLM	Caracas.
		JOSC	Sapporo, Japan.	4915	61.04	ZOY	Brisbane, Queensland. Accra, Gold Coast.
6004	49.97	HP5K	Colon, Panama.	4910	61.10	JKI	Nazaki, Japan.
6001 6000	49·99 50·00	OAX2A	Trujillo, Peru.	4907	61.14	YVMM	Coro, Venezuela.
0000	30.00	HJKB 4UM	Bogota. Port-au-Prince.	4901 4900	61·21 61·22	HJAG ZOH	Barranquilla.
		DZH4	Manila, P.I.	4900	01-22	YVOE	Colombo, Ceylon. Bolivar.
		HI9B	Santiago, D.R.	4895	61 · 29	PRF6	Manaos, Brazil.
			Damascus, Syria.			НЈСН	Bogota.
			Dornbirn, Austria. Moscow.	4890	61.35	YVKB	Johannesburg. Caraças.
			Salisbury, S.R.	4885	61.41	HJDP	Medellin.
5000	50.00	nn***	Noumea, N. Cale'nia,	4880	61 48	VUC2	Calcutta.
5998 5993	50·02 50·06	PRI3 HCJB	Belo Horizonte. Quito, Ecuador.	4879 4878	61·50 61·51	YVKF	Caracas.
5986	50.12	LRSI	Buenos Aires.	4875	61.54	HJFH	Pietermaritzburg. Armenia, Colombia.
5985	50 · 13	BEA9	Nanking, China.	4866	61 65		Srinagar, Kashmir.
5981	E0.16	7537	Mecca, Saudi-Arabia.	4865	61 - 66	PRC5	Belem, Brazil.
3981	50.16	ZFY YSW	Georgetown, B. Guiana. Santa Ana, Salvador.	4860	61.73	HJFA YVPA	Pereira. San Felipe.
5980	50 · 17	1011	Andorra la Vieja.	4000	01 73	JKL	Yamata, Japan.
5970	50.26	CBNX	Saint Johns	4855	61.79	HJCA	Bogota.
5968	50.27	HI4T HVJ	San Domingo, D.R.	4851	61 .84	VQ7LO	Na i obi, Kenya.
5960	50.34	HJCF	Vatican City. Bogota, Colombia.	4850 4847	61 86 61 ·90	YVMS HJGF	Barquisimeto. Bucaramanga.
		OAX4H	Lima, Peru.	4845	61.92	CSX2	Ponta Delgada, Azores.
5957	50.36	RLF	Moscow.	4840	61 9 8	VUB2	Bombay, India.
5951 5950	50·41 50·42	4V2S OAX4P	Port-au-Prince, Huancayo, Peru.	4835	62.05	YVOI HJKE	Valera, Venezuela.
5942	50.49	OIX	Godthaab, Greenland.	4828	62.14	YVOA	Bogota. San Cristobal.
5920	50.68	HRA	Tegucigalpa.	4825	62 - 18	HJED	Cali, Colombia.
5908	50.78	OAX4V	Lima, Peru.			ZYE7	Parnaiba, Brazil.
5900 5896	50·85 50·88	ZNB OAX4Z	Mafeking. Lima, Peru.	4823 4820	62·20 62·24	CR7BV	Singapore. Lourenco Marques.
5895	50.89	CR4AA	Praia, C. Verde Is.	4020	02.24	YVRC	San Fernando de Apuro.
5886	50.97	ZRK	Cape Town.	4815	62.31	HJBB	Cucuta, Colombia.
5880	51.02	YNCS	Managua,	4810	62.37	YVMG	Maracaibo.
5875 5870	51·06 51·11	HRN TIGPH	Tegucigalpa. San Jose, C. Rica.	4805	62.43	HJDU ZYS8	Medellin.
5855	51.24	CP15	La Paz, Bolivia.	4800	62.50	YVME	Manaos, Brazil. Maracaibo,
58 40	51 - 37	OAX1B	Piura, Peru.				Johannesburg.
5800	51.72	CE8AA	Santiago, Chile.	4700	(2.63	WWO =	St. Denis, Reunion.
575 7	52.10	PZH5 YNJAT	Paramaribo, Leon, Nicaragua.	4790 4785	62·63 62·70	YVQC ZYM8	Bolivar, Venezuela. Sao Luiz, Brazil.
5620	53.38	OAX2A	Trujillo, Peru.	4783	62.73	HJAB	Barranquilla.
					·•		



SWL Stations NO. 30

FOR many years before the war, J.E. Taylor, of 20 Rutland Avenue, Liverpool, 17, was keenly interested in the logging of DX broadcast stations. Now, his attention is concentrated on the amateur bands, and the station record to date is 124C in 30Z, with 34C and 25Z verified.

The equipment consists of an 0-V-1, R.107, RF-24 modified for 28 mc, and a commercial all-wave BC set. These receivers are operated with several aerials; a 66-ft. long wire, 20-metre dipole, a 10-metre doublet, with a beam for 28 mc reception in hand.

Being ex-Royal Signals, J. E. T. is an experienced operator and has actually worked from 11 overseas countries on Army equipment of various types. He intends to come on the air in due course with an amateur licence, and is keen on constructional work and the practical side of all SWL activities.

Readers in the neighbourhood who care to make personal contact with J. E. T. are sure of a welcome, whether it is for a spot of work at the bench, Morse practice or instruction, or just a chat about radio. Indeed, he is anxious to get into touch with other SWL's locally with these objects in view—we feel sure that there are many Liverpool readers who would like to take advantage of such an offer.

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.

THE WHIFEND

by A. A. MAWSE

A QUESTION frequently put to your conductor is whether he is able to supply details of a battery-operated receiver for 144 mc. The answer, at the present moment at least, is definitely in the negative, although, of course, any receiver can be run from batteries if expense is no object!

The demand for such receivers comes from two categories of listeners: Those without mains, and those who wish to enjoy the pleasures of portable operation. Current consumption rules out the super-het and that leaves the straight receiver and the superregen as possibilities. With the former the problem of frequency stability is likely to be almost insuperable, and will make reception of anything but strong local signals very nearly impossible, while the latter is a menace to all other VHF receivers in its neighbourhood due to the interference it radiates. In addition, the results are not likely to be satisfactory.

Your conductor's opinion is that to attempt VHF work with inferior equipment is fatal. It only serves as a discouragement. reception is something for the more serious listener, and he must be prepared to build suitable equipment. This is not intended to imply that 2-metre listening is just "a rich man's hobby." If it were, your conductor would be excluded, but makeshift equipment ust will not do. Although much pleasure can undoubtedly be obtained from listening to local and semi-local stations it is the weak DX signals which are the most fascinating from the amateur point of view, and if these are to be heard above receiver noise and so on, then the valve choice for RF and mixer stages is very limited. Types such as the 6J6, 6AK5, EF54 are essential. In addition, for a number of reasons a high IF, 8 mc or more, is desirable and there must be adequate amplification at this frequency. All this makes battery operation difficult, and it would seem that the unfortunate listener who has no mains must be prepared to provide a power supply such as a vibrator unit or rotary transformer which can be run from 6 or 12 volt accumulators. This is what is done in aircraft, and in other applications where there are no mains, with entirely satisfactory results.

This may be discouraging to the "no mains" listener, but it would not be right to suggest that worthwhile results can be obtained with

Receiver Design— Conditions Poor— Station Reports—

ab initio simple equipment. To attempt to achieve results with two- or three-valve battery receivers is, in your conductor's opinion, a waste of time and money.

DX on Two

G2XC has suggested in the Short Wave Magazine that in order to check two-metre DX reception claims beyond all possible doubt, the checking should be done by a third party. The idea seems sound enough and should provide definite proof of the accuracy of the claims. There will always be a "Doubting Thomas" when the unexpected occurs! So, to make the whole thing water-tight, when you hear DX at or beyond 500 miles, it is suggested you inform the Short Wave Listener immediately. We will then write to your DX and ask for details of his two-metre transmissions on the day in question, without first giving him the details of what you heard. Both reports, his and yours, can then be compared and a reliable check made. To make this a real check it is essential that you do not at the same time report direct to the DX station. If your reception is confirmed by this check, we will issue you with a certificate that we have verified your claim, and at the same time we will endeavour to obtain you a QSL from the DX station.

Recent Results

Since the excellent opening of New Year's Day, good DX has been a rarity on two metres.

TWO-METRE DX				
G. E. Magrow (Dawlish)	PAØUW	379 miles		
R. Hastie (Hayes)	F3DC	221 miles		
A. F. Hayton (Palmers Green)	G5BD	116 miles		

Note: All claims for this Table must be for distances over 100 miles and accompanied by QSL card to verify.



G2XS, Kings Lynn, is a keen exponent of the art of Two Metres; here he is at the receiver.

Acavity has been fair, at least in the South, but neither the cold dry spell of mid-January nor the rain and gales at its end produced any outstanding DX and, in general, signals have been confined to the 80 to 100 mile mark. This is, of course, not unexpected under such weather conditions.

P. J. Towgood (Bournemouth) in spite of the poor conditions logged a number of signals of the DX category. On January 21, he was hearing G2IQ (Sheffield) quite well, but otherwise there was a lack of Northern signals. He has spent some time checking on Sutton Coldfield TV. The sound is frequently S9 or more, on an aerial consisting of the inner conductor of the coax which feeds his 144 mc beam. He can actually get intelligible sound from an aerial of 1 ft. of wire hanging from the aerial socket on his RF27 converter! He regrets the lack of two-metre activity during TV hours, but suspects this is not due to TVI but to the 2-metre Tx men being keen televiewers. (Or busy building TV receivers for their wives !)

Other news from P.J.T. is that he has logged GW3EJM and G3CGQ, the latter giving him a new county. On several evenings the Cambridge signals have been reaching Bournemouth when no other DX from a similar

distance was audible. Other South Coast stations have reported the same effect from time to time, and it is probable that the relatively flat East Anglian country, allowing more effective low-angle radiation, may be responsible. Similar effects were noticed on five metres.

E. A. Lomax (Bolton) sends a strawberry (in contrast to the more usual raspberry) to G3EHY and GW2ADZ for providing him with some regular DX to check on. However, it is possible to assure E.A.L. that there has been activity in London and the south. G2CIW, G2XC, G6LK, G6XM and G8IL are just a few of those who have been heard on most evenings, while some nights there have been a dozen or more signals audible. It is therefore presumably conditions that have prevented E.A.L. from hearing them in Lancashire. He asks for a small scale contest to spur on activity, and this is being borne in mind. In the meantime E.A.L. listens to the local police transmitter with its latest stolen car reports.

A. L. Mynett (Wembley) checks in with two new counties, Suffolk (G2CPL) and Montgomery (GW2ADZ). He has found conditions to the South-West reasonably good, with G2DSW making good use of his 10 watts to a pair of 7193's. No doubt, A.L.M.'s 6J6 converter and 12-element stacked array played their part in this reception. A. L. Higgins (Aberkenfig, Glam.), having been active on 144 mc for some months, heard his first signal on January 22, when GW2DUR was S8 to 9; he reports GW2HH active in Bridgend. A.L.H.'s receiver is a RF27 into a Hambander and a four-element close spaced beam.

J. E. Harman (Eastbourne) has been putting in time on the aerial side and, with G3DIV/A sharing his station on Two, they are beginning to get some real results—incidentally, Club

TWO-METRE COUNTIES HEARD Starting Figure, 10

P. J. Towgood (Bournemo	uth)		 34
R. Rew (Birmingham)			 28
A. L. Mynett (Wembley)			 25
G. E. Magrow (Dawlish)			 22
A. W. Blandford (Mitchar	n)	••	 16
R. M. James (Chatham)			 12
P, Finn (Iver)	• •	••	 11

members are asked to report on 3DIV's signals. The array at present in use is a 6 full-wave stacked two-over-two-over-two, fed at the centre, and as J.E.H. now has transmitter

assistance, he is able to line up this beam much more easily. His calls heard list for the last month shows some useful DX logged.

Another to concentrate on the aerial is R. A. John (Swansea) who has a 3-element close-spaced affair under test right in the shack—it has already made a considerable difference to his results and January 15 was a red-letter day, with G3EHY (Banwell, Somerset) as first DX. The locals have gone up considerably in strength, and altogether R.A.J. feels that he is now on the right track—the converter has also been improved by taking the oscillator HT feed to the centre of the coil instead of direct to anode via a choke.

A. Blandford (Mitcham) finds the band very dead at times (don't we all!), but has managed to bring in a few more new stations; his total heard now numbers 116, which strikes us as quite good going, even though Mitcham is in an active area.

In Conclusion

Your conductor would like to appeal to all his regular correspondents to send in reports, lists of calls heard and news items even during these winter months when, as we all know, activity conditions tend to be at their lowest. It is not only in this country that VHF activity falls off in the winter, as a similar state of affairs is reported in the American magazines. Your reports for next time should be addressed to A. A. Mawse, Short Wave Listener, 53 Victoria Street, London, S.W.I, to reach us by March 2. And keep up your VHF listening!

TWO-METRE CALLS HEARD

SHORT WAVE LISTENER

A. L. Mynett, 29 Sunleigh Road, Alperton, Wembley, Middlesex.

50 to 75 miles: G2DSW, 2FJD, 2JU, 2NM, 2XC, 2XV, 3BHS, 3DEP, 3EJL, 3FAN, 3WW, 4MW, 8IL, 8LY, 8SY.

75 to 100 miles: G2FNW, 3ABH, 3CFR, 3ENS, 5UD.

100 to 150 miles: G2CPL, 2IQ, 3EHY.

150 miles and over: G2BMZ, 6WT, GW2ADZ. (December 31 to January 26; 6J6 converter; 12-ele. stack.)

E. A. Lomax, 28 Welbeck Road, Heaton, Bolton, Lancs.

G3ABA, 3AHT, 3CSC, 3CXD 3DA, 5CP, 5KX, 5RW, 5VN/P, 8SB, GW2ADZ. (January 1-30; 6J6 converter into AR88 on 12 mc; 10 metre folded dipole 38 ft. high, 300 ohm feeder.)

J. E. Harman, 10 Royal Sussex Crescent, Eastbourne, Sussex.

F8GH, 8OL, G2CIW, 2MV, 2UJ, 2XV, 3FIJ, 3LL, 4HI, 4IG, 4MW, 5PY, 5IB, 6WU, 6XM, 8KZ. (Heard January 1-February 1.)

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

'PHONE and CW: 25-50 miles: G2NM, 2XC, 3FAN.

50-100 miles: G2AHP, 2ANT, 2BMZ, 2FMF, 2MC, 2MV, 2QV, 3CGQ, 3EHY, 3FD, 3FXG, 3GBO, 3GSE, 4DC, 4HT, 5BC, 5MA, 5PY, 5RP, 5TP, 6CB, 6JK, 6LK, 6OH, 6OT, 6UH, 6VX, 6WT, 6XM, 8IP, 8SM, GW3EIM.

100-150 miles: G2CIW, 2FJD, 2WJ, 2XV, 3WW, 4MW, 5UM, 5ML. 6CI.

150-200 miles: G2IQ. (January 7th-29th inc. Rx: PP 6J6 RF, PP 6J6 mixer, 2 × 6C4 osc., into xtal-controlled 9 mc converter into 1.6 mc IF/AF amp. Aerial: 4-ele. c.s. beam, 22 ft. high, fed by co-ax.)

Please mention the Short Wave Listener when writing to Advertisers

Be a Good SWL

WORDS OF ADVICE

From A LICENSED OPERATOR

THE licensed radio amateur is known the world over as a good-hearted and friendly type, always prepared to help a fellow enthusiast and also to be of assistance to SWL's anxious to learn all they can about operating technique. Yes, the SWL almost certainly must have some contact with licensed amateurs as part of his education, BUT...

The word "but" in capital letters is not a printer's error; it is put there purposely and with some emphasis. No amateur worthy of that honourable title will turn away an interested visitor. On the contrary, being usually just a little conceited he is very pleased to show off his gleaming rig, and point out the QSL cards from rare countries, saying: "I worked him with only 10 watts, and on Forty at that!" BUT (there it is again) there is a limit even to his patience. In the first place, his station has been assembled to suit his own requirements, and it is of secondary importance that it can be used as a museum piece to show to visitors. It has taken a great deal of time and patience to get the gear into satisfactory working order and its owner wants it to stay that way. Furthermore, the average transmitting amateur has various other obligations -such as house, wife, family, garden, correspondence, and so on-to meet and contrary to SWL belief does not spend all his time on the

What Sometimes Happens

The writer of this column has suffered to some extent, and certain local operators have suffered extremely, from what might be called "the SWL menace." Yes, chaps, MENACE! The offender is usually young and very keen on radio. In the same way as younger enthusiasts count train numbers and spend most of their spare time around engine sheds and railway sidings, so the young SWL likes to be very much connected with a real live station. So a local operator is selected and a call made. Things proceed something like this:

"Is this G3XYZ?" ("Yes.") "Well, I'm a keen SWL and I've popped over to ask if you would mind showing me your rig. I've often heard you on the air, and I've never seen a ham station before." ("OK, old man. Pleased to meet you. Come right in. Always willing to lend a hand. Now this is the main transmitter, for Ten phone. . .")

A month later the SWL is still very enthusiastic, but as he bangs out "CQ" on

the doorknocker, G3XYZ groans and says to the XYL: "Crikey, here's that listener chap again. This is the ninth time he's been here this week. Hasn't he got a home?"

Enter the SWL, beaming all over his face. He goes straight to the rig, sits down at the operating table and starts waggling the bug key, which he hasn't the faintest idea how to use. (Little does he know that every time the key makes contact the transmitter is on the air.) Then he decides that the weights on the key need shifting and before 3XYZ can stop him he's altered the position that took about 15 minutes to get "just so." Tiring of playing with the key, he turns his attention to the receiver, "Been working on Ten, old man? Forty's much better !" Bang, crash ! and the bandswitch is turned. Whump! as the flywheel tuner is spun round and brought up with a shudder against the end stop. Twiddle, twiddle: "Ah, there's G2ZYX. Must give him a shout," and before you can say "QRM," the SWL has got the rig going on 40 'phone and is shooting a QRO signal half-a-mile across town to G2ZYX. The fact that G2ZYX is in OSO with a new country doesn't deter our friend. After all, G2ZYX would much rather have an S9+ signal from a local than a watery S5 from some foreigner who can't even speak English properly!

Live and Let Live

All this may sound exaggerated, but the above occurrences have actually taken place, and are still taking place. Well, then, why doesn't the licensee stop such irresponsible behaviour? The answer is that he is, as stated earlier, a good-hearted chap, and just can't be rude to a fellow's face. Some SWL's just don't realise what a nuisance they are at times.

So, chaps, take some advice. Nobody wants to damp your ardour. But remember that one of the first unwritten rules of Amateur Radio is "Be considerate to your fellows." By spending every spare minute at your local station, the SWL is not being considerate. So, give us a break, chaps, and visit us just now and again. Remember that the station is not yours and treat it accordingly. You won't lose anything by it, when your time comes to get on the air."



CALLS HEARD REPORT FORMS

Those readers interested in sending in lists for appearance in our Calls Heard feature are reminded that the forms for this purpose are obtainable from us free of charge on request. Use of these forms not only helps in compiling the lists but is also of considerable assistance to us in getting them into print. Please note, however, that it is essential to apply to the Circulation Manager, enclosing a large S.A.E. and card marked "Calls Heard Report Forms," and that your request for a supply of forms should be kept quite separate from any other correspondence.

WORLD WIDE RECEPTION OF SHORT WAVE PROGRAMMES

DX broadcast

MONTHLY COMMENT BY R. H. GREENLAND, B.Sc.

The continent of Africa takes foremost position again, though we have to report that Radio Addis Ababa appears to have forsaken ETB, its 15030-kc channel, which is apparently experimental only; ETA on 9620 kc is the regular outlet for the Voice of Ethiopia.

Perhaps the outstanding item of news reaches us from Graham Hutchins, Radio Australia's DX Editor, who has announced that as from May 1 next there will be shortwave commercial broadcasts from the Transvaal. This new SABC service will be known as Springbok Radio and it will operate in the 31-, 40-, 60-, 90- and 120-metre bands between 0445 and 2100 daily, though exact frequencies have not yet been determined. This, without a doubt, is a challenge to the similar broadcasts at present in operation in Mozambique, whose English sponsored programmes are so easily recognised by the direction: "Lourenço Marques for Happy Listening in the 60- and 85-metre bands.

We have recently received a registered letter by air-mail from J. Tavares Paulo, director of CR6RG, Companhia de Diamantes de Angola, Dundo, which operates daily from 1830 to 1930 with a power of 300 watts over 8242 kc. Using a Zeppelin half-wave aerial, this station operates, as we have previously indicated, for "the entertainment and spread of culture among the personnel of the Company distributed over the Field or residing at urban centres."

Their neat verification card depicts a large and sparkling diamond radiating equally lustrous radio waves. Another Angola transmitter which has caused some excitement is, according to R. Iball (Langold, Notts), operating on 9250 kc. R.I. logged it on January 8 at 1945 with dance music and frequent direction: "Radio Clube do Huilla;" at 2000 a piano solo: "Warsaw Concerto" was heard in the background of announcements and the station closed at 2005.

J. C. Catch (South Shields) at first thought it was CR6RH, Lubango, but changed his mind after Swedish DX had stated that its

slogan was: "Radio Clube do Huambo." P. R. Wyman (Feltham, Middx.) mentions hearing CR6RH on 9235 kc at 1900, which he says is supposed to be situated at Vila Sa da Bandeira but actually announces as "Nova Lisboa." Here it can be explained that Vila Sa da Bandeira and Lubango are one and the same place and that Nova Lisboa is the name given to the capital, a town formerly known as Huambo!

Last month we mentioned Sao Thomé, a Portuguese island off the coast of Guinea. We have been hearing CR5SB between 1530 and 1730, coming in with great gusto on 17677-5 kc. Musical items range from "Roll Out The Barrel" to Strauss waltzes, and the direction, which occurs frequently, reads: "CR5SB (Say-Erray-Cincuo-Ess-Bay), Radio Clube Sao Thomé e Principe, Sao Thomé, Africa Occidentale Portuguesa."

Other announcements indicate that for the time being this is an experimental service. Once during the month we logged FIQA, Madagascar on 7380 kc from 1615 until 1700 when it closed; the items heard were typical French songs and syncopated organ music.

V3USE, Mauritius, 15050 kc has improved in signal strength. On December 31 it gave a rendering of "Auld Lang Syne" before the National Anthem at 1700, and on January 2 we heard dance music at 1600. Half-an-hour later came the announcement: "You have been listening to a programme of Old Time Dances played by Harry James and his Your announcer was Harry Orchestra. Lawson of the Royal Army Service Corps. This is the Mauritius Broadcasting Service." On January 15, the English direction was given at 1530, but at 1600 we heard: "Ici Radiodiffusion Ile de Maurice." J. C. Catch has discovered V3USE with well-known waltz melodies, including "Jealousy," between 1530 and 1600, and on this occasion the entire programme was in French.

Cape Town, ZRK, 5886 kc celebrated the dawning of a New Year with a short religious service at 2200 on December 31. We have

ALL TIMES GIVEN IN THIS ARTICLE ARE GMT EXCEPT WHERE STATED

again logged the new Salisbury, Southern Rhodesia, transmitter on 3320 kc.

Signals were S5 at 1805 on January 21 when there was the rebroadcast of the BBC News from London, and at 1815 their lady announcer gave a weather forecast followed by pro-

gramme details which included the time of the next South African News. According to Radio Australia, Radio Nigeria on 9655 kc has been heard at 0700. R. Iball heard an FBS station on 9560 kc way back in October but it does not necessarily follow that Radio

Nigeria has any connections with this network.

P. R. Wyman says that Dakar, Senegal, may be heard opening up on an announced wavelength of 19.55 metres (15345 kc) at 1915 with a broadcast for France, and D. O. French (Norwich) hears them at 1900 over FHE3, 11895 kc with the call: "Ici Dakar."

From Omdurman, R. T. Blackmore (Exeter) has received a letter verification for a reception report of their 9746 kc transmission, together with their operating schedule and a copy of "This Is The Sudan," an illustrated book published by the Public Relations Office of the Sudan Government at Khartoum. On December 30 at 1745, Mr. H. B. Arbour, Public Relations Officer at Omdurman. gave a lucid account of the Progress of Broadcasting in the Sudan. He spoke of the 61-kW 30-metre band transmitter which is well heard all over the Sudan, and indeed throughout the Middle East. The British Administrative Council is further planning a powerful medium-wave transmitter, and there will be cheap sets, possibly of the crystal type, and a series of communal sets along relay lines. Batteries having a life of 300 hours will be used instead of the stereotyped accumulator, and there will be radiodiffusion in the big towns. With a specially designed new Broadcasting House in Omdurman and a series of recording vans to comb the countryside, it is hoped that there will be better and more popular programmes in the near future.

P. Fry (Chardlers Ford, Hants) records the logging of SUX, Cairo, 7860 kc with

TABULATED SCHEDULES

Israel Broadcasting Service.

Frequencies: 6820 kc, 8170 kc.

Additional frequency from 1800 to 2115: 9000 kc.

News bulletins daily.

0500, 1130, 1600, 1830, 2100, 2115 (Dictation). 1200, 2030. Hebrew:

English:

0530, 1215, 1730. Arabic: 1300. French:

2015 (on 9000 kc.) Viddish ·

Sundays, 0800: Tuesdays and Thursdays, 1800 (9000 kc). Turkish:

Tuesdays and Thursdays, 1815 (9000 kc). Persian:

Omdurman (Sudan) Broadcasting Station.

Address: Sudan Government, Civil Secretary's Department, Public Relations Branch, Broadcasting Service, P.O. Box 522, Khartoum.

Frequencies: 9746 kc, 6122 kc.

Schedule:

In Arabic: Daily, 0415-0445.

Daily (Except Friday) 1630-1800, 1900-1930.

Fridays: 1630-1730, 1900-1930.

Fridays: 0800-0900, 1400-1500

In English: Fridays: 1730-1800.

III. Radio Addis Ababa, The Voice of Ethiopia.

ETA, 9620 kc: Experimental: ETB, 15047 kc. (Has used 15055 kc).

ETA-Regular schedule:

Amharic: Daily: 1100-1145, 1345-1600.

Tuesdays only: 1730-1900. Programme for Eritrea. Daily: 1515-1600.

English:

IV. Radio Norway-Norsk Rikskringkasting, Oslo.

Short-Wave Division: Frequencies: LKV, 15170 kc; LKQ, 11735 kc; LLN, 17825 kc.

Broadcasts with English and Norwegian announcements are given at: 0100-0200, 1900-2000 and 2300-2400.

Schedule for LKV

0700, News; 0725, Prog. Review; News at 1200, 1805, 2110. 0800, News; 0810, Prog. Review: News at 1200, 1805, 2110. Weekdays:

Highlights of Programmes

Sundays, Wednesdays and Thursdays (part): 1900: Symphony Concert. Thursdays or Fridays: 1900: Radio Theatre.

Radio Nederland. P.O. Box 137, Hilversum, Holland.

International Service: English Transmissions (Weekdays only).

I. 1000-1055. 6025 kc, 15220 kc, 17775 kc, 21480 kc. II. 1730-1825. 6025 kc, 9590 kc, 11730 kc. III. 0200-0255. 9590 kc, 11730 kc.

The "Happy Station" Programmes in English.

1430-1600 Sundays

(15220 kc and 6025 kc). (9590 kc and 6025 kc). (11730 kc and 9590 kc). 2100-2230 0300-0430

(21480 kc, 17775 kc, 15220 kc and 6025 kc). (15220 kc and 6025 kc). Tuesdays: 1100-1230

Wednesdays: 1430-1600

2100-2230 (9590 kc). 0300-0430 (9590 kc).

native songs at 2030 on December 23. A verification from Radio International, Tangier, 6215 kc, has been received by R. A. Savill (Sevenoaks, Kent). Broadcasts are in English, Spanish, French, and Arabic from 1100 to 1500 and 1700 to 2330, and the address is: Goya 34, Tangier, North Africa. The Voice of America programmes can now be heard from Tangier over 15240 kc from 1600 up to 2000. J. C. Catch logged the same broadcast on 11730 kc with a Czech News following the English identification at 1700, and the transmission closed at 1715. Radio Africa, 7060 kc was logged by A. E. Nichols (North Shields) on New Year's Day at 2015 with a programme in Arabic followed by English and French songs. This station uses the call-letters EA9AA and is located at Melilla in Spanish Morocco. P. R. Wyman gives us CS9MB, 11094 kc with music from Ponta Delgada, Azores at 2100.

Asia

Once again J. C. Catch pulls one out of the bag in Ulan Bator Hoto, Urga, Outer Mongolia, on a frequency of 8400 kc, which he logged several times in December. All programmes are in the Chinese/Mongolian dialect with a News at 1200, another bulletin at 1300, and a programme of Eastern music at 1445.

Peking with XNNR, 10258 kc was an S8 signal with Chinese music at 1320, followed ten minutes later with the direction: "This is The Peking New China Broadcasting Station." R. Iball heard it radiating Eastern-type music at 2330 on January 3. We are informed that the Voice of Free China in Taiwan has now changed frequency from 11800 kc to 7260 kc in the 41-metre band. News in English is given at 1110 and the identification is: "BED2, BED4 and BED7." W. R. Sparling (Bogowantalawa, Ceylon) is a welcome addition to our list of correspondents; he hears BED3 on 15235 kc between 0430 and 0635 at signal strength S5.

Perhaps some of you have heard the latest broadcasts from Jakarta, new nomenclature for Batavia. The 100-kW transmitter which is well heard here is YDF3, 11795 kc; an Arabic programme at 1600 is followed by one in French at 1700 and another in Dutch at 1800. At 1700 you will hear the studio clock striking 1 a.m., a musical box interval signal and the French direction: "Ici Jakarta, La Voix de la Republique des Etats Unis d' Indonesie." Other transmitters in use are YDF, 6045 ke and YDC, 15150 ke, and it is reported that there is News in English over YDF only at 1500 and 1550 in the English Hour commencing at 1500. C. Costello (Wellington, N.Z.) says that YDC is now

used in parallel with YDB2, 4910 kc for the 1100-1200 English broadcast for which they announce as: "This is the Voice of the Republic of the United States of Indonesia." In Indo-China, the Voice of Vietnam is reported to be making itself heard over 18406 kc and 9670 kc with the direction: "The Voice of Vietnam in the 31- and 41-metre bands." An English News is given 1115-1130 daily. Singapore has again changed frequency from 6045 kc to 6175 kc.

In the Philippine Islands there is DYB2, 4985 kc relaying the medium-wave DYBR in Bacolod City on Negros Island between the hours of 1000 and 1400: DZH7, 9740 kc in Manila uses only 300 watts, but when the new V-beam to Bombay is completed, power will be increased to 3 kW; the address is: Far East Broadcasting Company, P.O. Box 2041, Manila, P.I. J. M. Simpson (Hayes, Middx.) reports reception of DZH3, Manila, 9500 kc at 2230, and the powerful Voice of America station in Manila on 11890 kc can be heard on Sundays from 1345 to 1400 with the "World Radio Amateurs' Hour." Then there is DZFM, "The People's Station," 4th Floor, City Hall, Manila, from whom F. W. Durham (Harrow, Middx.) has had a letter confirming his reception report on their short-wave outlets. These are DUH2, 6170 kc; DUH4, 9615 kc; and DUH5, 11840 kc.

From Bangkok, capital of Thailand, HSJ4, 15190 kc is now operating in parallel with 6235 kc, but we have yet to catch their English News at 1115 daily. On January 21, however, at 1645 we logged Indian music on an approximate frequency of 3300 kc and wondered if it could be emanating from Hyderabad which is assigned to 3335 kc; the programme appeared to be the same as that for Madras on 4930 kc. The latter was well heard on December 31, 1730-1830, with an English feature entitled: "No Roads—No Signposts;" it was a review of the past fifty years, and it reached its climax with the pertinent question: "Whither The

TRANSFORMERS 230V AC Mains, shrouded. I50-0-150V at 100 Mills, size $3\frac{1}{4}$ " \times $3\frac{3}{4}$ " \times 4½". Fitted with ceramic terminals, 4/- plus 1/- post.

TRANSFORMERS 230V AC Mains, similar, 150-0-150V, 0, 10, 20, 30 and 40 Volts all at 70 Mills, size $2\frac{1}{4}$ × $3\frac{3}{4}$ × $3\frac{3}{4}$, 4/- ea.. plus 1/- post. No heaters.

We have pleasure in announcing the opening of our new Branch the RADIODEN at 68 Hurst Street (opposite Hippodrome), Birmingham, 5

FIELDS

435-437 STRATFORD ROAD, SPARKHILL, BIRMINGHAM, II Wonder Century?" On the same day, ZOH, Colombo, Ceylon, 4900 kc had a Watch-Night service at 1745 which ushered in the New Year there at 1800.

Finally in Asia there are two items from the Middle East. Damascus, Syria, now uses 5005 kc, 6000 kc and 11750 kc in parallel, and there are English News bulletins at 1030 and 1900. Radio Arabia, too, which is heard daily, 1700-1800, has five transmitters beamed as follows: 3960 kc to the South-East; 5985 kc—Bearing 305 deg.; 9645 kc—Bearing 60 deg. towards the Persian Gulf; 11760 kc—Bearing 330 deg.; and 11950 kc—Bearing 20 deg.

North America

VED, 8265 kc, is being logged other than in the early mornings: J. C. Catch on Boxing Day heard Xmas Party from Montreal, 0100-0200, Variety at 1415, and a Play at 2330. R. Iball noted it at S7 with light orchestral music at 0430, and we found it at 0618 with a talk on recent forecast for Alberta and Saskatchewan and a programme preview, and the final direction indicated that the broadcast had emanated from "Studios in Edmonton, Alberta, Canada." J. C. Catch logged CBLX, Verchères, Quebec, 15090 kc with sponsored English programmes up to 1700: there was a play and an Appeal for the Poor Children's Fund, 1600-1630, and this was followed by the "Lux" Variety Show. P. R. Wyman heard a news broadcast in English from this station at 1230.

R. Iball received CKOB, 6090 kc, at 0415 on January 9, when it was transmitting messages from Canadians to their relatives prospecting in the isolated regions of the North-West Territory. W. J. Gore (Monkton, nr. Ramsgate) heard Canadian Chronicle over CKRZ, 6060 kc at 2220, and W. R. Sparling in Ceylon logged CKNC, 17820 kc with its European broadcast at 1515. M. Milne (South Woodford, E.18) reports good reception of CHNX of the Maritime Broadcasting Company, Halifax, Nova Scotia, operating on 6130 kc and giving a programme sponsored by the Campbell Food Co. at 0015.

D. O. French says that the NBC European service has been heard at 2130 with the following station calls: "WNRA, WNRI, WNRE and WNDI" (the announcer emphasized the "D"); it appears that WNDI is a new one operating on 9620 kc. D.O.F. recommends the following programmes: "Youth Talks It Over" (WNRA, 11770 kc, 2000 Sundays) and "Music For Your Listening Pleasure" (WRUS, 11790 kc, 2015 Sundays).

P. R. Wyman has noted the new procedure lately adopted by WWV on 5000 kc, 15000 kc and its other outlets. Two different tones are

employed, 440 c.p.s. and a higher note, these being used in alternate five-minute periods. CW time announcements in GMT with a 440-c.p.s. note are given in the fourth minute of each five-minute period, together with a voice announcement of Eastern Standard Time. The announcements of frequencies at the hour and half-hour are discontinued. C. Costello in mentioning this feature states that it commenced at 0500 on January 1. We welcome it as giving an accurate verbal time-check every five minutes throughout the day—it is the DX'ers own "Dialling TIM" in fact!

South America

ZFY, Georgetown, British Guiana, 5980 kc has on occasions proved stronger than Andorra, according to R. A. Savill, but still suffers from interference from Moscow. Conditions are better around 0045 when the Daily Argosy news is read. J. M. Simpson has logged it at \$8/9 at 2245 and this excellent reception is confirmed by P. Fry, who gives their schedule as 1045-1645, 1945-0145 daily. R.A.S. mentions that he cannot raise a verification from this station! PZH5, Paramaribo, 5758 kc was \$7-9 at 2145 on December 31 with English Nursery Rhymes to music in a Children's Hour broadcast.

In Venezuela, YVKD, Radio Cultura, 5060 kc, with singing at 0001 and YVLE, Radio Puerto Cabello, 3480 kc, with a Catholic programme at 0030, were both logged by R. A. Savill who comments on the considerable QRN! J. C. Catch noted that YVPA, 4860 kc; YVKF, 4880 kc; YVKB, 4890 kc; and YVMM, 4908 kc were all working in parallel at 2345 on January 15.

Other stations in the announcements were YVKX, La Voz de la Patria, 3505 kc; YVKO, Radiodifusora Nacional, 5020 kc; and YVKD: J.C.C. thinks this may be a regular "hook-up" on Sunday evenings. He also tells us that YVKF, Ondas Populares, Caracas, 4880 kc gives an English News sponsored by

W. B. RADIO (G4PF)

45 Priory Road, Anfield, Liverpool, 4

Phone: Anfield 3629.

Denco Catalogue (Inc. T/V Components) . . 9d.
Eddystone Catalogue 6d.
Send 2½d. S.A.E. for List of Bernards Radio Books.
Raymart and Woden Stockist.

This Month's Snip— Standard 6-Tier Steel Tx Racks, £2, post free



a local tobacco firm at 2345 every night except Sunday.

We heard YVMG, Radio Popular, Maracaibo, 4810 kc and YVMC, Radiodifusora Maracaibo, 3440 kc with New Year celebrations at 0430 on January 1. YVME, Ondas del Lago, Maracaibo, 4800 kc is increasing its output to 10 kW. Colombians include HJAP, Radio Colonial, 4930 kc noted with musical programme by J. M. Simpson as early as 2100, and HJDE, La Voz de Antioquia, Medellin, 6145 kc heard by J. C. Catch at 0110.

HJCF, La Voz de Bogota is now using 5960 kc; HJFA, Pereira operates on 4865 kc from .0330 to 0730; and there is a new Colombian on 6135 kc operating from Bogota between 0000 and 0315.

The voice of the Andes, HCJB in Quito using 15115 kc, was logged with a Spanish News at 1210 by D. H. Smith (Hatch End, Middx.) who says the direction was: "Son las siete y media en Ecuador." A. E. Nichols logged HCJB, 17900 kc at 1815 with hymn singing and announcements in English. In Brazil, PRL7, Rio de Janeiro, 9720 kc is a popular station according to R. Iball who says that it is a magnificent signal at 2300. R. I. is still hearing Rio on 9220 kc with a Portuguese News at 2215; this station is ZYC2, Emisora de Districto Federal. ZYK3's

— EASIBINDERS

for THE "SHORT WAVE LISTENER"

Bind your issues in the Easibinder. By a simple operation the journals are inserted with a steel wire, and at once become a neatly bound volume for the Bookshelf.

The Easibinder is bound in green cloth, and goldblocked with title and year on the spine. It will hold 24 issues. (Two volumes.)

PRICE II/3 (Post Free)

A binder can be sent on approval if requested. When ordering please state the years to be blocked.

EASIBIND LTD

PILOT HOUSE, MALLOW STREET, LONDON, E.C.I

BARNES RAD-ELEC. & WHOLESALE CO. 12 Pipers Row, Wolverhampton

A few RIII6 all-wave battery receivers left. leaflet 3d.; Television R1355, 10 valves and booklet, 50/-; filament transformers, 6.3v 14 amps, 27/6; E.B.C. 33 valves, new, 6/6; L.T. battery chargers, 230 input 2v ½ amp. out, 25/-; dual range (L. & M.) coils with circuit for 1v or crystal, 5/3; morse keys, 1/9; 500 microamp meters, 2", 6/6; $4\frac{1}{2}$: i.L.F. trans., 5/-; 3" m/c speakers, 9/-; 50 PF double spaced T.X. condensers, double bearing, 4/6; charger transformers, 16v 5 amp, 32/6, new; R3132 for television, new, less valves, 25/-; see "Listener" for special

Sunday evening programme in English, entitled: "Brazil Calling," is now given at 1930 and is offered by the Radio Jornal de Commercio in Recife, suburb of Pernambuco. On January 15, Janet Swaton told us that this resort was noted for its excellent bathing beaches, and commercially it is important as a coffee port. ZYK3 on 9565 kc also gives an English broadcast weekdays from midnight to 0030.

W. R. Sparling finds ZYC8, Radio Tamoio, 9610 kc a reasonable signal at 0130.

R. Iball remarks on LRS, 11880 kc with a first-class signal in its English broadcast at 2235 which they give as 1935 Argentine time.

They have recently sent out a questionnaire in Spanish on which each listener is asked to answer in the affirmative or negative questions relating to his receiving station and to the comparative reception of LRS, LRU and LRY at it.

Central America

YNEQ, 6964 kc was heard by J. M. Simpson who identified it by three chimes and call at 2330. He also heard YSLK, San Salvador En El Aire, 9540 kc at 2230. We logged YSUA, 6256 kc with cheering for the New Year at 0500 on January 1, and the Guatemalan TGLA, 6294 kc was heard by R. Iball with a grand signal at 0430 on January 10; just

RADIO G200 Announces

The Viewmaster. The best home-built television receiver. Parts always in stock. Complete assembly instructions, A, London area, B, Birmingham, $\delta/-$.

128 Vibrator Units. Complete (ex-No. 22 set). Rated: 12v DC input, 325v, 80 mA, DC output. These are ideal for car radios, sound equipment, supplies, etc., price only, 19/6.

Voltmeter Movements. Calibrated 15v and 600v, 500 ohms per volt, 4/- each or 6 for 20/-

Headphones. Brand new. Browns 4,000 ohms, price, 7/6.

Tannoy Pressure Speaker Diaphragms (11 diameter 8 coil).

Valves. 6L6's, 1619's, VR136 (EF54's), 5T4's, 8/9. 6SA7's, 6SG7's, 6/9. EF39's, EF50's, 5/-.

ARTHUR HOILE 55 Union Street, Maidstone Phone: 3155 before the close at 0503 the direction "La Voz de Centro America" was given and a reference to "Radio Scrutas en Rebublica Panama"—obviously a Central American "hook-up." R. T. Blackmore heard TGWA, 9760 kc at 2330 on Christmas day with the call "La Voz de Guatemala," and D. H. Smith found TGWA, 15170 kc with marimba music at 2210 on January 11.

PJC1, Curacao, 5010 kc has appeared at 2345 recently (J. C. Catch), and ZQI, Kingston, Jamaica, 4950 kc, too, at 2140 and closing down at 2230 (J. M. Simpson). R. A. Savill spotted 4V2S, Port-au-Prince, Haiti, 5948 kc with its lady announcer offering musical items at 0001. In Cuba we have COCW, 6325 kc heard at 0430 with trumpet call and direction; "Say-Emmay-Say-Dooblevay—Cadena Rojo, Havana." (R. Iball); COBZ, Radio Salas, 9030 kc which has sent a colourful picture of the Plaza Hotel under the address: P.O. Box 866, Havana (M. Milne); and COBQ, 9236 kc logged with direction: "La Voz de Cuba" at 0000. (R. T. Blackmore.)

Europe

R. Iball sends us information from FBS, Malta; their letter reads: "The Forces Broadcasting Service, Middle-East short-wave service is on the air at the following times (GMT) daily, 0400-0700 hrs. and 0930-2200 hrs. Definite times at which the other frequencies are in use cannot be given at the present time, but most probably 7270 kc will be in use from 0930-1400 hrs. In addition, one more short-wave channel will be open during all transmission times; this may be either 11785 kc, 7220 kc or 6140 kc. 4782 kc is no longer allocated to this unit. The shortwave transmitters are rated at 7.5 kW output." We presume their main frequency is still 4965 kc, heard by us at good strength both early mornings and at night! W. J. Gore is logging them on 6140 kc during the early evenings, and J. E. Honey (Four Elms, Kent) claims to be hearing them on 14650 kc, or is this a harmonic?—the time was 1215 and 6140 kc was in use simultaneously. W. R. Sparling hears an English broadcast from Madrid, 9368 kc at 0001, and R. A. Savill reports a letter in Portuguese from Lisbon at long last which confirms reception of CS2WD, Radio Renascenca on 6154 kc; the address is: "Emissora Nacional, Rua do Quelhas, Lisbon." J. M. Simpson says that FET, Alicante is definitely using 7924 kc instead of the official one of 7935 kc, and D. H. Smith heard a Spanish Basque pirate station on 6451 kc at 2100 using the slogan "Radio Scotis."

This month we have a number of unidentified stations which our experts may care to investigate.

(i). A Latin-American on 6010 kc which has English by Radio (BBC recording) from 2315 to 2330. Moscow on 6000 kc wipes it out before 2300; the slogan may be: "Ecos del Mundo." (R. Iball.)

(ii). A station on 9192 kc heard 2230-2303 when it closed abruptly in the middle of a record without identification announcement. It had given a commentary in French included in a programme illustrating the relationship of African tribal music to American jazz. (J. M. Simpson.)

(iii). Station on a checked frequency of 5430 kc at 2310 on January 15. Light music, but identification impossible due to Morse

interference. (J. C. Catch.)

(iv). Heard on 5972 kc from 2245 with a weak fluttery signal giving what appeared to be a language lesson in Chinese. At 2300 came three ascending chimes and an excerpt from "William Tell." (J. M. Simpson.)

(v). A weak signal on 6046 kc from 1530 to 1545 when it was blotted out by BBC Eastern service. Language used was English interspersed with musical recordings. (J. M.

Simpson.)

Any information on these or any other stations will be welcome; please send all your short wave broadcast news to: R. H. Greenland, *The Short Wave Listener*, 53 Victoria Street, London, S.W.1, to reach us not later than March 19.

CARDS IN THE BOX

If the SWL's listed below care to send us an S.A.E., with name and number, we shall be very glad to forward the QSL cards held for them in our QSL Bureau. The address is simply "BCM/QSL, London, W.C.1" with a slip marked "For SWL cards."

A1054.

BLDLC2959, 3039.

BRS1028, 2404, 2814, 2912, 3085, 8464, 10063, 10234, 12789, 13497, 14400, 14535, 14675, 14996, 15058, 15698, 15711, 15743, 15822, 15937, 16152, 16263, 16700, 16795, 17016, 17045, 17203, 17317, 17447, 17468, 17510, 17681, 17859, 17886, 17896, 17912, 18082, 18352.

BSWL110, 173, 285, 299, 574, 645, 883, 1028, 1038, 1071, 1178, 1201, 1297, 2093, 2232, 2361, 2433, 2757, 3069, 3219, 3225, 3362, 3412, 3486, 3586.

ISWL/G180, 354, 692, 734, 1156, 1552, 1756, 2255, 2475, 2513, 2628, 2959, 3072, 3119.

G-SWL: J. Austin, J. Comthwaite, R. Finch, F. Holdaway, R. Sternfelt.

SMALL ADVERTISEMENTS

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

QSLGARDS AND LOG BOOKS, APPROVED BROS., PRINTERS, ELLAND, YORKS.

SEE THE WORLD in a well-paid and interesting job. Senrol now for one of our Marine and Air Radio Officers' courses of instruction. Constant personal supervision and attention by our expert instructors with recent operational experience. Apply for FREE literature, giving full particulars, E.M.I. INSTITUTES, Dept. S.W.L. 10, Pembridge Square, Notting Hill Gate, London, W.2.

AR88LF, 75 kc-550 mc, 1.5 mc-30 mc. perfect, £29 or best offer. Granger, Regent House, Icewell Hill, Newmarket,

EDDYSTONE S640, perfect condition, £23 or near offer, buyer collects or supplies crate 10 Moor Park Road, Northwood, Middlesex.

WANTED. Circuit and Manual for U.S. Navy Rx. CRV.46151. Buy or borrow. K. Twibell, Woodsetts, Worksop, Notts.

NaTIONAL 1-10A complete, £20. D.B.20 Preselector, new, £12. Eddystone 640, as new, £17. Denco D.C.R.19, new, £40. B.C.221 N with power pack, £12.—Box No. 027.

EMERSON 1.4-volt 5-valve superhet. 5-13 mc, headphones, carrying case 6 in. × 2½ in. × 9 in., £3. Wireless Worlds, Short Wave Magazines. Components. S.A.E. Box No. 028.

NEW 1155 modified with 6V6 output. Separate Power Pack with speaker. Working, needs realigning, £10. Phone RAYNER, Abbey 1577.

SALE 31 Short Wave Magazines March 1937 to September 1939, 16/-. Quantity of components and valves to clear cheap. I want 1949 Call Book and Manual for AR88 LF. Send S.A.E. for list of your requirements. Richardson, 20 Barnwell, nr. Oundle, Northants.

SALE. Books, transformers, valves. various components, 4-valve short wave receiver. H. Pryor, 1 Belle Vue, Saltash, Cornwall.

DENCO DCR. 19—must sell, owner emigrating. This fine receiver in mint condition, only 5 months old (with guarantee): will reluctantly accept £39/10/for quick sale.—W. D. Robertson, Ardenhor, Stranraer.

FOR Sale.—R.107 perfect condition with manual, £8 or near offer. Or exchange with 1155.—Farrant, 8 Bertram Road, Hendon, N.W.4.

ELECTRADIX

for Best Brilish Bargains
Hand Magneto Generators. P.M. Steel Magnet,
wound armature, driven by gearing in handle, output
approx. 70v 25 mA A.C. useful for A.C. Experiments,
bell circuits, shocking coils, etc., 8/6 each, postage
1/6, few only mounted in polished wood box, 10/each, postage 1/6.

G.P.O. Candlestick Telephones with switch-hook and Contacts, long Magnet Bell Receiver and cords, 12/6 each, postage 1/6, or 22/6 pair, postage 2/-G.P.O. Magneto Bell in polished wood box 8°×6°×3½" with condenser and induction coil, 5/-, postage 1/-G.P.O. Hand Mike in Moulded bakelite case, 4/6, postage 6d. Telephone connection strips 2/6 dozen. MAGNETS. D.C. Electro Magnets, twin coil, weight 10 oz. lift 4 lb. on 6v, 3 lb. on 4v and 1½ lb. on 2v, 5/- each. The Alni disc Magnet, the wonder midget magnet ½" dia. ½" thick with ½" centre hole in pot with keeper, 3/6 each. Swift Levick Horseshoe Instrument Magnets ½" dia. ½" thick ½" gap, drilled poles, 2/6 each, 12/6 for six.

TRENCEN TRANSMITTERS in canvas covered case 12" × 9" × 8½" ebonite panel fitted 10-way Rotary Switch with laminated brush gear, litz wound variometer coil, coupling, valve holder, folding Morse

TRENCH TRANSMITTERS in canvas covered case 12" × 9" × 8½" ebonite panel fitted 10-way Rotary Switch with laminated brush gear, litz wound variometer coil, coupling, valve holder, folding Morse key, etc., useful for breakup, 3½ each, carriage 2½ ex. WIRELESS CONTROL UNITS. ex-R.A.F. metal box containing Yaxley Switch with knob, connection strip, fuse and holder coil socket and connections 2½, postage 1½, larger model with two Yaxley switches and pilot lamp. 3½, postage 1½.

WIRELESS CONTROL UNITS. ex-R.A.F. metal box containing Yaxley Switch with knob, connection strip, fuse and holder coil socket and connections 2/-, postage 1/-, larger model with two Yaxley switches and pilot lamp, 3/-, postage 1/-. HEADPHONES for use on Crystal Reception, bakelite case and caps, headband and cord, 5/-, postage 9d. L.R. Headphones, single with headband and cord, 1/6, postage 6d. Moving coil single headphone 45 ohms resistance, 5/-, useful as small speaker, with marching transformer.

with matching transformer.

ELECTRADIX RADIOS
214 QUEENSTOWN ROAD, LONDON, S.W.8
Telephone: MACaulay 2159

P.M.G. CERTIFICATE

NEXT EXAM - MAY'50

PREPARE NOW by taking our special POSTAL COURSE. Many former students testify that our tuition was invaluable in ensuring their success in previous examinations.

A student writes:

"Many thanks for the great trouble you are taking and for the very full comments you made on modulation. This is a wonderful course. . . "

Student No. 30,365

Full details of this and other courses in FREE BOOKLET from:—

E.M.I. INSTITUTES, Dept. 51

10, Pembridge Square, Notting Hill Gate, London, W.2. Telephore: BAYswater 5131/2

BISIR

SELECTED SURPLUS (Ex-Govt.)

10 K.V.A. ALTERNATOR SETS. Ideal for country house or if you are setting up a workshop or laboratory in a remote place, then these are an ideal unit because in addition to the main output of 10 K.V.A. 230 v. 50 cycles 3 phase there is also 1.5 K.V.A. 230 v. 400 cycles. These alternator sets are complete with exciter, voltage regulators, switchboard, frequency meters, amp. meters, and iron-clad switch fuses for output. They are mounted on stout angle-iron stand and are complete with "Vee" belt pulley, the alternator is designed to run at 1,500 r.p.m., but being belt driven they can, of course, be driven by an engine of almost any speed, as the difference can be adjusted by the size of the pulley on the engine. Unused but storage soiled. Price is £85 each, ex works.

TYPE 6 INDICATOR. As specified for the "Wireless World" oscilloscope (reprint of data 9d.). Also for the "Inexpensive Televisor" (booklet 1/6), and the Mark I Televisor (Constructors envelope 2/6). These indicators are brand new, packed and sealed in manufacturer's original crates, they contain VCR.97 Cathode Ray Tube, 4 EF50 valves, 3 other valves, and hundreds of useful components, including wire-wound pots. Price is only £4/10/-, plus carriage and packing 7/6.

10 VALVE 1½ METRE SUPERHET. Ideal for conversion into a Midlands or London region Televisor. These contain 6 valves type SP61, and 1 each RL7, RL16, and EA50, 6 LF. Transformers of 12 mc/s. 4 mc/s band width and hundreds of other useful components. Complete with 3 11 mm. formers, price 59/6, plus carriage and packing 5/-. These receivers are unused, being in original wrappings.

RADAR RECEIVER TYPE 3084A. These require only the smallest of modification to make them into a sound and vision televisor. Main contents are valves: 7 EF50, 2 VR136, 1 VR137, 1 HVR2, 1 R3, 1 V507, 1 EA50, wire-wound variable resistors, small 80 v. A.C. motor, and dozens of useful components, resistors, condensers, etc. Brand new, in original manufacturer's packing and transit case, price 59/6, carriage 5/-.

RECEIVER R.3585. An ideal unit for conversion to T.V. in the London Service Area, as it contains a "PYE" 45 mc/s I.F. Strip, and valves as follows: 7 EF50, 4 SP61, 8 EF36, 1 EB34, 1 EF39, brand new—only 90/-, carriage, etc., 7/6.

RECEPTION SET BP413. Made by Philco. 4 valve battery superhet. Valve line up, frequency changer, I.F. amplifier, double diode triode and output pentode. Complete with all valves and 5 in, P.M. speaker, Provision for phone output incorporated. Cabinet size $10\frac{1}{2}$ in, $\times 7\frac{1}{2}$ in, $\times 7\frac{1}{2}$ in, Controls are volume, ON/OFF switch, and tuning. Frequency coverage 1.4 to 4 mc/s, 75-222 metres (Trawher, 80 and 160 metres Amateur bands). Only £3/19/6, plus 5/- carriage and packing.

TRANSMITTING & SPECIAL VALVES

ALL BRAND NEW IN ORIGINAL CARTONS, MOSTLY AMERICAN MAKE

813 47/6	866A 10/6	807 7/6
6L6 10/6	6A3 12/6	2A3 9/-
TZ40 27/6	CV57 30/-	8011 18/6
5Z3 13/6	6N7 6/6	832 16/6
GU21 (CV5)	VS68 (STV280/40)	PT15 (VT104)
VT25 (DET25)	VU508 (CV1508)	

Many other types available, including Magnetrons, Klystrons. Thyratrons, etc., etc., Send us your enquiries.

IMPORTANT.—Postage must be included, orders up to 10/-, 1/-, over 10/-, 1/6; £3 and over post free unless otherwise stated.

HOUSE TELEPHONES



Desk or Wall Mounting

Suitable for intercommunication between offices, workshops, stores, garages, biouses, kitchens, etc. Each station consists of normal size Bakelite handsets and desk or wall mounting cabinet with built-in selector switch, buzzer and push. All stations can communicate with one another independently. Each installation compete with 50 yards to installation compete with 50 yards to installation compete with 50 yards of compete side of 101/s. 4 station installation, complete with 25 yards 6-core cable, 28/10/s. 2-station installation, complete with 25 yards 4-core cable, 23/17/8.

ELECTRIC HEATERS



Heavy cast framework totally encloses the elements, so these are 100% safe even in confined spaces, just right.

for your radio den, garage, office, shop, etc. 900 watt (general) model, 19/6, plus 4/6, 250 watt (personal) model keeps legs and body warm for less than a farthing per hour. 23/6, plus 4/6. 500 watt (medium) model 23/6, plus 4/6.



THE "SPEE-DER" SIGNAL TRACER A small metal case a few inches square, a flex terminating in a probe, a twin lead for connecting to either A.C. or D.C. mains, no switching, no tuning controls, and there you have the "SPEE-DEE" Signal Tracer. H.F., I.F., or L.F. checks—makes no difference: note frequency change is automatic. The fault is in the no-note stage. Yes, it's as simple as that Price, with directions, \$4\$, leaflet free.



SHORTED TURNS COLL TESTER. You know that it is almost an impossibility to test for shorted turns in L.F. Transformers, Colis, L.T. Transformers, etc., with an ordinary channeter. Our mains operated shorted turns coil tester will reveal these faults in a second. For one month only we are offering these to you at the remarkably low price of £5/10/-, each.

4 Electron House, Windmill Hill, Ruislip Manor, Middlesex

CLYDESDALE

Sniperscope

Snooperscope

The famous wartime "Cats-eye" tube used in "Tabby" for night sniping and observation. Provides a silver caesium oxide screen for the conversion of infra-red rays to visible rays, using an infra-red light source. Data provided. Dimensions overall: dia. 2' × 1\frac{3}{4}". Screen dia. 13"

Clydesdale's Price only

12/6 each

Post

INFRA-RED IMAGE CONVERTER CELL



Brand New in maker's original carton TRANSMITTER TUNING

UNITS

Each having vernier tuning dial; variable capacitors. Tank coil unit on ceramic former; ceramic switch; R. F. chokes, etc. In metal cab $17\frac{1}{2}$ " $\times 7\frac{1}{2}$ " $\times 8$ ". Finish black. TU5B. 1500-3000 kcs. in metal cabinet

Clydesdale's 22/6 each Carriage Price only paid тÚ7В, 3,000-4,500 kcs. TU6B.

4,500-6,200 kcs. 7,700 kcs. 6.200-TU8B

Clydesdale's 17/6 each Carriage Price only

TU26B. 200-500 kcs.
Clydesdale's 10/- each Carriage
Price only paid Price only

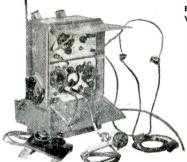
W.S.18 RECEIVER UNIT

4-Valve Battery Superhet chassis covering 6-9 mcs. (50-33 metres) for phone operation. Contains 4 2v valves 3/ARPI2 (VP23). AR8 (HL23DD), slow-motion drive, 2 slug tuned L.F. coils, etc., etc., size $9\frac{1}{2}^x \times 5\frac{7}{8}^x \times 5\frac{1}{4}^x$. Power requirements approx. H.T. 100v. L.T. 2v.

Clydesdale's Price only

17/6

Carriage paid



Brand New in maker's original packing. Ex-U.S. Army WIRELESS SET NO. 48MK. TRANSMITTER/RECEIVER American version of the No. 18 set, modified to U.S. Army

requirements.

Frequency coverage 6-9 Mc/s. 33·3-50 metres. Complete equipment for 'phone and C.W., comprising:

TRANSMITTER, with 1,000 kc/s crystal, 4 valves, IA5 master osc., 2/1299's P.A., ILD5 mod., crystal osc., and diode R.F. Rect., etc.

RECEIVER, superhet circuit, employing 6 valves, ILN5 H.F. Amp., ILA6 lst det., F.C. ILN5 L.F. Amp., ILD5 2nd det., and B.F.O., ILD5 lst L.F. and A.V.C., IA5 output. L.F. frequency 455 kc/s, etc.



HAND-DRIVEN GENERATOR supplying H.T. and L.T. (plus 12v bias, when switched for WS-18) with operator's seat. AERIAL, 10 ft. rod type (11 sections) range 5 miles R/T. 10 miles C.W., greater ranges can be obtained with a normal aerial. Plus cables and Instruction Book. This equipment can also be used with dry batteries (not supplied) as a PORTABLE WALKIE-TALKIE.

Power requirements H.T. 162v 60 ma. L.T. 3 Iv 0-3 A., Dimensions set and battery container: $11\frac{3}{8}" \times 10\frac{3}{8}" \times 17\frac{1}{2}"$.

Clydesdale's Price only

£14 - 10 - 0



Ex-Royal Navy. SOUND POWERED TELEPHONE

Requires NO batteries, and will give long service without attention. Complete with warning indicator lamp and generator, giving a high-pitched note which can be heard through any noise, where a number of telephones are used, the indicator lamp would indicate which one is being called. Dim, $7\frac{3}{4}$ " \times 9" \times $7\frac{1}{4}$ " for wall mounting. Designed for ships' use, but can be used in the home, office or factory.

Clydesdale's Price only

27/6 each

Carriage paid

Order direct from :-

or bidesidate

Phone: SOUTH 2706/9

2 BRIDGE STREET GLASGOW

VISIT OUR BRANCHES IN SCOTLAND, ENGLAND AND NORTHERN IRELAND