

# Short Wave News

**1/3**

**Vol. 3 No. 7  
July, 1948**

## For Transmitter and Listener



### Contents

V.H.F. News  
Cosmic Ray Research  
Around the Broadcast Bands  
Two-Pentode Portable Receiver  
I.S.W.L. Notes  
Trade Notes  
Radio Melange  
Book Reviews  
On the Ham Bands

**I.S.W.L. AMATEUR BAND  
DX CONTEST—Full Details**

Quarterly DX Prediction  
Around the Shacks  
Survey of World Broadcasting  
etc., etc.

**AN AMALGAMATED SHORT WAVE PRESS PUBLICATION**

# SPECIAL LINES from VALLANCE'S

## DELIVERY FROM STOCK OF SOUND SALES MAINS TRANSFORMERS.—

Suitable for upright, inverted or horizontal mounting, which is facilitated by interchangeable brackets. Double shrouds are provided, thus ensuring a very neat appearance. All primaries wound to suit 50/100 CPS. A.C. Mains., from 210/250 v. by means of suitable tappings. Earthed static shield between primary and secondary is provided. X250 Octal. 250-0-250 v., 80 m.a., 5 v. 2 a., 6.3 v., 2.5 a., C.T., £1 17s. 4d. X250 250-0-250 v., 80 m.a., 4 v. 2 a., 4 v. 4 a., C.T. £1 17s. 4d. X2/275 Octal. 275-0-275 v. 120 m.a., 5 v. 2 a. 6.3 v. 1.5 a., C.T. 6.3 v. 2 a., C.T. £2 12s. 4d. X2/275. 275-0-275 v., 120 m.a., 4 v. 2.5 a., 4 v. 4 a. C.T. 4 v. 2 a., C.T. £2 12s. 4d. X300 Octal. 300-0-300 v. 70 m.a., 5 v. 2 a., 6.3 v. 2.5 a. C.T. £1 18s. 6d. X300 300-0-300 v. 70 m.a., 4 v. 2 a., 4 v. 4 a., C.T. £1 18s. 6d. X2/350/120 Octal. 350-0-350 v., 120 m.a., 5 v. 5 a., 6.3 v. 3 a., C.T. £2 14s.

**AUTO TYPE.—SK/75 Auto, 75 watts. 0.32 a. at 250 v. at 250 v. max. Available tappings 100 v., 110 v., 210 v., 230 v., 250 v., £1 5s. 10d.**

The following are specially designed for Westinghouse L.T. Rectifiers—LT41. 17—18.25—20—22 v., suitable for charging 6 v., 8 v., 10 v. and 12 v. batteries at 1 amp. with LT41 rectifier, £1 8s. 9d. LT42. 8.5—10—11 v., suitable for charging 2 v., 4 v. and 6 v. batteries at 1 amp. with LT42 rectifier, £1 0s. 8d. LT42 Rectifiers, 6 v. 1 amp. output. £1 3s.

**OUTPUT TRANSFORMERS.—**Designed expressly for high quality reproduction (see *Wireless World*, test report on the type 036.) The latest model is totally enclosed and metal shrouded.

**TYPE 036X.—**Wound to suit two type PX4 valves in push-pull, with tappings for PX25 valves. Primary inductance 77 henries. Primary impedance, 10,000 ohms, tapped at 6,400, thus rendering the component suitable for use with PX4 valves, working 10,000 ohms anode—anode with 200 v. H.T. or 6,400 anode—anode with 300 v. H.T. Standard impedance 15 ohms, tapped 6 ohm. £2 8s. 10d.

**TUNING UNITS.—**As used with the BC375E transmitters. TU5B. 1,500—3,000 kcs.—ideal for an E.C.O. and is "rock steady" in operation. First grade components of American manufacture are used throughout and include the following:—

A—(2) National velvet vernier dials. B—(1) Variable condenser 20—135PF, 1,500 v. flash-over. C—(1) Variable condenser 20—156PF, 1,500 v. flash-over. D—(1) Variable condenser 8—26 PF., neutralizing. E—(1) 0.0003 mfd. 2,000 v. mica condenser. F—(3) 0.0009 mfd. 3,000 v. mica condensers. G—(2) 0.0004 mfd., 5,000 mica condensers. H—(3)

0.0001 mfd., 3,000 v. mica condensers. L—(2) 4-position ceramic bandswitches. J—(2) R.F. chokes. K—(1) Tank coil ceramic former with tapped antenna coupling coil. L—(1) Tank coil ceramic former, variable inductance link. M—(1) Parasitic Suppressor. N—(2) Ceramic flexible couplers. O—Black crackle metal cabinet, with handles, Price £1 5s., plus 3s. 6d. carriage.

TU7B units are also available, price as above.

**THE "LAZY MAN'S" Q FIVER.—**In other words, the BC-453A, 6-valve superhet receiver. This receiver uses a three stage plug in coil unit 190—550 kcs. and consequently can be changed to any frequency desired without conversion. Its most valuable use is as a selective 85 kcs. I.F. amplifier with demodulator and output stage, having an input of 190 to 550 kcs. (See article QST. Jan. 1948 issue.) Price new, £3, plus 2s. registered post.

**MT/MI COMPACT MAINS TRANSFORMER.** A small drop-through transformer suitable for V.F.O.S. test equipment, midget receivers and a host of other applications where size is the limiting factor. Primary 200-250 v. (screened). Secondaries, 4 v. at 2 amp. or 5 v. at 2 amp. tapped; 6.3 v. at 3 amp. 260-0-260 v., 80 m.a. dimensions: 3 1/2" x 2 3/4" x 2", price £1 2s. 6d.

**BAKELITE SHEET.—**1/8" thick, sizes 12" x 8", 5s. 1d., 10" x 8", 4s. 3d., 10" x 6", 3s. 8d., 8" x 6", 2s. 10d., 6" x 6", 2s. 3d., 6" x 4", 1s. 8d.

**ENAMELLED COPPER WIRE.—**4 oz. reels, 18 and 20 S.W.G. 1s. 8d., 22 S.W.G. 2s., 24 S.W.G. 2s. 3d., 26 S.W.G. 2s. 5d., 28 S.W.G. 2s. 6d., 30 S.W.G. 2s. 8d., 32 S.W.G. 2s. 10d., 36 S.W.G. 3s. 5d., 38 S.W.G. 3/9, 40 S.W.G. 4s. 3d.

**PARMEKO SMOOTHING CHOKES.** fully shrouded and tropicalized, 12H, 120 m.a. 130 ohms. 21s. 5d. 12H, 150 m.a., 130 ohms. 22s. 5d.

**WEARITE CERAMIC SWITCHES.—** Available up to 4 bank, either SP 12-way, 2P 6-way, or 4P 3-way. The index spindle is supplied with a 6" spindle which may be cut to the required length, the side rods being available in three standard sizes. (2 1/2", 3 1/2" and 6"). Price of parts:—Spindle and index 4s., ceramic washer 7s., types SP12-way and 2P6-way and 3P4-way. Side rods, 2 1/2"—3d., 3 1/2"—4d., 6"—6d. Spacers 3/16"—1 1/4d., 1/2"—1 1/4d., 2"—4d. Moulded straps 8d., nuts, 3d. a dozen.

**RECEIVING VALVES.—**American metal types, 6S7, 6SK7, 6SF7, 6SC7, 6SG7, 6AB7, 6AC7, 6K8, 6K7, 6J7, 6F6, 6SA7, 6L7, 6C5, 6J5, 12SJ7, 12A6, 12H6, 12SK7, 12SA7, 12SQ7. All brand-new, boxed, and fully guaranteed, and offered at makers' list prices, plus tax, which in most cases is pre-budget.

Speedy Postal Service, C.W.O. or C.O.D.

When sending C.W.O. please include extra for postage and packing

## VALLANCE & DAVISON LTD.

144 BRIGGATE, LEEDS, 1

Telephone: 29428/9

Staff Call Signs:—G2HHV, G8SX, G3ABD, G3CML



# Short Wave News

Vol 3 No 7

Annual Subscription 16/-

July, 1948

Editors:  
ARTHUR C. GEE, G2UK      W. NORMAN STEVENS, G3AKA  
Advertisement & Business Manager:  
C. W. C. OVERLAND, G2ATV

## EDITORIAL

"HAM SPIRIT" is one of the phrases that are part and parcel of the amateur's vocabulary. It implies that the amateur is a gentleman, that he observes the amateur's code of ethics, that he does his fair share to help others as he expects to receive help from others. In short, it is a password of the amateur fraternity, the keynote of the amateur's activities—on the air and off.

No, this is not going to be a tirade against the spivs of the air—the "spams" as a reader described them—who are, though annoying, fortunately just a minority. What we are getting at is something more insidious. It is the growing snobbishness amongst certain portions of the fraternity that make a mockery of the aims and ideals of ham radio.

While you have societies you will always find a few who form a "clique." When, however, this attitude extends beyond the realms of the occasional and becomes an established and usual fact, then it has several noticeable repercussions. The most serious is that the younger enthusiasts tend to get "put on the shelf." The more average enthusiast is frowned upon and the only way to be "one of the boys," is to be a proven Old Timer. In circles where such an attitude is predominant it is almost a crime to be a mere "SWL." One reader said in a letter "once a person gets his ticket he seems to forget that he was once a SWL himself." Whilst this is doubtless untrue in many cases it goes to show that this high and mighty attitude does become adopted by many. Anyone would think that it takes a genius to get a ham licence!

Two true examples: A reader decided to join his local club and went along full of enthusiasm. This particular person had been actively interested in the constructional side of radio since cat-whisker days. He got into

a general discussion at the club and was considered to be the highlight of the evening—reminiscing of "old times" and the advances in radio. This went on for two or three meetings and then it was discovered that he was not a licensed amateur but just an SWL and constructor. From then on, after the dread silence, he was more or less ignored. Finding that he met with the proverbial cold shoulder he finally left the club in disgust.

Example two: The writer of this editorial is not without practical experience of this sort of thing, though from a different angle. Being interested in attending a certain gathering of hams, he was informed that he could come along if he liked, though "we don't really want anyone new." Need I give you more than one guess to discover if I went to that meeting?

## The snobs

No one, except those with spectacles of a rosy tint, will deny that the SWL gets a raw deal at many ham gatherings. We get too many letters on that subject to be in doubt ourselves. From this, the lowest form of ham snobbery, we get progressive stages until once firmly established as a Grand Old Timer one is able to mix with even the most influential of the elite. Considering that the majority of hams prefer to grow old gracefully it will be seen that on the law of averages we stand a poor chance!

Maybe this editorial is a little harsh. It is a tricky subject but one that should have been raised long ago. If a few ears are burning after reading these lines we feel that we have done what was intended. Let's forget how good we are and get together and enjoy our hobby in the best possible way—in an atmosphere of genial good nature (even if there are a few mere listeners amongst the ranks!).

W.N.S.

THE EDITORS invite original contributions on short wave radio subjects. All material used will be paid for. Articles should be clearly written, preferably typewritten, and photographs should be clear and sharp. Diagrams need not be large or perfectly drawn, as our draughtsman will redraw in most cases, but relevant information should be included. All MSS must be accompanied by a stamped addressed envelope for reply or return. Each item must bear the sender's name and address.

COMPONENT REVIEW. Manufacturers, publishers, etc., are invited to submit samples or information of new products for review in this section.

CHEQUES and Postal Orders to be made payable to "Amalgamated Short Wave Press Ltd."

ALL CORRESPONDENCE should be addressed to "Short Wave News," 57 Maida Vale, Paddington, London, W.9. Telephone CUN. 6579.

# V.H.F. News

**T**HE summer season of sporadic E and good tropo conditions has continued with a swing and activity has increased to almost as high a level as last year. Conditions have been exceptionally good during the past month, sporadic E in particular, providing some good European contacts. The 50 Mcs. band closed for British amateurs on 30th April, but several European countries are still allowing their amateurs the use of the band and these signals have been heard in this country. For instance, Arthur Simons, G5BD, (Mablethorpe, Lincs.) heard FA8IH on 50 Mcs. on May 20th; on the 25th he was heard again and on the 26th, FA8BG and F8MG were heard. On June 4th, the "best sporadic E opening since the war" occurred and Arthur heard upwards of 50 Europeans, including OK, FA, F, I, HB and OH2NY.

Arthur reports that 60 Mcs. has also been good. On May 25th, I1XW, F9AC and F9BG were heard on 59 Mcs. FA8IH was heard on 58.5 Mcs. on June 7th and 8th and on the 10th. Arthur says he must have been right on the edge of the sporadic E cloud because G5GX, G6OS and G3ALY of Hull and several other Yorkshire stations were working Europeans, which were quite inaudible to him. Later on, however, he heard F3JB, F9KB, F8CT and an Italian.

On the 11th, conditions were good to the North and he worked G3BW in Cumberland for the first time. GM3OL was audible from 2045 until midnight but contact was not made. On the 12th, Arthur worked G2BS in Newcastle, which gave him 35 counties. Nice going Arthur and thanks for the fb report.

Jim Bramhill, G2BMI, Hillingdon, Middx., reports that the amateurs in his area are going in for five in a big way. G3CKX, G3CUI, G2FMF and himself have all bought type 27 converters. G3CUI has heard G2NF, 2HDO, 3CWW, 3BGW, 4MR, 6UN, 6DO, 6PH and 8AL. G2FMF worked the following:—G2NH, HDY, JU, FI, MV, BRR, CIW, G3CWW, CGO, KP, BWS, BWY, FPP, AHB, G4OO, IG, G5VB, LQ, US, MA, JO, LC, HN, G6NF, UH, VC, XM, OT, VX, OH, PG, G8AL and G8DV. Not bad going for his first efforts! He was also lucky to be listening when the sporadic E opened on June 4th. He then heard I1RN, AAE, ARD, IX, ALH, SW, SL, FM, SS, PB, AAW, MCM, XW, and ABR all on fone, together with OK2MV, OK2FF, SM5FI and PA0UW on cw, and OK1CZ, 3ID, F8GH, F9BQ and F9KB on fone.

Jim himself, using his l-v-l heard G2NH, FPP, QY, CIW, K1, FMF, 3BLP, AKD, 4IG, 5VB, PP, PY, 6NF, 6XM, 8SM, OT, VB and TS.

W. A. Martin, G7O, Brixton Hill, S.W.2., using a type 26 converter into a B2 receiver has heard G2AJ, HDY, MV, QY, ZV, 3AEX, BOT, BLP, BWY, FPP, WS, OG, 5AA, DT, KH, PY, 6VX, 8KZ and 8GX. Not having a 5 metre aerial up yet, he used a 40 foot indoor wire for the above reception.

R. J. Appleby, Clacton-on-Sea, using the SWN 5/10 converter heard F3JB, F9BQ, I1FA and a harmonic of IRL on 58.9 Mcs. on June 4th. He heard F9BQ again on June 5th at 1940. His aerial is a 5 metre indoor doublet.

Leslie Orton, Uxbridge, was in on the sporadic E of June 4th. At 1855, he heard SM5FI on 50 Mcs. saying he had tried to make a contact on five but could not get through on that band. However, at 1925 a G was heard calling OK2RV and between 2000 and 2200 I1FA, I1YU, I1UA, I1ARE, I1SS, I1SM, I1WX, I1BC, F9BQ, F8JB and F5TB were all heard.

One of the best logs of the sporadic E activity on June 4th., comes from D. Outram, G1O44, London. He heard the following, using a type 26 converter into a BC348:—LA7F, SM5KN, SM5FI, OK2FS, I1FAC, I1AA, I1DA, I1AAU, I1AAH, I1SS, I1XW, F3JB and F9BG.

News is to hand that OH2PK and OH2NY have had some good contacts on 50 Mcs. with Switzerland and Western Europe.

J. L. Miles, G2031, who is operating some 100 Mcs. gear professionally, tells us that on the 1st June, at 0945, he established contact with another station 150 miles away, ground to ground—a most unusual feat for this equipment—a 5-watt Tx—which normally gives a coverage of little more than 20 miles.

**Ex-service Converters.** As "Centre Tap" mentioned in his article on a "Converter for the Basic Superhet" (March number p. 63), the Service Converters types 24, 25 and 27 have recently become fairly readily available. The types 24 and 25 are pre-tuned and can be made tunable by removing the switches and replacing with a three-gang variable capacitor. An interesting letter from Dr. H. S. Brodribb, The Knowle, 8 Brittany Road, St. Leonards-on sea, queries the three-gang variable being of 15  $\mu\text{F}$  per section—as suggested by Centre Tap and all the trade advertisements on this converter. In his case he says that he considers it a waste of time to try putting a three-gang variable in. He uses a 22  $\mu\text{F}$  in the HF stage which covers 35—45 Mcs., a 33  $\mu\text{F}$  in the mixer which covers about 39—45 Mcs. and he finds that a far bigger oscillator capacitor should be used. He considers that it would

*(Continued next page)*



## COSMIC RAY RESEARCH

### Experiments at Jungfrauoch

**F**IRST thoughts may lead one to wonder just what cosmic rays have to do with radio. So far, cosmic rays have come little into the consideration of the radio enthusiast. Cosmic radiation has, however, an affinity with radio waves, the latest theories about them regard them as a mixture of charged particles and electromagnetic waves—a "mixture" resembling that thought to be emitted by those sunspots which disturb the ionosphere. Another interesting feature of these rays is that they affect the top of the atmosphere in such a way that new radiation elements are produced—a phenomenon again having some parallel with the effect of the sun's ultraviolet radiation on the ionosphere.

The charged particles and electromagnetic waves, of which cosmic radiation is thought to consist, are characterised by extremely high energy. Ordinary radioactivity, *i.e.*, the activity of radium etc., usually have an energy of less than a million volts. Cosmic rays are usually reckoned to have an energy level exceeding 10 million volts!

The reason for the present great interest in cosmic rays is that the atomic nuclei of which matter is made up is held together by energies of just over a million volts. In order to break

these atoms up, energy exceeding a million volts must be used, so we see that cosmic rays have possibilities as "atom-smashers."

The particles found in cosmic radiation near the earth's surface are different from the particles which fall on the top of the atmosphere. According to present day theories, the radiation falling on to the atmosphere consists of a mixture of protons and positive and negative electrons. At sea level, very little of this primary radiation is found, the radiation consisting of about 1/3 positive and negative electrons, and about 2/3 mesons, only about 0.01 per cent. of the original protons being detectable. The proportions of this mixture vary with altitude. Mesons are the latest addition to the list of "fundamental particles" known to physicists. They have a mass intermediate between that of the electron and the proton, *i.e.*, if the mass of the electron is regarded as unity, then the proton will have a mass of about 2,000 and the meson about 200. So far, mesons have only been found in cosmic radiation, but it is thought that some of the atomic energy plants being built may provide scientists with a supply of "artificial mesons." Mesons have been known to exist in cosmic radiation since 1937, but very little is known about them. A research institute has been established high up on the Mountains in Switzerland to study these mesons further. At the altitude—over 10,000 feet—mesons are 30 times more frequent than they are at sea level.

The apparatus used is far too complicated to describe in a short article of this nature, but it consists essentially of a chamber in which an ionised quantity of argon gas is used to record the presence of mesons. The ionised current through the chamber is amplified by means of a cathode ray oscilloscope and recordings made of the trace by means of an Avimo camera—which we have described already in the S.W.N. Our photo shows the research station on the Jungfrauoch.

#### (VHF NEWS—continued)

be quite impossible to gang all three. He would very much like to hear from any reader who has had experience of adapting the type 25 to either 50—60 Mcs. or to the region of 30 Mcs. Incidentally, our contributor Les Coupland, has been converting a type 27 to cover 60 Mcs. and finds that the usually recommended 7 turns on the oscillator and 8 turns on the mixer and RF were far too many in his case. So it seems that there is room for some experiment in each individual case. So if you don't hit five first time off, try cutting the coils down a bit.

# Around the Broadcast Bands

## Monthly Survey by "MONITOR"

All times are given in G.M.T.

(For EST subtract five hours; for AEST add ten hours)

SEVERAL good logs have been received this month again from far and wide.

Logs, news, etc. are always welcome for this column and should be addressed to: Monitor C/o "SWN" by first of the month. Please do not include any matter which does not come under this heading, also see that your ISWL number or name is on each sheet sent in. Very few alterations take place in our "Honours List" this month. Conditions at your scribe's location have been somewhat like the weather—rather erratic! Anyway, let's hope for more settled conditions soon. Now for this month's news:

### ● Africa.

**Anglo Egyptian Sudan.** Ray Aldridge (Amersham) has logged "Radio Omdurman," Khartoum, on 13320 kcs. with English BCs on Fridays at 1730-1800 with poor quality. Sidney Pearce (Berkhamsted) also states this and adds that 9650 kcs. is also used for this BC. Sent booklet entitled "101 facts about the Sudan" with QSL.

**Mozambique.** L. W. Lewis (St. Leonards-on-Sea) sends along the freq. used by the Radio Club of Mozambique according to a QSL card received from CR7BJ: CR7AA, 6130 kcs., CR7AB, 3490 kcs., CR7BE, 9580 kcs., CR7BJ, 9645 kcs., CR7BU, 4920 kcs., CR7BV, 4850 kcs.

Power used is  $7\frac{1}{2}$  kW. QRA Caixa Postal 594, Lourenco Marques, Rex Gillett of Prospect, Southern Australia, who is DX Editor of "Radio Call" and ISWL Rep., send in a nice log and mentions that from May 1st, Lourenco Marques said they would operate from 0900-1500 on the 31 metre Band (presumably over CR7BJ) and from 1500-2100 on the 60 and 85 metre Bands (CR7BU and CR7AB?). Dr. T. B. Williamson (St. Albans) lists CR7BU on 4932 kcs. (measured) at 2050. English announcements and call at 2100, QSA3 R5.

**Union of South Africa.** Pietermaritzburg, 4885 kcs., heard one Sunday with sign-off at 2145. Normal sign-off time is 2105. Frequency seems to vary as the next day was on 4878 kcs. (Gittett), QSL from Johannesburg (Afrikaans Programme), 4895 kcs. says "try Johannesburg on 4800 kcs. for English programmes" from 1615. Heard R4 with QRM (Pearce). ZRK Capetown 5888 kcs. most consistent signal from this part of the World with usually R5 signals at 2100 plus heavy

CW QRM (Williamson). ZRI Johannesburg 4895 kcs. heard on several occasions around 1715 with music and talks. No English heard (Williamson).

**Portuguese Guinea.** CQM4 Emissora de Guine, Bissau, 7925 kcs. (approx.). Still heard nightly from sign-on at 2130. Well on low freq. side of Alicante. News in Portuguese at 2215. (Pearce) Williamson reports them from 2300—0000 on a measured freq. of 7948 kcs. All announcements are in Portuguese with call each half-hour as "Aqui Bissau Radio Clube Portuguese." Programmes mainly recorded music. Suffers intermittent heavy auto CW QRM. Signals R6-7 QSA3-4, sends folder type QSL and headed Emissora da Guine Estacao CQM4 Bissau. States freq. as 7948 kcs. Schedule: 2130-2300 (Pearce).

**Angola.** Dr. Williamson reports an unidentified station on 8220 kcs. at 1900 with recorded music and Portuguese announcements and closing at 1930, with Nat. Antyem. Do not think this is Benguela OM as you suggest but maybe the new station CR6R1 (or RY) in Nueva Lisboa reported on 7165 kcs. and closing at 1930. May have changed freq. Gives call as "Radio Clube do Nueva Lisboa." Schedule: 1830—1930.

Has any reader any news of this 8220 kc. station?

**French Cameroons.** Douala FIA heard at 1900 on 9149 kcs. with call "Ici Radio Douala" and recorded music. Signals were QSA3 R5 (Williamson).

**Senegal, Dakar, FHE3,** approx. 15580 kcs., listed as 15383 kcs., heard with R9 plus signals from 2100—2200 (Williamson).

**Kenya Colony.** Nairobi VQ7LO, 4850 kcs. R6-9 signals at 1930 regularly (Williamson).

**Madagascar.** Tananarive FIQA, has been heard often on 6065 kcs. R3-4 with heavy QRM; 9690 kcs. R5 QSA4; 10605 kcs. R2 Bad CW QRM. All heard usually around 1700 hours with French talks, etc.

**Spanish Morocco.** Tetuan, 6067 kcs. heard giving Arabic during evenings to 2000. QRM. Clear with Spanish from 2200. Often heard near to Munich on 6080 kcs. (Pearce).

**Algiers,** Radio Algeria 9570 kcs., R8 signal with Arabic at 1930. French from 2000 to 2300 (Pearce).

**Azores.** Ponta Delgada, CSX2 11090 kcs. Letter veri states the schedule: 11090 kcs.,

2000—2100 (Summer) 7017 kcs, 2000—2100 (Winter) 4845 kcs., 2200-2400. QRA : Emissor Regional dos Acores, Ponta Delgada, San Miguel, Acores (Lowis).

● Asia.

**Turkey.** Ankara. TAQ 15195 kcs. heard with strong signals Thursday at 2120 with BC in Eng. for BBC. Also strong at signing-on at 0930 with ordinary scheduled broadcast. (Pearce).

**Palestine.** Radio Haganah, 13890 kcs., approx. heard at 2200 R8 with Eng. recordings and announcements in English and Hebrew. (Aldridge). Pearce has heard them on approx. 6830 kcs. with Eng. at 1730, French 1900 and Italian at 1830.

**Asiatic U.S.S.R.** Stalinabad, Tadzshik, 7792 kcs. heard R7 at 2030. Ashkabad, Turkmen, 5652 kcs. R7 at 2130. Both reported by Dr. Williamson. Tashkent, RAD "Radio Tashkent" 6820 kcs., R7 at 1730 (P. E. Woolmer, Grantham).

**Lebanon.** Beirut. FXE 8036 kcs. "The Voice of the Lebanon" heard giving talk in Eng. at 1830-1845 (Pearce).

**Java.** Batavia, PNW, 17630 kcs. R5 signal at 1715 with news in Eng. (Williamson).

**Ceylon.** Colombo, "Radio SEAC" 15120 kcs. heard R6 at 1600 with relay from BBC of news at 1610, then programme summary and close down at 1615 with Anthem. (Woolmer).

**Siam.** Bangkok, HS8PD operates on 11150 and 9940 kcs. writes P. E. Woolmer according to a R.A. DX Club Session. Schedule anyone ?

● Central America/West Indies.

**Dominican Republic.** Tom Williamson lists the foll. stns: and several freq. changes :

- HI1N Trujillo now on 6050 kcs. R9 at 2355.
- HIL Trujillo now on 6175 kcs. R7 at 2320. Announcing as "Ondas Dominicanas."
- HI2A Santiago now on 6794 kcs.
- HI4T Trujillo now on 5970 kcs. 500 watts channel of "La Voz del Yuna."
- HI2T Trujillo now on 9735 kcs. "La Voz del Yuna."

Tom says all above have been checked with an accurate wavemeter and have been heard regularly at his QTH. Thanks OM. (Are you spending your holidays in the West Country this year ? Should be pleased to see you or any reader down here. If you're in the district ring Bristol 25628).

HILL Trujillo is a new station to look for on 6245 kcs. being a relay of HIL.

El Salvador. YSHQ San Salvador was the station I reported as unidentified on 6505 kcs.

HONOUR ROLL

Name and Country	Countries Heard	Countries Verified
A. Cushen (New Zealand)	?	107
J. Beauanoir (Natal)	105	84
M. Preston (Eng.)	117	59
E. Field (Eng.)	?	50
A. Levi (N. Ireland)	54	49
Dr. T. B. Williamson (Eng.)	102	47
G. H. Friend (Eng.)	62	40
L. W. Lewis (Eng.)	65	34
C. M. Southall (USA)	73	33
D. O. French (Eng.)	58	29
J. A. Jagger (Eng.)	98	29
E. Strangeway (Eng.)	71	20
S. D. Tovey (Eng.)	56	12
R. Iball (Eng.)	55	10

(Feb. "SWN"). This was heard several times but has recently moved to 6175 kcs. (Williamson).

**Nicaragua.** YNVP Managua 6758 kcs. formerly YNPS. Call "La Voz de Nicaragua".

YNWW Granada 8150 kcs. gives call as "Radio Sport."

Two unidentified stations have been heard on 6730 and 6464 kcs. both situated in Managua. All heard by Williamson between 0000-0100. Any offers anyone ?

**Jamaica.** ZQI Kingston, 3480 kcs. heard QSA3 R5 from 0045-0115 with prog. of Dance music till 0100 the call "You are tuned to station ZQI Kingston" foll. by Military Band. Believe power is same as 4 Mcs. channel Tom as you say. (Williamson). Aldridge also lists them at 0100 with R7 signals giving play by Edgar Wallace (very creepy OM ?) and also at 0230 R8 with Dance music. At 2200 they were QSA1-2 R2 and swamped by CW QRM.

**Guatemala.** Two new 'uns from Guatemala City are TGJA "Radio el Mundo" 6230 kcs. relay of TGJ and TGTA "Radio Bolivar" 6335 kcs. relay of TG5T (Williamson).

● South America.

**Venezuela.** Ray Aldridge with his "Sky Champion" plus a 66 ft. Windom aerial running N/S 30 ft. high has captured some fine DX from this Continent in the following :—

- YV5RM "Radiodifusora Venezuela" Caracas, 4970 kcs, R8 at 0100.
- YV6RK "La Voz del Tigre" Tigre, 3034 kcs. R4 at 0100.
- YV9RA "La Voz del Apure" Apure, 4820 kcs. R4/5 QSA3 at 0200.

YV1RU "Radio Maracaibo" Maracaibo, 3440 kcs. R7 at 0100.

YV4RK "Radio Maracay," 3390 kcs. R6 at 0130.

YV4RP "Radio Valencia" Valencia, 3460 kcs. R5 at 0130.

YV3RS "Radio difusora Occidental," 3580 kcs. R8 at 0115.

YV2RC "La Voz del Sierra," 3420 kcs. R4 QSA3/4 at 0130.

(Nice going Ray. Keep up the good work OM).

VY1RG Cabimas, 6150 kcs. heard at 2330 with call "Radio Cabimas" R7 (Williamson).

**Paraguay.** ZPA1 Asuncion 6275 kcs. heard once at 2215 R6 QSA4 with call "Radio Nacional del Paraguay" (Williamson) ZPA5 "Radio Encarnacion" 11970 kcs. R8 at 2300 relaying programmes of MW ZP5 920 kcs. heard by Ray Aldridge who has had a FB QSL card from them to his surprise....one that Sidney Pearce hasn't he says!

**Chile.** CE920 Punta Arenas 9200 kcs. heard once at 0100 with QSA4 R7 signals. Call "Radio Ejercito" and American swing music on records (Williamson). CE1180 Santiago 12000 kcs. R8 at 2330 (Aldridge).

**Ecuador.** T. B. Williamson says that the station reported by Bob Iball in April issue was the new freq. of HCJB Quito 5970 kcs. using 500 watts. Tom mentions that HCQRX is now on 4985 kcs. and announces as "Radio Quito, La Voz de la Capital." Bob Iball lists HCJB on their 12455 kcs. channel with QSA1-5 R5-3 signals with bad CW QRM 2200-2245. Prog: Gospel Music, News in English at 2215 foll. by Mail Bag at 2220-2230 on the 24th March. This station was also heard as 'go between' in relaying messages to G.I.s stationed Overseas at 0600-0645 on the 23rd. Signals were then QSA1-5 R6-2 with intermittent CW QRM. Closed at 0645.

**Argentina.** LRR1 Rosario heard at 2130 on 6146 kcs. with patriotic speeches for President Peron. QSA4 R6 LRY Buenos Aires logged regularly back on 9545 kcs. Both listed by Williamson.

● **Europe.**

**Luxembourg.** Roy Patrick who is a Sound-Electrical Engineer and is now on tour with the show "Perchance to Dream." Roy tells me that he has been very lucky just lately in being able to put up a first class aerial . . . on top of the Theatre Royal at Birmingham . . . 72 ft. from the ground with a 20 ft. screened lead-in! Evidently a "Dream" Antenna!! Roy has recently received a letter Veri. from the General Manager of Radio Luxembourg which gives the schedule as:—1100-1330,

15350 kcs., 1630-2300, 6090 kcs. Sundays/Weekdays. (Relaying LW transmission 1293 metres). Eng. programme times: Week-days, 1700—1745. Sponsored, 2215 till close down Dance music.

Sundays: 1630 onwards except 1900—2100. Reception reports requested to: Radio Luxembourg, Luxembourg or to London Office . . . 36 Davies Street London, W.1. Heard by your Scribe giving sponsored record programme in Eng. entitled "New to you" at 2030-2045. Signals QSA4/5 when sig. faded to R6 from R9. No mention of SW outlet was made only LW freq.

● **Australia**

Sidney Pearce mentions that conditions have been quite good late afternoons/early mornings but nothing much from about 1300-1500. This reader reports the following: VLB4 R7 at sign. on at 0830 and carrying the General Forces programme in parallel with VLA6 joined from 0855-0910 by VLC4/VLG10 operating in the Pacific Service. VLB11 was R7-8, VLA8 R7 and VLC R8, carrying news at 2145 (heard VLB11 at this time say that the news Bulletin was also being relayed by WLKS Kure Japan, BCOF Stn. . . Scribe.) at 2155 VLC signs off but reopens again for N. America at 2210 also VLG6 (15230 kcs. freq.) for Brit. Is. transmission.

● **QSLs Received.**

Sidney Pearce: VLH3, VLH4 Johannesburg, CXA19, HI2T (9727 kcs.), YFA4, Paramaribo, Munich (6080 kcs.). Madrid Omdurman CXA10, VRR5, WRUX (21460 kcs.). KWID, KWIX, KRHO (15250/17800 kcs.) Radio Algeria, CR7AA, ZQI. Ray Aldridge: HI2T (7275 kcs.). E. J. Field: VLB10, VLB11, CKCX, C. Southall: HJDE, PZR, VP4RD, Ponta Delgada XGOY. Radio Andorra, HI2T, WLWO, TAP, CQM4, BFEBS, HP5A. A. Cushen: YV5RY, Azores, HER7, HED6, VLG11, OTC3, OTC5, CBLX, KZBU, KNZD (9505/8780 kcs.). VPR4D, WLWO, WNRX, VLC3, XEBR, JVV4. K. H. Barnett: HEI5, TAP Rome, Andorra Prague, CKNC, CKCS, CHOL. David Potter: VLA6.

● **Acknowledgements.**

VLA8, VLC7, VLB, VLG4, VLG10, Belgrade ZAA (All letters). The Editors and "Monitor" wish to thank all those who have kindly sent along news compiled in this article. Space limitations prevent us from giving full list this month. Some reports are withheld till next month.

N.B.—Starting next month we are running a '6 QRAs Section' Thanks to Sidney Pearce, who has consented to send along a "bunch" each month.

# TWO-PENTODE PORTABLE

By P. LUMB  
ISWL/G46

**T**HE receiver about to be described was built in haste last summer when the writer was without any short-wave set at all—a strange occurrence for any radio enthusiast. It was built mainly from junk-box parts, with the exception of the valves—hence the unusual chassis arrangement. There was, however, another reason for this; the writer is not much good at metal work, especially cabinet construction!

## The Chassis-cum-Cabinet

This is made from a sheet of 16-gauge aluminium 13" x 8" bent 3 1/4" from each end to form the front and back panels. The two open ends are filled in with pieces of 3/4" oak, so completing the cabinet. The "Chassis" is another piece of oak of the same size fitted across the cabinet 3 1/4" from one end. Figs. 2 & 3 give an idea of this construction and of the holes to be cut in the "chassis."

## Circuit

At this point, it may be advisable to briefly discuss the circuit used. The detector valve is a Mullard KF35—a valve specially chosen as it is designed for short-wave work and can be relied upon to give good results. In addition, being a pentode, smooth reaction can be obtained by the potentiometer R2. In order to bring oscillation point to approximately the centre setting of the potentiometer, the resistor R3 is connected in series with the earthy end of R2.

The grid circuit of the valve is conventional except that, as the receiver is intended solely for the amateur bands, the tuning capacitor C2 is a 15  $\mu\text{f}$ . bandspread unit made by Eddystone before the war and fitted with a built-in slow motion drive. By using this particular model, adequate bandspread is obtained without the necessity of specially fitting a slow motion drive.

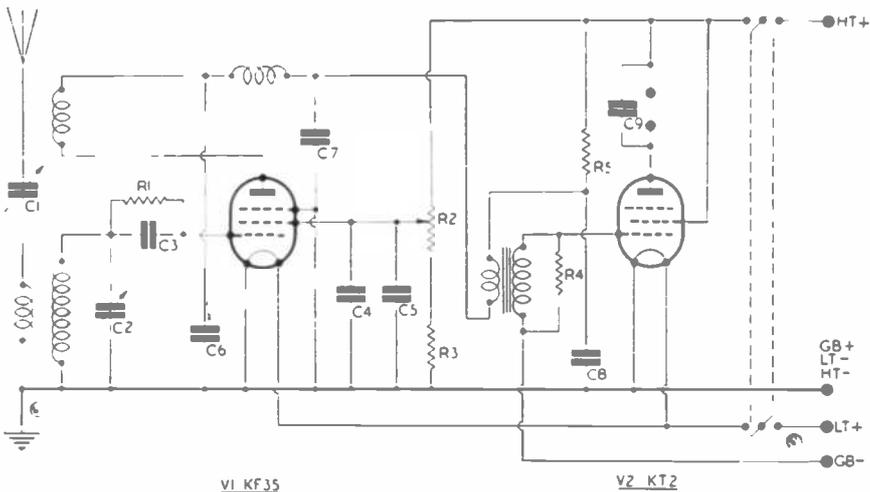


Fig. 1: Theoretical Circuit

## CAPACITORS

- C1—Midget trimmer
- C2—15  $\mu\text{f}$  Eddystone
- C3—100  $\mu\text{f}$  ceramic
- C4—.01  $\mu\text{f}$
- C5—2  $\mu\text{f}$
- C6—200  $\mu\text{f}$  ceramic
- C7—100  $\mu\text{f}$  ceramic
- C8—.25  $\mu\text{f}$
- C9—.001  $\mu\text{f}$

## RESISTORS

- R1—3 megohms
- R2—.25 megohms
- R3—60,000 ohms
- R4—.25 megohms
- R5—20,000 ohms

## OTHER COMPONENTS

- 5-pin valveholder
- Octal valveholder

## 6-pin coilholder

- 6-pin coils
- Pentode valve KF35
- Varley "Nictet" transformer
- H.F. choke
- D.P.S.T. toggle switch
- Headphone jack
- Pentode valve KT2 or similar
- Metal for cabinet, 3/4" oak,
- knobs, nuts, bolts, etc.

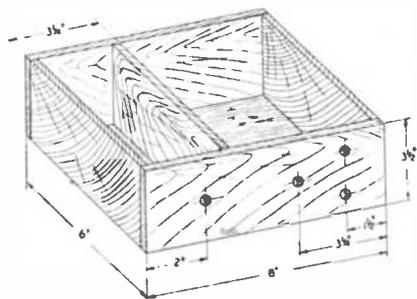


Fig. 2: Sketch showing construction of the wooden housing for the receiver. "Department A" is the small one and "B" is the large department.

C4 is the screen bypass capacitor and C5 is included to remove all traces of noise due to the potentiometer. It will be appreciated that a noisy reaction control cannot be tolerated so that a good make of potentiometer must be used.

By the use of a good R.F. choke, the capacitor C7 and the resistor R4, there is not the slightest instability.

**Construction**

It is best to commence assembly with the "chassis" removed from the cabinet. The coil holder is mounted so that the coil fits in the small section in Fig. 2. Raymart six-pin coils are used in the original model and the tops of these show through a hole cut in the side of the cabinet, large enough to allow insertion and removal of the coils. A metal cover can be made to swing over the hole. The only other components in this section are C2 and C9, the latter being soldered across the pins of the output valve.

Both valve holders are mounted on the opposite side of the "chassis," the valves appearing in the large compartment, the KF35 to the front with its locating peg pointing downwards.

The potentiometer can be mounted, the two end holes on the front panel being used for on-off switch and headphone jack. The L.F. transformer, a Varley "Nictet," is fitted on the back panel of the set above the output valve. All other components are slung in the wiring, most of them being packed in above the KF35.

**Wiring**

It is best to commence wiring by connecting R1 and C3 to the coil holder. The two earthed ends of the coil are joined and the following components soldered to this junction—C4, C5, C6, and C7. The other end of C6 may then be carried across to the reaction coil and the choke attached.

Filament leads may be connected, negative sides being taken to the earthing point on the

coil. All earth wires, incidently, are taken direct to this point.

The "chassis" may now be fitted, and, after inserting the valves, a bit of juggling is needed to fit all the loose components in the space between the valves and cabinet. The remainder of the wiring is simple and easily accessible. All battery leads are led out through a hole in the side of the set.

A simple dodge to avoid "blowing" valves may be mentioned—always make L.T. leads much longer than those carrying H.T., it is then very difficult to get the two mixed. More than one good valve has met an untimely end through not observing this simple rule.

**Operation**

This completes the construction. As the only bands of interest to the writer are the 10, 20, and 40 metre amateur bands, these are the only coils he possesses. They are all three standard Raymart six-pin. For anyone interested in other bands, coils will have to be wound, and, as more than one article could be written on that subject, it will be left severely alone. "Trial and error" is probably the best and simplest way.

The set in use is very much similar to any other straight short-wave receiver. The aerial trimmer, which can be adjusted through a hole

(Continued next page)

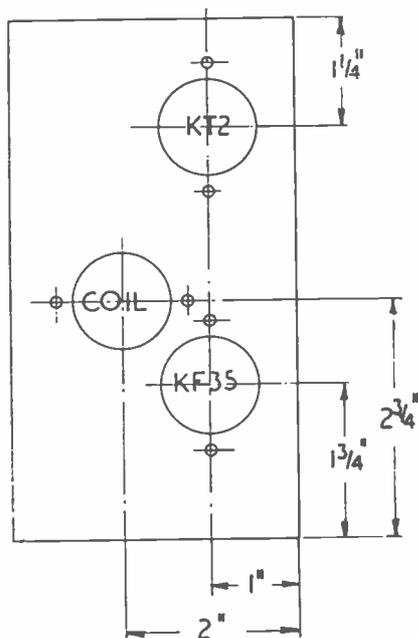


Fig. 3: Showing dimensions of coil and valve holder fittings for compartment "A."



# INTERNATIONAL SHORT WAVE LEAGUE

Monthly Notes by G3AKA

Annual Subscription 1/-

West London (Sec.: J. Hebborn, 71 Saxon Drive, Acton, W.3).

Though only six weeks old, the Chapter is growing fast. In fact, it has been agreed that a definite "saturation point" be fixed since if membership increases at its present rate the club rooms would soon be more than overstocked with seething humanity—or SW fans! However, it has been suggested that should this stage be reached the only solution would be for another Chapter in West London to be formed to ease the situation. Any help in this direction would be more than appreciated by the secretary, so what say OM's?

Under G3AKA, G3UQ and George Friend, morse classes are continuing; all groups being held in the same room in order to train members in reading through QRM! A Junk Sale has been held and proved profitable to the club kitty. It was expressed that never has such an accumulation of junk been seen outside the doors of a museum!

Two constructional sections have been formed, G3AKA taking care of the Transmitting Section and G3UQ the Receiving Section. These groups combine practical work with theory and explain not only the constructional side of things but the theory as well. In this way it is hoped to coach many members for their tickets. A notice board has been donated by Don Morrell and

## *(2-Pentode Rx—continued)*

in the side of the cabinet can be used to vary selectivity. By slackening this trimmer off, selectivity is increased. It is best to try to strike a happy medium. Due to the fact that the coverage on each band is so limited, no trouble is encountered with dead-spots. It will be found that the receiver glides smoothly into oscillation after a well defined "hiss" period.

## Results

Up to date the set has given every satisfaction even though the aerial consists of about 15 feet of wire slung up outside. A good aerial would be certain to make a considerable difference.

## Conclusion

Anyone who may construct this receiver and require further information is invited to write to the author at 25, Pearl Street, Starbeck, Harrogate, W. Yorkshire, when assistance will gladly be given.

it is used for club announcements and members small advertisements.

Birmingham (Sec.: G. Moore, 42 Fern Road, Erdington, Birmingham, 24).

Birmingham have also held a Junk Sale recently and it extended so far beyond the time limit that a talk by Mr. Needham had to be postponed! Listening Periods continue to be held and Mr. Water came out on top this month with a score of 124 points. Morse classes continue to be a regular feature. We hear that the Chapter is well supplied with DX machines for the Contest! Good luck, lads.

South London (Sec.: W. A. Martin, 21 Brixton Hill, London, S.W.1).

The famous club receiver has just had the final adjustments made and we are told that, though a TRF, it is giving superhet results. The club has agreed that on meeting nights all the local motorists form a queue and use up their Basic to run up and down the main road! However, the set will be duly described in SWN and we are looking forward to publishing the design.

The morse sessions have proved successful and several members are now copying at 12—15 wpm. This is due to the fact that they stick at it outside of club times and concentrate on actual listening on receivers at home.

The members are reported to be trickling down to the VHF's, several having converted RF units, 26 and 27 for that purpose.

North West London (Sec.: F. Wells, 8 Evangelist Road, Kentish Town, N.W.5).

Great fun at the Chapters Field Day. Everything was agin 'em, both the weather and reception conditions. In the secretaries' own words ". . . all listening was accomplished by using the batteries as a seat, nursing a receiver on one's lap and with a raincoat over one's head"!! Receivers in use were two super-regens (955—954) and one single-valver. The latter was built in a hurry after a mishap which accounted for two acorns! Aerials in use were a Windom (8 ft.), a 3-element rotary beam and a 6-metre dipole. Though everything was against them, the teams logged some fair DX, the best one being 2XC at Portsmouth. It has been agreed that future Field Days are to coincide with the National event.

Like West London, membership is to be restricted.—25 being the total permissible recruits. This leaves few vacancies at present. The DX merchants are dusting off the receivers in anticipation of the Contest. Best of luck.

**Manchester** (Tr. : M. Wilks, 57 Longley Lane, Northenden, Manchester).

The newly appointed TR is extremely anxious to form a local group and if interested members would contact him there is every chance of a first-rate Chapter. So, please write to Maurice, OM's and help put Manchester on the ISWL map !

**Southwick** (Sec. : J. Short, G3BEX, 112 Southwick Street, Southwick).

A promise to "have a go" in the Contest has been duly received from 3BEX, and also the assurance that many members have already started to wash their ears ! Arising from the preliminary circular sent to Chapter secretaries, a discussion straightaway took place on the subject "What is DX?" The perpetrator of this remark was our ham band expert Bert Onslow. (You should know the answer to that one, Bert !).

On the general side, the club has now completed a QRP rig and hopes to be active on the local hills with a spot of FD work soon. With many Chapters now with their TX's it might be an idea to have an Inter-Chapter round table. What say ?

(Footnote to 3BEX : Regarding your points scheme, John, hope to bring in something on these lines next time.)

**Bromley (Kent)** (TR : A. Veness, 37 Park Road, Bromley).

The TR would be pleased to form a Chapter in the district providing that sufficient members come forward and offer support. Therefore, would members living in these districts, and willing to support the proposed Chapter, please drop a line to the TR :—Bromley, Shortlands, Beckenham, Hayes, West Wickham, Coney Hall, Keston, Bickley and Chislehurst.

If you want a club where you can all meet and swap notes please let the TR know about it. Thanks OM's.

**East London** (Sec. : A. Baldwin, 28 Wallwood Road, Leytonstone, E.11)

Dead silence this month from East London ! However, the Sec. and TR called in at HQ a few days ago so we know the Chapter is still flourishing ! They are all probably too busy DX-ing to get down to sending along notes. Let's hear from you next time.

**Portsmouth** (Sec. : R. Masters, 62 Battenburg Avenue, North End).

Owing to the advent of Summer (?) weather

it has been decided to hold meetings once a month until the longer evenings are with us again. Meetings are held at the above address on the first Friday of each month. Members in the locality who have not yet dropped in at the Chapter are assured of a warm welcome.

### TRANSLATION SERVICES

Please note the new address for the German and Dutch Service:—C. Jakes, 2 Russel Place, Comrie, Dunfermline.

Although *Afrikaans* is very similar to Dutch, our good friend Jeff. Bowes-Taylor, G3BQG, himself a South African, has offered to handle any translation in that language. This may ease the burden at Comrie ! The address is :—

J. Bowes-Taylor, 20 Ingestre Road, Hall Green, Birmingham, 28.

Another addition to the Translation Service is due to the kindness of SM6-1051, Lars-Eric Hansson, who will undertake *Swedish*. When writing to the department, please enclose an IRC in place of the usual SAE. The QRA is :—

Lars-Eric Hansson, Hallebacken 5, Jonsered 2, Sweden.

### TURN TO PAGE 183 FOR DETAILS OF THE DX CONTEST

#### Footnotes :

Stanley White, G3CMO, writes to say that he has access to large stocks of surplus gear and if any *ISWL members* are interested in it, please contact him. 3CMO also offers hospitality to anyone holidaying in his district and would be more than pleased to welcome them any evening after 6 p.m. His QRA is : "Collede," Old Polzeath, Wadebridge, Cornwall.

We are sorry to lose the services of Paul Dilg (Monrovia, California) as State Representative. Other commitments make it almost impossible for Paul to carry on with the hobby. Sorry to lose you Paul and hope to have you active again one day. In the meantime, HQ would appreciate offers to take over the vacant position.

Spalding (Lincs.) members please note ! F. S. Rose of 10 South Parade, Spalding wants to form a local group. If anyone reading this is within easy access of Spalding, please drop a line and help with the formation of your Chapter. Tnx.

Stamford (Lincs.) members also please note ! F. K. Parker has in mind a group in the town. However, more support is needed before the Chapter can become a reality, so what say to some mutual co-operation ? His address is 122 Empingham Road, Stamford.

Our TR for Taunton (F. R. Freeman, G3AXV) has now moved to Tunbridge Wells and has therefore left a vacant seat at Taunton. Thanks for your help, OM and good luck at your new location. Offers, please for a successor.

**New Representatives**

**Town:**

**Bromley:** A. Veness, 37a Park Road, Bromley.  
**Manchester:** M. Wilks, 57 Longley Lane, Northenden.

**Workshop:** R. Iball, 1 Riddell Avenue, Langold, Workshop.

**County:**

**Cardiganshire:** O. D. Jones, 12 Harford Row, Lampeter, Cards.

**Leicestershire:** R. Winters, 64 Victoria Street, Melton Mowbray.

**Overseas:**

**Singapore:** Wang Tzu Kang, 38 Lavender Street, Singapore.

**Ohio:** Leo. J. Chak, 4347 Groveland Road, University Heights, 18, Ohio.

**ISWL BADGES**

Good news this month. We have inspected, and passed, the first sample of our League badge. It was right up to our expectations and looked really fine in its three colours (green, amber and gilt). There will be two versions available: (1) with lapel fitting and (2) with pin attachment. Prices will be the same for either variety; 3s. 6d. post-paid. We hope to announce that they will be available in our next issue.

**CHAPTER SECRETARIES**

We hope that every Chapter will "have a go" in the Contest; a full report of which will be published in the next available issue after logs have been received. It is essential to have the fullest support with this first competition in order that further events may be arranged.

If you have any queries, please write to HQ without delay. 73 and good luck—may the DX tumble in!

**TRADE NOTES**

**Eddystone:** We have received a sample of one of the new range of transmitting capacitors (Cat 612) marketed by Stratton & Co. Ltd., under the well-known Eddystone trade-name. The sample under question is a split-stator type, having 50  $\mu\text{F}$  per section, with a spacing between vanes of 0.08" and is of particular use in transmitters operating on the 14 and 28 Mcs bands. The construction is really rigid and the vanes are of heavy gauge aluminium. The insulation is of ceramic (end plates). In the same range is a split-stator capacitor (Cat. 611) with 25  $\mu\text{F}$  per section. This has the useful idea of two neutralising capacitors, of 1.5-7  $\mu\text{F}$ , integrally built into the unit. For use in

a medium-power VHF transmitter, using low capacity troides in push-pull, this capacitor is ideal. The other two split-stators in the range are No. 476 (18  $\mu\text{F}$  per section) and 614 (100  $\mu\text{F}$  per section). All units in the range are constructed on sturdy lines and are a worthy addition to the range of Eddystone components; a range which has long been associated with the words "efficiency and quality."

**Wilflo Products**, of 160-164 McAslin Street, Glasgow, C.4, have sent along a copy of their mail order list. As well as some useful radio gear, we were interested to note listed such items as breast and hand drills, pliers and cutters, dividers, screwdrivers and other tools of which the constructor is often in need.

**Barnes Rad-Elec. Co.**, of 2 Elmdale Road, Penn, Wolverhampton, announce that they will shortly be opening extensive premises and workshops at 12 Pipers Row, Victoria Square, Wolverhampton, where constructors are invited to inspect many tons of useful gear. This firm also does a large mail order business, and invites readers to apply for their new lists which are now in preparation.

**M. Watts**, of 38 Chapel Avenue, Addlestone, Surrey, have sent us their latest list. This firm specialises in surplus components, and emphasises that these are all brand new, and not stripped down jobs. A Mail Order service is operated, and readers are invited to apply for the latest lists. Apart from this, the Trade is also catered for, and in this connection a monthly list is issued.

\* \* \*

**BOTTLE SWAPPING SECTION**

**ISLW/G1075**, 21 Northwood Park<sup>e</sup> Road, Bushbury, Wolverhampton, Staffordshire; has the following valves for exchange:—TZO5-20, 6V6G, 807, Pen 1340, EL32, 6K7G, 6K8G, EF50, 5U4G, FW4/500, E1148, V248Z, 6H6G, HL23DD, TSP4 and KTZ73. He is in need of a VR150/30, two 6C5G's and one each of 6L6 and 53. He would also like to hear from anyone who has the circuit of the TR9H.

**G. W. Dale**, c/o Bakery, Hailsham Road, Heathfield, Sussex, wishes to swap 1 of 6V6 or 12J7 or 6X5 for 1 of 25Y5.

\* \* \*

**CQ's**

*Item 1:* Will Mr. Jones who sent a PO for ISWL badge please send along his address as this was omitted. Also, OM, please send your League number.

*Item 2:* We received an envelope, post-marked "London, W.1. 19 May," containing simply a PO for one shilling. Will the sender please identify himself and state the purpose of the cash.

*Item 3:* Can any reader please supply on loan HQ with a circuit diagram of the R1355 or the R1426 receivers? Urgent!!

# Radio Melange

*A pot-pourri of current topics*



## THE BIELEFELD "HAMFEST"

In our May number we gave some details of the recent SWL's "Hamfest" at Bielefeld, Germany. Above we reproduce two photos taken at this "Hamfest." On the left of the photo is Waldemar F. Kehler, one of the organisers of this "Hamfest," seen talking to Dr. v. Dyke of the Dutch Broadcasting service. In the lower of the two photographs, a corner of the exhibition is shown. Copies of the *Short Wave News*, *S.W. Listeners Annual*, etc., are to be seen.

## TELEVISION FOR ST. LOUIS

From Grove Calkins

(*SWN U.S.A. Correspondent*)

The race for the honour of being the first newly equipped post-war television station to go on the air with regular schedules has been won by KSD-TV, St. Louis, U.S.A. The Edison Centenary Week was chosen as a suitable occasion to launch the programmes on a daily schedule. The transmitter is a 20 kW RCA Unit having a range of 40 miles. The aerial system is on a tower on top of the Post Dispatch building, 550 feet above street level. The service area covers 4,300 square miles, serving an estimated population of nearly 1½ million. To give flexibility of programme material, the station facilities include an RCA radio relay link and a 16 mm. projector and film camera.

## RADIO DIFFUSION IN MALAYA

From Tan Bin Hussain

(*SWN Far Eastern Correspondent*)

The radio diffusion system as operated in England has been adopted by the Singapore Government. For a few dollars a month, subscribers will be supplied with loud speakers connected directly to the station on similar lines to a telephone service. Radio Malaya, consulted during the negotiations for a licence, welcomed the project, and a condition of the licence is that the diffusion station must radiate a certain amount of the Radio Malaya and B.B.C. programmes.

## TWO NEW PHOTOTELEGRAPH SERVICES

Cable and Wireless Ltd. have opened a phototelegraph service between London and Nairobi and, in co-operation with Radio Communications of America, have opened a similar service between Bermuda and New York.

Sir Stanley Angwin, Chairman of Cable and Wireless, Mr. John Innes, Managing Director, Sir Howard d'Egville and Major Lockhart of the Empire Parliamentary Association, and Miss Fell, Director, Photographs Division, Central Office of Information, were in the Company's London Facsimile Room to witness the opening of the Nairobi service,

## Book Review

"By Cable, By Wireless," a nice little 25 page booklet just produced by Cable and Wireless Ltd., portrays the development of the electrical transmission of messages from the days when it cost 10s. 8d. a word seventy years ago to the present time, when a 12 word cable from Britain to Australia costs less than half this amount.

About 1,750,000 words are telegraphed every week over the network known in most countries as the "via Imperial" service, but in others as "via Eastern" and still others by a local name such as "via Radio Athens." This little booklet reviews the work of the 155,000 miles of submarine cable, the 150 wireless circuits, 9 cable ships, 22 coastal radio stations, 3 aeronautical stations, 36 radiotelephone circuits and 17 phototelegraphic circuits now controlled by Cable and Wireless Ltd.

Very well illustrated and well produced, this booklet will give anyone an hour or so's very pleasant and instructive reading.

A.C.G.

**Standard Valves :** Published by Standard Telephones & Cables Ltd. (Valve Division), Connaught House, Aldwych, London, W.C.2. 320 pp., illus., c/bds. 15s. 6d. post paid.

This handbook, intended primarily for equipment designers, is eminently suitable for the more advanced readers of this Journal who are interested in the experimental side of the hobby. Details are given of special valves manufactured by S.T.C. and not of ordinary receiving types.

Sections are devoted to Definitions of Terms, Cathodes, Cooling of Valves, Water Jackets, Valve Bases, Commercial Codings, etc. The Data Sheets occupy the bulk of the book and they contain a wealth of information on Diodes, Triodes, Thyratrons, Pentodes and Tetrodes and Special Types. Amongst the latter, Cold Cathode Stabilisers, Gas Filled Relays, Vacuum Capacitors, Pulse Modulators, Velocity Modulated Oscillators, Thermal Delay Switches and X-Ray Tubes are dealt with most thoroughly.

The book is excellently illustrated, with scale drawings of each valve, curves and circuits. Much of the information is normally hard to come by, especially with regard to Repeater Triodes, Grounded-Grid Triodes, Double-disc-seal Triodes, Air-Blast-Cooled valves, Coaxial Repeater Pentodes and the like.

Though most definitely not for the beginner, this STC book presents in a compact form a mine of technical information for those interested in advanced radio. It is a valuable addition to existing literature on valve data.

Additional loose supplements will be issued periodically on application.

W.N.S.

the first picture transmitted to London being a photograph of Mr. J. B. Hynd, M.P., Leader of the Empire Parliamentary Delegation now in East Africa, arriving at Nairobi. The first London-Nairobi Picture, a topical news photograph, was filed to his Nairobi office by Commander Christopher Powell, London Editor, East African Standard group of newspapers.

Interviewed in Kingston, Jamaica, by the *Daily Gleaner*, Mr. J. A. Smale, Cable and Wireless Engineer-in-Chief who is visiting the West Indies, said, "We are establishing the transmission of pictures by radio in a very great many of our colonial stations. We have recently opened a circuit between Barbados and London and we shall quite shortly be installing suitable apparatus in all our more important stations in the area, including Kingston." The Barbados Relay Station for London-Australia service was being expanded.

(Public Relations Office, Cable and Wireless Limited.)

### N.Z. RADIO PHOTO SERVICE

From Arthur Cuchen

(SWN N.Z. Correspondent)

The first radio-photo service in New Zealand was recently installed and the first pictures to be sent were of the wedding of Princess Elizabeth. Photos taken at the wedding were published in the Wellington morning papers on the day of the wedding. These photos came through Colombo and Melbourne stations. The first outward photos were sent by Wellington Radio to Australian newspapers and contained pictures of the tragic Christchurch fire in which 41 lives were lost.

\* \* \*

### THE EDITORS INVITE...

...Photos and write-ups of your SWL or transmitting station for inclusion in "Around the Shacks."

...Circuit and brief details of your "Favourite Receiver"

...Technical articles, describing short wave receivers, transmitters and the like, for inclusion in this journal.

Prospective writers are invited to apply for our Guide Sheet, which gives advice on the preparation of articles, standard terms used and so forth. We are in particular need of articles describing AC/DC or DC gear and also of short articles on auxiliary gear for the transmitting and SWL enthusiasts.

...Items of interest, especially from overseas, for inclusion in "Radio Melange."

\* \* \*

Did you know that the Waste Paper Salvage Drive is on again? Try and save all the paper you can. See that all waste paper goes to salvage, not into the stove.

# CLYDESDALE

## FOR BARGAINS IN EX-SERVI

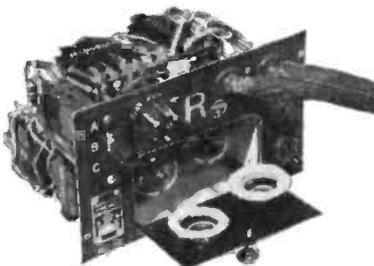
### Repeat Offer, Further Supply BATTERY AMPLIFIER A1134.

Two stage pre-amp, intercom., or Tx modulator Unit. Two Valves, VR21(PM2HL), VR35(QP22B). Three Trans. Mic., Q.P.P. Input and Q.P.P. Output. Complete in metal case 7"×5"×4½", finish black, with circuit.

CLYDESDALE'S  
PRICE ONLY

**15/-**

Post and packing paid.



### JUNCTION PANEL 10D/13336.—For the A1134.

Contains matching sockets, terminals Blocks, etc., mtd. on a board 6"×4½".

CLYDESDALE'S PRICE ONLY

**4/6** Each

Post and Packing paid



### TRANSMITTER TUNING UNITS

TU5B 1500-3000 kcs. CLYDESDALE'S PRICE ONLY	<b>25/-</b>	TU6B 3000-4500 kcs. Carriage Paid
TU8B 6200-7700 kcs. TU26B 200-500 kcs. CLYDESDALE'S PRICE ONLY	<b>19/6</b>	TU9B 7700-10000 kcs. Carriage Paid

### BRAND NEW. EX-U.S. ARMY COMMAND RADIO RECEIVER. B.C. Series (Western Electric).

Each a Superhet, with 6 metal 12 V. Valves, 3/12SK7's, 12K8, 12SR7, 12A6, in series/parallel for 24V. less dynamotor in metal case, length, base 10½", top 7½", height 5½", width 4½".

BC 453. 190--550 kcs. I.F. 85 kcs.  
CLYDESDALE'S  
PRICE ONLY **50/-** Each  
Post paid

BC454. 3.0-6.0 Mcs.  
BC455. 6.0-9.0 Mcs.  
CLYDESDALE'S  
PRICE ONLY **30/-** Each  
Post paid

Set of circuits for BC 453, 454, 455, A & B, M.W. and Control Boxes, Plus Tx. and Modulator etc., at 4/6 per set

Brand New, in makers' cartons

**5 AND 6 METRE OPERATION THE FAMOUS R.F. UNIT TYPE 26**  
Variable tuned from 65-50 Mcs. — 5-6 Metres

This unit and any Mains Set that tunes to 40 Metres (7 Mcs.) can be simply converted to a 5 and 6 Metre receiver.

CLYDESDALE'S  
PRICE ONLY **35/-** Each  
Post paid

### BRAND NEW. EX-SERVI

In makers' cartons or wrapped  
CV No. Service No.

1054	VR54
1056	VR56
1091	VR91
1092	VR92
1285	NR73
1286	NR77
199	VT112
660	VT231
1932	VT94
	VT144

### 2-GANG TUNING CONDENSER.

Max. cap. 500 pf. per section, with  
2½"×3"

CLYDESDALE'S  
PRICE ONLY

### VARIABLE AIR SPACED CONDE (STRATTON 339).

Lab. built, on DL9 insulation, brass  
0.3/50 pf. or 2/100 pf. or 4/200 pf.  
Size 2½"×2½"×1½".

CLYDESDALE'S  
PRICE ONLY **4/11**

### REMOTE CONTRACTOR No 4 (V)

A Relay Unit used for remote Swit  
24V relay and drive mechanism. O  
round metal case, with block plastic

CLYDESDALE'S  
PRICE ONLY



BRAND NEW S  
Ratio 48-1 dia.,  
escutcheon, milled  
tongue.

CLYDESDALE'S  
PRICE ONLY

### STILL AVAILABLE—as previously ad

Ex-R.N. Loud Hailer for 12-v  
R1155 Receiver Unit  
T1154 Transmitter Unit  
R1132 VHF Receiver Unit  
R1481 VHF Receiver Unit  
AN/APA-1 Cathode Ray Indi  
Accumulator Charging Board  
12-volt, 75 a.h. Accumulator  
6-metre Half-Wave Dipole Ae  
All carriage and packing Paid

SEND NOW FOR NEW ILLUSTRATED LIST

(Write Name and Address in BLOCK LETTERS please)

# CLYDESDALE SUPPLY CO LTD

# ● The Radioman's Shop ●

## CES ELECTRONIC EQUIPMENT

### ICE VALVES.

ers.	Post paid.	Price each.
Mullard EB34		5/-
"	EF36	7/6
"	EF50	7/6
"	EA50	7/6
"	ECC31	7/6
"	EL35	10/-
U.S.A.	6AC7	7/6
"	6SN7	7/6
"	6J5G	6/-
"	813	59/6

ch trimmers, ceramic insulation, size 3" x 2".

**7/6** Each  
Post paid

### ENSER.

ss vanes, Caps.  
as connected.



Post Paid

enner Time Switches Ltd.)

witching of Transmitters. Comprising  
ON/OFF switch and resistor etc., in  
e top, perspex window.

**3/11** Each  
Post paid

### SLOW MOTION DRIVE (MUIRHEAD)

. 3 in. for 1/2 in. spindle, drilled for  
ed edge on main drive, metal locking

SDALE'S **7/6** Each  
ONLY Post paid  
Two for 13/6d.

### advertised.

-volts	..	£25	15	0
	..	£12	12	0
	..	£10	10	0
	..	£8	19	6
	..	£7	19	6
icator	..	£4	17	6
d 1260W.	..	£3	3	0
	..	£5	0	0
erial	..	£1	8	6

d, plus a host of other items.

### BRAND NEW. BEACON RECEIVER BC.1206B.

A midget superhet, for 200-400 kcs., with 4 metal 6.3 valves, 6SA7, 6SF7, 6SK7, 6K7, in series for 24 V. miniature 3-gang condenser, dial and knob, V/control, W/switch, I.F. trans. provision for output and Rectifier Valves on chassis. In metal case. Size only 5 1/4" x 4 1/4" x 4 1/4".

CLYDESDALE'S **45/-** Post Paid  
PRICE ONLY

### NEW—UNUSED. BEACON RECEIVER, BC.1206B.

Exactly as above, but glass valves

CLYDESDALE'S **35/-** Post Paid  
PRICE ONLY

### EX-U.S. NAVY I.F.F. RECEIVER/TRANSMITTER.

Types ABK (43AAX) 12v. and ABKI (43AAV) 24 v. for 158-186 Mcs., with 10 valves, Pioneer Dynamotor etc., in metal case 12" x 12" x 8", used, good condition.

CLYDESDALE'S **33/6** Each Carriage  
PRICE ONLY and Packing paid

Circuit available at 1/9d. post free.

### BRAND NEW. 5-PUSH BUTTON UNIT.

CONTROLLER ELECTRIC, TYPE 1A. 10J/17.

Comprises : 5-digit push button switch, 5 pilot bulb holders, 3 pos. 4-pole Key Switch, wired to 12-pin Jones type plug, in metal box, 5 1/4" x 4" x 1 1/4".

CLYDESDALE'S **3/11** Each  
PRICE ONLY Post paid

Dozen lots 45/- Carriage paid.

### BRAND NEW. MIC. AND HEAD- PHONE ASSEMBLY IN MAKER'S BOX.

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

CLYDESDALE'S **15/6** Per set  
PRICE ONLY Post paid



### BRAND NEW. EX-SERVICE.

Cathode Ray Tube 3B.P.1., with 3 in. Electrostatic screen, 14-pin Octal Type base. Fil. Vtg. 6.3 v. 1st. Anode 500 v., 2nd Anode 1500 v., length 12 ins.

CLYDESDALE'S **25/-** Post Paid  
PRICE ONLY

## 2 BRIDGE STREET, GLASGOW, C.5

Phone: SOUTH 2706/9

VISIT OUR BRANCHES IN SCOTLAND, ENGLAND AND NORTHERN IRELAND

# On the Ham Bands

Conducted by Les Coupland

—G2BQC

## General.

WE have some interesting "gen" in the post-bag this month. Firstly, VQ4RAW, George Whiting, sends congratulations to Conrad Tilly on hearing the Kenya stations on 6,800 kcs. According to George, these stations are operated by the railways in the Colony as the call signs denote, i.e. VQ4RGL, 4RKE, 4RKU, etc. The majority of these stations use a power of only 2 watts and others in the region of 20-30 watts. Even the police have a VQ call—namely VQ4P! Thanks, George for the fine data. Has anyone else heard any of the above stations?

The Wireless Institute of Australia have recommended that the prefix VK8 be allotted to Northern Territories. Previously this prefix was for Central Australia and stations operating in the North have used VK5.

The station SHFIX, the Swedish Exploration Vessel "Albatross" (see cover photo. in December 1947 "SWN"), has popped up and so has K2UN, the United Nations station now on 14 Mcs.

Our wandering ham, Harry Pain, G3ATH, late of ZB2A and now XZ2HP, is moving again soon and hopes to be on with a VS7 call. Good luck, Harry.

LX1RB, the QSL manager for Luxembourg, returned reader Arthur Robinson's QSL for LX2FN with an explanatory letter to the effect that 2FN is a pirate, the only genuine LX's being those in the current Call Book.

VS6BC is now the call of our Far Eastern Correspondent, R. W. A. MacKichan. "Mac" is licensed for 25 watts of CW and is looking for G QSO's. He says that the address for all VS6 cards is P.O. Box 541, Hong Kong.

Bert Capelin, G1078 (Broadway, Worcs.) kindly sent along the local report on their NFD station. They had a 14 Mcs. rotary beam which the wind played havoc with but which succeeded in pulling in QSO's with the East and West coasts of USA, South America, Australia, etc., and which knocked up a score of 611 points. Incidentally, we ran two stations up here, G6GH/P (3.5 and 1.7 Mcs.) and G2BQC/P (7 and 14 Mcs.). The latter station was located on one of the highest points in Lincolnshire. We were fortunate to score a total of 624 points.

Champion DX-er Al Slater has turned his attention to the VHF's. Good luck, OM, and hope to hear from you from time to time.

That's the lot for now, so on to the DX news . . . . .

## Reader's Reports.

W. Mills, G261 (Chelmsford), starts the ball rolling this month. Walter uses an R107 and has a 14 Mcs. Windom NE/SW, 30 ft. high. The best DX on 14 Mcs. has been C7TY, AR8AB, CE5BH, ET3AE, 3AF; HA4AB, HC2KM, HI6AC, KA1AI, KG6AI, W3FDJ/KL7, VP2GE, VR3A (Christmas Isle. Vy fb), VU2LU, 2VA, XE1FB, 2BQ, YS1GM, ZS3S, etc.

R. W. Ainge, G219 (nr. Crewe), sends in his usual fb log. On 7 Mcs. he logged KP4ha, ZC6aa, UA3kab and numerous W's. 14 Mcs. produced KH6AW, GS, GF, RJ, AX; KL7FQ, UM, FC; TG9AD, JK, OA4AB, AT; HC1KE, VR9AA (Ellis Islands), EL5A and stocks of W's, VK, VE8, etc. On 28 Mcs. KG6BW, KA1ABA, PK2RK, MI3ZJ, KP4CK, VQ4ERR, ASC5, DES; ST2KP, TG9JK, VP4TT, 9F; KZ5EL, 5LN; CX4CS and PZ1RM, were pulled in despite poor conditions. Bob thinks that the band has "had it" until the autumn. Agreed!

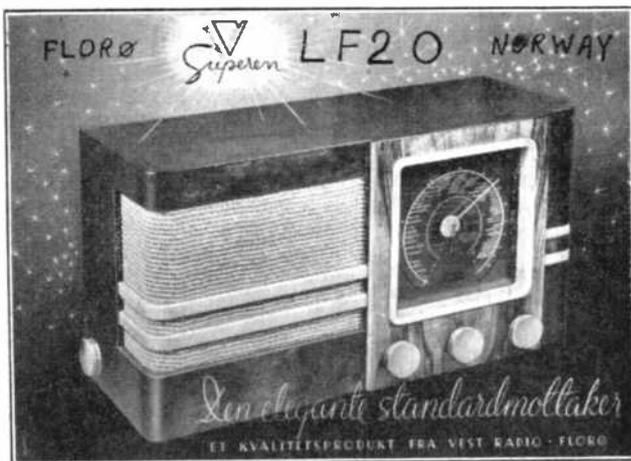
W. Ghelms (Hendon) who is an ex-Corporal wireless op. of the RAF sends in his first log. He uses a commercial 5-valve Ferranti with no "frills." However, he has certainly heard some nice ones, like: TF3EA, VO2BP, OX3GF, CO7BP (VP?), CE3AE, PY4QX, VP9F, YA1EP (Very doubtful one this OM!) MB9BD and LN4AF (another new 'un on me). You can get a Call Book from Dale Electronics or Modern Book Co.—see May issue adverts. Good DX OM.

A. Baldwin, G193 (Leytonstone), sends along a fine CW and phone log for 14 Mcs. He wants to know why more SWL's do not learn the code. I don't know the answer but I do know that when I started ham radio, I soon became curious as to what those dits and dahs meant and was more than amply rewarded when I found out! On CW, we note C2ot, 8pw; CR4hb, 6an, 6an 7bb; J4klt, KB6ad, MD5da, OY3igo, PK2kk, TF3ab, UF6kac, UG6ab, wd; VP2an, 6is, 9e, VS2bz, 2nx, 7la; VQ2hg, 3hge; VR6aa, 6ab; W6anx/C6, ZD1lg, etc., which goes to show. Not wishing to start a phone/CW war here are the picking of the phone DX: C7TY, FQ8SN (Nice one this OM), HC2KJ, HK5MQ, HP1RP (FB catch), KA1AI, KH6US, VE7ZM, XE1BC and YS3PA.

J. Bollard, G1114 (Chester), has some interesting Europeans like OH2OK, YR5C, EA3ZJ and MB9AD, together with PY1PZ, VK2AGU (not LGU as stated, OB), YV5DY and ZC1AL.

All times are in G.M.T.

This interesting QSL card was received by G2FAY. On the reverse side we read "LF20 is the call of Vest Radio Factory, Floro, Norway. Floro is on the west coast, north of Bergen. TX was 45 watts, CO-PA. RX was 4-valve super. QSO on 7 Mcs. band".



D. L. McLean (Yeovil), really produces some amazing DX logs each month as regular as clockwork (he has heard 149 countries to date). On 14 Mcs. phone this month he logged AR1PC, KH6AW, CZ, GS, IU; MD1H, OX3BD, VK2AGU, 2VD, 2WD, 3AJB, 4KS, 7AZ (10 watts); VP2AG, 5AF; VQ2JC, VR2AZ/VR1, W7EEF (Nevada), 7JOE. (Have just received a card from "Joe" after a 12-month wait—2BQC), XE1AC, ICQ, YS3PL, ZL2BT, ZS3F. Though most others report 10 metres as "dead," have a look at some of the DX heard down Yeovil way:—AP2F, 5TM; AR8AB, C1BC, CX4CS, EL3A, 6A; EQ2L, ET3AE, FF8FP, HI8WF, HZ1AB, J9AAI, KG6CP, KH6KG/KW6, (20 watts), KZ5EL, MI3AB, OQ5AR, PK2RK, PZ1RM, ST2AM, TG9RV, VE7VY, VK2AMU 3EE, 5AE, 6AW; VP4TA1, VU2BG, ZC6JP, ZD4AH, ZE2JV, ZL1KN, ZP8AC, ZS4AW (Basutoland—now ZS8AW?). Also lots of Latins, etc. Some log!

Monty Preston (London S.W.), our ISWL Oriental translator, has also logged some nice ones. Starting with 14 Mcs., how about these choice specimens:—FG8SP, FK8VB, FO8HI, KW6AI, PK4VD, UA0KGA, VP7NG, VR5PL, W0CTV/VR1, W0CZW/KS6, YA3B, ZD1BD, ZD8B, ZK1NF, UA9ci, UH8aa, UI8ae, UL7bs, UM8ce (rare one, that!). Then on 28 Mcs. we see AP2D, HC20A, HLI AJ, HL1MH, KH6CT and PK1RF. A really wonderful log of "plums." Congrats.

D. Outram, G1044 (Kings Cross), known otherwise as "Pop," obliges with his 28 Mcs. log as heard on his R208. VU2GB, MI3XJ, VP6VV, KG6CS, ST2CH, PZ11M, EL6A,

ZL2AT, ZS1AS, ZS4BL, etc. Let's hear from you again.

Fred Clarke, G2FAY (Oldham), sends along his log of 7 Mcs. stations heard and also those worked. Fred says that LF20 is a radio factory call sign and is at Floro (the QSL card reproduced herewith). 7 Mcs. heard: UJ8ae, UQ2kaa, Y15fn, W6ity, KH6lo, FA8ia, 8ch, LU4hg, VK2oe, VE4cr, ZL2dn, W6yrg, KZ5bc, W6wdh. All on an Eddystone All-World Two. Stations worked include W1nrq, 2til, 31sb/3, 4kpv, 4imn, 4cde, 8ycw, 9npc; OX3sf, VE3bhx, EA3oo, CT2ag and LX1xx. Nice going, OM. Keep up the good work and lets know how the 2-watter is working out. Thanks also for your very encouraging remarks about the "News," Fred.

D. Robertson, GM1051 (Wick), corrects me by saying he uses an O-v-2 and rotary dipole 18 ft. high for 28 Mcs. Sorry, Don. Anyway you seem to have an fb line-up there judging from the log. The plums this month are ZL3LE, HLIAN, CIAC, KG6AF, VK5AE, MI3AG, PK4SO, PK2RK, KA1ABZ, J9ACD, FF8PF, VE8MH, CX6AF, XU2JJ (Don says this is a pirate, but I am remaining neutral, hi), OQ5CH, VS7PS, ZJAZA, CICH, VU2ET, W5EYB/KG6, ZS6BW, AR8AB, AP5M and on CW:—ZS6ct, 6bv; VQ3hjp, 3hge; FE9ab (where and why!), ZE1jv, AP5b, MI3zj, VS9an, CR6an, VS6bc. On 14 Mcs. the RX is the same but a full wave aerial is used. The log shows HRICE, VK6DD, FR8KJ (very nice indeed), C1NG, EA8AR (No QSL's I fear), HLIAB, KL7GS, ZM6AF (nice work), EQ2L, CIHK, C7TY, ZS3F, J2AAO, VE7ZM. 14 Mcs. cw produced KL7pb, 7ok; KH6la, VS1ba, KG6dj,

'Phone calls are as W9XXX. CW calls as W9xxx

HLIac, HH2cd, VR5pl, J3aad, C7at, C2kt, PK2ik, ZM6rv, FO8aa, VR4aa, C8yr. And Don said that conditions were only fair! An extremely good log of *real* DX, OM, and it proves what can be heard on a small straight receiver. Superhet users please note!

Maurice Wilks, G1584 (Manchester) turns up again with a 20 metre phone log, which includes CIHK, EA3MB, 3ZZ; OX3DB, SVIRX, VK2AGU, etc. We are promised some real DX next time, so let's hear from you OB.

T. Endersby, GW703 (Old Colwyn), has replaced his l-v-l with a BC348 and has been working overtime in logging C7ok, PK2rk, U18kaa, VK5js, 5rp; VS2cb, ZL3KO, C7TY, HLIAB, J5AAH, 9ACC; KA1AI, KG6AB, MF2AA, VP6IS, VQ4ASC, 4NSH; VS1BA, XE1AC, ZE2JR, 7 VK's., including 6DD. These were on 14 Mcs., whilst 10 produced CR9AM, 9AG; J9ACB, ST2FU, KG6AW/VK9, VS6ae, VU2BG, ZS1BN, 6U. Nice work. GW703 would like to borrow the copy of "QST" in which the mods. to the BC348 appeared. If anyone can help, please write to T. Endersby, 15 Fairmount, Old Colwyn, North Wales.

D. E. Hayes, G323 (Hoddesdon) uses an R1166 and  $\frac{1}{2}$ -wave vertical for 14 Mcs. Best DX is CX4BS, OX3BD, VK2BT, 2NA, 3JT, 4UD, 6AD; VP2GB, VQ2JC, VS7GR and XE1CQ.

Charles Southall, W990 (Philadelphia), heard HRICE, LX1JW, VQ4ERR, 4NSH, ZD3B, KG6AW/VK9, KA1HR, HLIWH, J2AHA, 9ABN; WøYWW/KC6 and KG6AD. All logged on a BC343.

A. M. Norden (Golders Green), who uses a Phillips 464a 7-valve super, joins our ranks and sends along a 14 Mcs. phone log: HClKE, KH6BF, OA4AI, TG9AD, VE7TQ, 8MU; VP2AG, VS1BA, XE1AC, 3AF, YR5C, ZC6JM and ZL2BT.

Tom Jones (Birmingham) gives us AP5b, C7oo, 8yr; CT2ab, CZ2ac, LZ2aa, M13zj, KA1ag, KG6dg, UAøkfa, da, ai, ub; UH8aa, VS2bx, 6bc, 8aa, 9af. Also C1CH, 7TY; CX5AP, KA1AD, KL7FQ, TG9JK, VE8MI and VS1AN. All on 14 Mcs. Good work, OM, and pleased to see another CW addict!

R. Winter, G1708 (Melton Mowbray) is "In the Army Now." Never mind, Richard, your Signals Regt. training will benefit your radio knowledge. I know it's tough, though, as I had 6½ years in RAF signals. Good luck and please write from time to time.

Chas. Sheppard, G292 (Worcester), uses an R1116A, with Inverted L aerial. The 14 Mcs. phone DX has been T120A, ZL2JQ, PY6BO, VE7ZM, OA4CV, CPIAP, ZB2B and EK1AD.

Leslie Waine, G328 (Yeovil), sent along a very nice letter and says he is swatting CW and theory in preparation for his ticket. This is good news and here's wishing you the best of luck. (G3NA is to be praised for showing the true ham spirit, OM). The DX for G328 this time is (28 Mcs.) HR1MB, J9AAR, OA4AF, 4BG; VK6PW (14 Mcs.) C1CH, J9ABC, HLIAR and ZS6AA. Receiver is a "640" with a VS1AA aerial. Sorry could not include more of your DX but space is running short!

Garth Martin, G1001 (Cheltenham), uses al-v-l with EF50-EF50-6V6 line-up and has heard W4MLU/MM, MDIH, CEIAH and CM9AC on 28 Mcs. and LA2UA/Airborne, on flight to Saigon, SHFIX, CPIAP, FT4AI, TG9AD, 9JK, 9RV; VP3MCD, YS1GM, YVIAD, ZA1A (another!), ZC6NT and ZL2JO.

Martin Harrison, G54 (Darlington), has a "dig" at me. Well, OB, sometimes my script does not get published in the same words as it leaves my QRA—no names, no packdrill! Your 7 Mcs. log this month is just the job, so here goes: AR8AB, VO2W, YV5ACX, XE1HV, VE8OY and all W districts. Very fine. On 14 Mcs. Martin heard C7ok, CPIap, CR6ai, OQ5cf, 5ra; KA1ai, many "rare" Russians, VP8am, VQ2jc, 4asc, 4jgk; VS1ba, W6anx/C6, ZE1je, ZS3f, ZC6no/MD5 and FE8ab. Nice DX there, OM. VP8am is in the Falklands group and will try and get his QRA for you via G4GI.

Deck Garrard, G632 (Ipswich), heard CT3AB, HC1BP, 7KD; KG6AW, NY4BA, OQ5AR, PK1RK, PZ1RM, ST2RU, 2JF; VK6DD, 7AJ, 7PR; VP3TR, 4TD; VQ3HGE, 4APW; VS7AC, 7PS; ZE2JV, ZL1NF, 2JB and ZS6J1. All on 14 Mcs. using a BC348 and Inverted L.

Mal Geddes, G2SO, our QRP King has tried QRO to the tune of 50 watts, with only one crystal frequency. He worked KB6ad, T12exo, VE1, 2, 3, 6; UL7, U18, UA9, UAø, EA7cp, VK2, 3, OX3rg, LU4hg, FA8, MD5, UQ2, G3cmd/MD5, ZS5 and ZS6—which, to my mind, is a really fine effort. 73 Mal.

D. W. Bruce, G734 (S.E. London), using a l-v-2 and a  $\frac{1}{2}$ -wave dipole lists AP2n, C6hh, 7ok, HZ1jc, J2aal, 3aad; KA1abt, 1nl; KG6db, ds, di, dk; KH6ct., KP6ai, PK2nn, VS1cr, 2bx, 6ac, 7pp, 9gt; XZ2mm and Y12am. On phone C1CH, 7TY; HLIAA, J3WGT, 5SQK, 9ABB, 9ABW; KA1AF, PK3GA, 4PQ, 4VD; VS2AL and VU2LU. All these on 14 Mcs. The choice ones, however are yet to come, viz: HP1LS, YS1AC, HP2X, FQ8SN, CT3MN, VP3ACS, VP3MCB and KZ5AO. A really FB log OM.

P. G. Castle (Hitchin), put in 15 hours listening and found these on 20 metres:—FA3GZ, J3WGT, KG6AI, OX3BD, TI2OA, VK2AGW, 3WX; VP9L, VQ2ALO, 3HGE, 4NSH; YVIAB, ZB2B, ZD3G, ZL2BT and our old pal ZA1A. On 28 Mcs. he heard MDSJM and W5AXI/MM (Suez).

Brian Cole, G687 (Grimsby). Using an R1155, sends in a 3.5 Mcs. log to round off this month's DX news: HB9bx, LA1qb, LB3ra, LX1ac, OE5mw, OZ3ej, SM4alb, 5 arc, 5tf, 7jp., etc.

Note.—Will contributors please keep their logs down to sizeable proportions and omit the common DX (such as the easy Latins, etc.). This will help us a lot as also will be the fact if logs are kept in *alphabetical* order of prefix. Thanks, OM's.

● Query Corner

Business is on the increase! First of all, any data on the mysterious ZA1A? Or is it worth while trying to find out!

D. L. McLean wants any gen on VR2AZ/VR1 and ZS4AW (Basutoland). Just what is it you want OM? Don Robertson and T. Endersby both found YQ5U and wonder what and why. (G703: MF2AA is in Trieste. The DA calls are unofficial, though they are QSL'ing through DARC, Box 585, Stuttgart. Licences should be through for these stations very soon now according to latest information). Don adds XU2JJ and FE9AB to the list.

Deck Garrard asks about FT2CB and ST1RX. For the latter suggest this is SV1RX (now on his way home to London). Others have asked about EQ1RX, AR8LE and YO5Q.

ZD9AA is definitely pukka! It is a permanent station on Tristan da Cunha and will be operated according to the personnel present at the Meteorological station there.

New one to pop up in Iran is EQ3H, who asks for QSL's via RSGB. . . . If you hear an AC2 on the bands he is not in Tibet—it is the new prefix used by Americans in Trieste. . . . FGB is the call allotted to a French expedition in Greenland. It will work hams on 7 and 14 Mcs., using the frequencies of 8270 and 14487 kcs. QSL's to REF. . . . ZD4AO is now QRT. Ditto ZD4AP. . . . Look for W6RLD/FO8, ZS8A (Basutoland), ZC1AZ, VK9DW, VQ8AV, CR5AA, PK6XA—All recently heard. . . . Another new address for Jim Mann, VP9D—C/o Cable & Wireless, Wireless Transmitting Station, St. Georges, Bermuda.

● G Calls Heard Overseas

Albert Teeter, W2-790 (Rumson, N.J.): 28 Mcs. phone:

G2XV, AKQ, HNY, EC, NU, XN, FMM, 3FJ, ZI, 4JZ, NF, KC, HW, LP, 5FP, CP,

TOPICAL DX QRA's

- AP4A: S/Ldr. Howard, MBE Signals, Air HQ, Peshawar Armed Forces, Pakistan.  
 APSB: 4 Racecourse Road, Lahore, Pakistan.  
 AR8AB: Box 293, Beirut, Lebanon.  
 C1CS: Box 409, Shanghai, China.  
 C1HK: Box 409, Shanghai, China.  
 C1JH: J. C. Holt, 280, House 7, Wukang Road, Shanghai, 18.  
 C1KC: Box 77, Shanghai.  
 C6HH: Box 2, Hanchung, Shensi, China.  
 C6PS: Box 20, Tsingtau, China.  
 CP1AP: Box 346, La Paz, Bolivia.  
 CP2AC: C. Chiappe, Casilla, 262, La Paz.  
 CR6AN: C. Mendes, Posto de Angola, Quilengues, Angola.  
 EA300: Box 12354, Madrid, Spain.  
 EK1DI: J. E. Terry, P.O. Box 179, British Post Office, Tangier.  
 EQ1RX: Radio Workshop, Abadan, Iran.  
 FGBD: Box 39, Lwonte, Guadeloupe, FWI.  
 FQ3AT/FE8: Ivan Paste, c/o British Aviation Field, Douala, French Cameroons.  
 FO8AA: C/o. Radio Club, Papeete, French Oceania.  
 HLIAR: R. H. Brown, APO 901, c/o Postmaster, San Francisco.  
 HC2OL: Box 1294, Guayaquil, Ecuador.  
 KG6CJ: APO 254, c/o PM, San Francisco.  
 OA4AK: R. E. Brown, Box 51, Panagra Airways, Lima, Peru.  
 OA4CR: C/o Pan American Grace Airways, Lima.  
 OX3GF: APO 858, c/o PM, New York.  
 OX3GG: D. Werner, American Embassy, Godthaab, Greenland.  
 OQ5CK: Box 63, Kipushi, Belgian Congo.  
 PK1HM: Box 109, Batavia, Java.  
 TI2WR: Box 1345, San Jose, Costa Rica.  
 VP2KS: K. Austin Slack, St. Kitts, BWI.  
 VP3DCA: U.S.A.A.F., Atkinson Field, British Guiana.  
 VP7NG: Box 2003, Arlington, Va., U.S.A.  
 VQ3ALT: Godoma Airport, Tanganyika.  
 VQ3JMT: R.A.F., Mbeya, Tanganyika.  
 VS7DR: D. Ralph, 205 Squadron, R.A.F. Koggala, Ceylon.  
 VS7PS: Box 439, Colombo, Ceylon.  
 YS1AC: Arcadio Chaves, Villa del Guardo, El Salvador.  
 ZD4AD: Box 1119, Accra, Gold Coast.  
 ZM6AF: P. J. Rivers, Box 90, Apia, Western Samoa.

(Acknowledgements to T. Endersby, D. L. McLean, D. Robertson, T. W. Jones, A. M. Norden and C. Southall for QRA's supplied).

WP, JO, ZC, 6PP, 8SY, PP. All heard on Feb. 21st.

P. Sleutel, PY-1070 (Sau Paulo). 28 Mcs. phone:

G4HV, 4KY, 6TD, 3RP, 5RV. Heard around 0930 GMT.

Frank Pardy, VS2BT (Penang, Malaya): 14 Mcs. CW:

G2fdc, uq, tt, 3ali, clb, cun/A, csy, tk, ui, qv, 4cp, hj, 5pq, rs, 6co, ku, us, yq, G15ur.

MONITOR SESSIONS

Report on Sessions 5 and 6.

Number 5 seemed to go down well. It was for 3.5 Mcs. on May 29th (2030-2130 GMT). As usual we seemed to pick a day on which conditions were below par! G1731 noted the absence of the usual PAø phones and complained of severe QRM between French stations. G193 mentions that no DX was heard during the session and that despite

many OK's being logged, nothing further East was heard. The logs are as follows:—

**A. Baldwin, G193:** RX "Hambander": D5ax, F8rq, 8yj; HB9bx, 9gx; LA1ag, OE5mw, OK1ha, kx, nx, ru, sj, xs, xu, 3it; ON4ie, 4yq, 4zx; OZ2kg, 5xy, 7an; PAøbb, 1b, 1j, us., D2CK, 2LV; PAøAX, WQ.

**Michael Dransfield, G1731:** RX MCRI, Aerial 33 ft. running NE/SW: D2CK, F3XM, 8BY, 8MD, 8MK, 8OX, 8YM, 9BH, 9DI, 9FO; PAøDM, KH, WQ, PAøjm.

**Eric Coates, G509:** RX Eddystone 504, Aerial 50 ft. long wire: D2CK, 2CU, 2IH, OZ6H, PAøADJ, AX, CW, MU; HB9EW.

**D. W. Waddell, G1893:** RX Modified R1155A: D2CK, PAøADJ, US, LX1ag, 2dn; OK1kx, 1sj, 1tj; ON4ie, OZ2kg, 5xy; PAøcj, 1b, mvh, qh; SM5tf, 6bq.

**Leslie Waines, G328:** LX1rg, OK1sj, PAøcj, rm, us; SM5tf. RX: 1-v-1, Aerial 68 ft. VSIAA.

**John Clarke, G10:** RX 1-v-2, Aerial doublet: DA1da, 3fb, øxx; F8rq, 8yj, 9da; HB9gx, OK1kx, ru, xs, tj; PAø1b, qh, us; ON4yq, SM5tf.

**Fred Randall (RX BC348):** D2CK, PAøAX, WQ. (Fred reports "an almost static curtain—the chap next door trying out his motor-cycle, the lady the other way using her hair-dryer! As I only have one noise limiter, I took a couple of aspirins and logged three stations!!")

Now to Session 6, held on June 6th, 1100-1300 G.M.T. on 14 Mcs., any station outside Europe . . .

**Deck Garrard, G632:** RX BC324N, Aerial Inverted L: LA2UA (portable Airborne), CX3BD, TRIP, WIHUA, 2ANH, 2BIQ, 2CIP, 3FIJ.

**Bert Endersby, GW703:** RX Modified BC348L: CN8BF, CT2AD, LA2UA, OX3BD, WIBKJ, ICH, IDHD, IJYR, 3BET, 3FIJ, 4DIJ.

**Brian Cole, G687:** CN8bf, OX3mg, HB1ff, VO2ax, W4kcp.

**John Clarke:** CN8bf, VO1B, 2ax, OX3mg, 3uf, VE2ks, UA9ci, MD5kw, W1btf, qda, 2cnd, 3ffs, 4kcp.

We had two moans about the times of this session, which accounted possibly for so few entries, viz: the times clashed with the time normally set aside for devouring what there is of the Sunday joint and secondly the day itself—same as the NFD!

Here then are the details of further sessions, Nos. 7 and 8 being reported in our next issue.

**Monitor Session 9**

Date: July 21st; Time 2000-2120 G.M.T.; Band 3.5 Mcs.

Target: Stations outside the British Isles.

**Monitor Session 10**

Date: August 1st; Time 0800-1000 G.M.T. Band 14 Mcs.

Target: Stations outside of Europe.

**Monitor Session 11**

Date: August 14th. Time 2030-2200 G.M.T. Band 14 Mcs.

Target: Stations in Latin America.

**Monitor Session 12**

Date: August 28th. Time 2000—2200 G.M.T. Band 7 Mcs.

Target: Stations outside Europe.

Deadlines are August 8th for Sessions 9 and 10, and September 8th for 11 and 12. Let's hear from more of you next time, OM's, or is the going too tough? After glancing at the DX news this month I can hardly think it's the latter! So, what say a few more enter the ranks of the sessionaires?

**DX QSL's Received.**

**D. L. McLean:** D5AA, OQ5CA, PY7QG, ST2CH, ST2GE, VE4MJ, 4YZ, 1AO (3.5 Mcs.), VO6J (3.5 Mcs.), VQ2PL, 3PYE; VS7IT, W6PJJN/KG6, W6UNH/KG6, ZD2KC, ZL1GI ZL1HY, ZL2AT, ZS2AW, ZS6JF, ZS6JL.

**D. Robertson:** W6BPD, PAøTOM, W1BPX, (all 7 Mcs.), W5MFD, CT1NT, and ZC1AL (14 Mcs.) and W5JLJ, W7KGL, W7IYG, WøZEP, VK6HL and ST2JF (28 Mcs.).

**D. Hayes:** OA4M (after waiting 14 months!).

**C. Southall:** OA4AK and VP2KS (St. Kitts).

**A. M. Norden:** SM1MM, VE5LM, W5RY, WøWKS, øUYC, øZEA, 5AFU; VE8MI, 8MU; HC2KJ, ZL4FO.

**D. Potter:** XAFG and CT1QF.

**M. Wilks:** SV1RX and XAFG.

**L. H. Waine:** OA4BG (by Air mail), W5BAB (photo also), W5GQG, W6EZP, W6QGK, W7JKY, W7JHS/P5 (is this "portable 5th district?"—or what!), W7EHP, WøAMR, WøJDX, WøQV, VE6CR and YV1AU.

**R. W. Ainge:** CR9AG, VP4TAE.

**J. N. Trye:** VE6CR, VU2CS, MD5GW, VP2GE, W2QIC/MM, ZD2KC and ZS1GR.

**Deadline for logs and news is the 8th of the month**

# INTERNATIONAL SHORT WAVE LEAGUE AMATEUR BAND INTER-CHAPTER DX CONTEST

**Note.**—This contest is the first of a regular series of Amateur Band and Broadcast Station DX contests organised by the ISWL. As such, the contest is in the nature of an experimental event from which we hope to gain valuable information for the improvement of future contests of this nature. We appeal to all Chapters to do their utmost to put a team into the field.

## Rules.

1. The Contest is reserved for ISWL Chapters and clubs affiliated to the League.
2. Each Chapter may select a team of five fully paid-up members to participate.
3. In the case of overseas areas, such as the U.S.A., where no local Chapters are yet organised, a team of five will be accepted representing, say, a State or Call Area.
4. Reception may be on any amateur band. Both CW and phone transmissions will be accepted—there will be no distinction.
5. No extra points will be gained by claiming reception for a given station on more than one band.
6. No "CQ" call will be allowable for scoring purposes.
7. Scoring will be carried out in the following manner :—  
One point to be scored for each country heard and one point for every radio zone heard. The aggregate will be assessed by the multiplication of the totals of countries and zones heard, e.g., with 100 countries and 20 zones the score would be 2,000.
8. Zones will be determined according to the official list as compiled by "CQ" magazine and country scoring will be determined by the recognised ISWL list. Both these lists are appearing in the "Short Wave Listeners Annual."
9. Claims may only be made for one station from each country and one station for each zone.
10. There is no restriction, or advantage, for any amateur band. Reception may be made on any of the authorised amateur frequencies.
11. Each member of a team should, at the termination of the Contest, submit his log to his Secretary for checking. Each Chapter Secretary, after checking individual logs, will submit them to HQ.
12. Each individual log should contain the following data :—  
Time (G.M.T.), Station Claimed; Station being called or worked by station claimed; Signal Report; Phone or CW; Band; Date. It is important to adhere to this system as it will facilitate checking. At the termination of the log the total number of countries and zones claimed should be given.
13. The duration of the Contest is from 1800 G.M.T., August 20th—2359 September 10th.
14. Chapter Secretaries should submit checked logs to HQ, to reach the office by September 18th.
15. The judges for the Contest to be G3AKA, G2UK, G2ATV and G3AYA. The decisions of the judging committee shall be final.

**73 GOOD LISTENING AND LOTS OF DX!**

# Quarterly DX Prediction

JULY TO SEPTEMBER, 1948

Issued and prepared by the Leicester Tele-communications Laboratory,

Monitoring Dept., near Leicester, England

## Introduction :

*For the purpose of these predictions it should be noted that four major communication circuits are used extending to (a) North America, (b) South America, (c) South Africa and (d) Australia. Reference to the Great Circle map centred on London will show that circuit (d) also covers Asia and Japan.*

*It should be understood that to forecast these communication circuits for a period of three months, the data is liable to slight errors with relation to the "disturbed periods."*

## The preceding period :

*The average maximum usable frequencies observed in this area during the daytime have been somewhat lower than was predicted and communication has been possible over long distance circuits during most parts of the day and night. The nighttime m.u.f. have been very slightly higher.*

*Communication over long distance circuits on 28 mc/s on circuits (a) have been very infrequent since the middle of May. On the other circuits however 28 mc/s have been open at various periods during the day and night.*

*"Sporadic—E" was noticed during the periods of "summer" commencing with the second week in May, so that a number of "medium-distance" stations have been heard on the 50—60 mc/s band. The B.B.C. television on 41.5 and 45 mc/s has been giving very good "picture-sound" reception almost every evening from this period up to the time of the issuing of this report (Early June).*

## Prediction for July :

**D**URING July the m.u.f.'s., during the daytime will be lower than those during the nighttime and long distance communications on 28 mc/s on circuit (a) are not likely to take place. This frequency however may be used spasmodically during the month on other circuits at various times. *i.e.* Circuit (b) between 19.00 and 22.00, Circuit (c) between 14.00 and 18.00 and Circuit (d) between 03.00 to 06.00.

The 14 mc/s band should be very reliable on all circuits until about 01.00 (G.M.T.) and "opening" again at 05.00. July is the month when medium-distance is possible on the v.h.f.'s due to "Sporadic—E" and no difficulty should be noticed with communi-

cations with Europe at those times up to a maximum distance of 1,000 miles. Part of circuit (c) should also be usable during this month for v.h.f.'s under the same conditions.

Ionospheric storms occur very frequent during July and may interrupt communication on all circuits during 4th and 5th day, 16th to 17th, 20th to 21st, 26th to 28th.

## Prediction for August :

The night-time frequencies during August will be about the same as those usable during the daytime, and the conditions for amateur transmission working will be about the same as outlined about for July. Towards the end of the month however there should be spasmodic periods of working circuit (a) on the 28 mc/s band and conditions for Sporadic-E working on the v.h.f. frequencies will not be so frequent as during July.

At 00.00 during August the circuits (a) and (c) should give reliable service on the 14 mc/s band, whilst 7 mc/s will be usable towards the end of the month on circuit (b) and for medium-distances on circuit (d).

Temperature inversions should make G DX possible on the 58 mc/s bands and periods of lengthy "qso's" with near-European stations should be possible on this frequency.

Ionospheric Storms should be of two types, during August, the first type only last for a brief spell (Delinger Fade-out) whilst type two will be rather severe, this latter type occurring on or about 15th to 17th, and 26th and 28th.

## Prediction for September :

During September all circuits should commence to be usable on the 28 mc/s and with the Autumn period there will be an increase in the day-time m.u.f.'s coupled with a slight decrease in the night-time m.u.f.'s. This means that 14 mc/s will be usable during the daytime and late evening but not so frequent after 00.00 towards the end of this month. Between 03.00 and 07.00 it should be possible to work circuits (A) and (b) on frequencies as low as 7 mc/s, and during 12.00 until 15.00 daily to work circuits (b) and (c) on 28 mc/s, towards the end of the month however the remaining circuits should be usable (a) during the same time, and (d) between 07.00 and 09.00.

SHORT WAVE NEWS

Communications via the v.h.f.'s during this month will be fairly infrequent due to the reduction in "Sporadic-E," but even so there should be a few periods when European stations up to a maximum of 1,000 miles (centred on London) should be workable on 58 mc/s.

It is during September that poor conditions prevail due to Ionospheric storms and it is

to be expected that a certain amount of disturbance will occur weekly during this month, with the most severe occurring in the middle of the month.

**Special Note :-**

It should be noted that during the last two months predicted above that all circuits would have been usable daily when the new frequency of 21 mc/s is allotted for amateur transmission.

Time G.M.T.	Summary of conditions for all Circuits.		Month
	Frequency	Circuit No.	
0000	Mc/s		
	14	(a), (b), (c), (part)	July.
	14	(a), (c-part)	August.
	7	(c-part)	July.
	7	(b)	August.
0600	7	(a), (b), (c-part)	September.
	28	(d)	July/Aug./Sept. (spasmodic).
	14	(a), (b), (d).	July.
	14	(d)	August.
	14	(c-part), (d)	September.
0900	7	(a), (b)	September.
	14	(a) (part-b)	July.
	14	All circuits	Aug./Sept.
	7	North Europe	July/Aug./Sept.
1200	28	(b), (c)	July/Aug./Sept. (Spasmodic).
	14	(c)	July/Aug.
	14	(a)	September.
1500	28	(c)	July.
	28	(b), (c)	September.
	14	(a)	July/Aug./Sept.
1800	28	(b)	July.
	14	(a), (b)	August/September.
2100	14	(a), (b), (d)	July.
	14	(a), (b)	August/September.
	7	(a), (b)	July.
	7	(a)	August/September.

**S.W.L.A.**

Yes, we know! Everyone is getting impatient about the "Annual"—including ourselves. We even had a sketch from Darkest North Wales depicting a "chad" asking "Wot! No S.W.L.A.?" All of which merits a report on progress...

The position as this issue goes to press is that printing on the "Annual" has now commenced. However—we still prefer not to make any definite promises as to actual publication date. Those who have already paid for their copies will have their "Annuals"

mailed off immediately—we receive advance copies from the printers.

Let any readers accuse us of unpardonable delays we would like to take this opportunity of reminding them that the matter of producing books in these times is strewn with difficulties—paper, labour, machinery, etc.

Apropos of the above, do you realise that YOU can play a part in the easing of the present-day hazards? We refer to the Waste Paper Drive. Save all your waste paper, keep it in clean condition and hand it in for salvage. Every little helps.



## AROUND THE SHACKS

No. 18

FRED WOLFE  
ISWL/W816

**W**E have pleasure this month in presenting a write-up of one of our overseas reader's shacks, viz., that of Fred Wolfe, W816, Alameda, California, U.S.A.

Our photograph shows the very fine listening post operated by this reader. Looking at the picture from right to left, we see first of all a Hammerlund Super-Pro receiver covering from 540 kcs. to 20 Mcs. Next to this is a Signal Corps receiver, tuning from 27 to 144 Mcs. This receiver can be used for FM. Above this receiver is a converter for use with the Super-Pro tuning from 19.5 to 32.5 Mcs. In this way, complete coverage from 540 kcs. to 144 Mcs. is obtained.

Next in the photo is an aerial switch panel, enabling any aerial to be coupled to any receiver by the turn of a switch. On top of this switch unit is a clock and next to it is a ten watt amplifier. The speaker shown is an eight-inch Jensen, mounted on a board with wheels, so that it can be moved around. There is also a twelve-inch speaker on the other side of the room used for FM music.

Three aerials are available, a 32 ft. vertical, a dipole cut for 28 Mcs., and one cut for the FM band.

Fred says his location is a good one for reception, there being little ignition noise as few cars pass the house. Alameda is an island in San Francisco Bay, joined to Oakland by a tube and three bridges. It is about three miles from San Francisco.

Amongst other items of equipment is a recorder on which many records of amateur signals have been made. One of the most interesting of these is one of VR6AA, Pitcairn Island. SWL's who complain that they get no QSL's in return for their reports will sympathise with Fred, who says that in spite of the recordings costing a dollar each, very many of those he has sent to amateur stations have never even been acknowledged!

\* \* \*

It will interest home readers to learn that, though now sporting a W number, Fred is in actual fact British born. Football fans will prick up their ears when we say that Fred was at one time a member of the Chelsea Football Club, with whom he played regularly. Nowadays the main interest at W816 is in 28 Mcs. reception and much work is done in the way of monitoring for institutions interested in propagation.

# A Survey of World Broadcasting

## PART II.

By M. Preston (*ISWL Translation Service*)

THE continent of Asia provides many opportunities for interesting listening entertainments by reason of the numerous Oriental states and kingdoms which all broadcast programmes of music and drama of a type entirely different to those of the Western Hemisphere. However, due to the many unusual languages employed, identification is very difficult, especially as announcements in English are rare.

From Palestine there are several transmissions and also a Forces station which transmits music, variety, and news of local events. Irgun Zvai Leumi, the Jewish terrorist organisation also broadcasts under cover but is rarely heard in this country. Palestine is tri-lingual, English, Hebrew and Arabic being in common use. Nearby Syria also broadcasts programmes of native music and uses the languages of French, Arabic and English for daily news bulletins. These programmes emanate from Beirut. Persia, now known as Iran, transmits frequently from Teheran in Persia, Arabic and occasionally English, but broadcasting is not developed to any great extent. There is a transmitter situated in the province of Azerbaijan but broadcasts are not very frequent. Turkey is a most progressive country and under the enlightening rule of Mustapha Kemal she cast off many shackling conventions which were the heritage of the old time Sultans. The main transmitters are at Ankara and there are frequent programmes in English, other languages used are Urdu, Serbo-Croat, Persian, Arabic, Greek, Bulgarian, French, German, and Rumanian. A feature of their programmes is the Post Bag of the Air (on Sundays) in which listeners can hear their letters answered.

By far the most powerful stations of Asia are those of All India Radio, at Delhi, Madras, Calcutta and Bombay. Transmissions are beamed to many parts of the world including the British Isles and programmes in English are a daily feature. Oriental music of course, is widely broadcast and is very fascinating to western ears, the instruments used are "tablas" (drums), "sitar" (stringed), "sarai" (wind), "sarangi" and "tamboora" (stringed) and "jaltrangs" which is a form of dulcimer. News bulletins are given in many languages including Hindustani, Arabic, Turkish, Persian, Tamil, Telugin, Singalese, Pushtu, Bengali, Parathi, Kananes, Gujerati, Burmese and Chinese. Signals from A.I.R. are usually R9 on the 16, 19, 25, 31 and 48 metre channels and on 60 metres at 1600 G.M.T. Relays are also broadcast in conjunction with the B.B.C. Ceylon possesses a powerful transmitter at Colombo which is operated by S.E.A.C., and

there are special English programmes on Sundays devoted to requests from military personnel for their families at home. At Rangoon in Burma there is also a British operated station but broadcasts are usually only for local use and not therefore well heard in this country. Siam radiates a daily English programme from Bangkok for listeners in S.E. Asia, and also broadcasts in Thai, and Hindustani.

The French dependency of Indo-China has a transmitter at Saigon and theirs is a daily news bulletin in English, in addition to programmes in French, Annamese and Chinese.

In Malaya there are several transmitters at Singapore and Kuala Lumpur operated by the Colonial office which broadcast programmes to nearby countries and also carry news and entertainment in English. China possesses many up-to-date stations especially in the capital of Chungking. Identification is easily made as English announcements are frequent during transmissions. When Chinese is used it can be recognised by the curious sing-song monotone of the words which are monosyllabic. There is a form of standard Chinese known as Mandarin which is widely understood but in the whole country there are over 140 different languages and dialects each radically different from one another, this is one of the chief reasons for the great illiteracy of the country especially as Chinese characters must be memorised by the thousand before a native can write. Among the languages used by Chungking are English, French, Burmese, Annamese, Thai, Kuogu, Hokkie, Nanking, Cantonese, Dutch and Malay.

As yet there is no state-operated station in Japan, and any project for such will be rigidly controlled by the American authorities. Prior to 1945, Japan directed disruptive propaganda to all countries of the Far East by means of her high powered short wave stations and transmissions were radiated in nearly thirty native tongues. The occupying American forces have several stations however and these can be heard from Tokio and Kure.

There are very many stations situated in the Dutch East Indies, some of which operate in Batavia, Sumatra, Celebes, Macassar, and Djokjakarta. Batavia is the main centre, and occasional programmes are broadcast in English. There also are relays from PCJ in the Netherlands and the recent trouble in this area has fostered the setting up of several undercover transmitters operated by Indonesians and hostile to the Dutch Colonial government. Many languages are used in broadcasting due to the large number in the islands, some 225 being spoken by the various

## SHORT WAVE NEWS

native peoples. The principal tongues heard are Dutch, English, Chinese, Javanese, Malay, Dyak, Sulu, Macassar and Jaseng.

Soviet Asia and Siberia with an area of millions of square miles has several interesting stations. In Tashkent, Central Turkistan, transmissions are radiated mainly for N.W. India and Persia and also local inhabitants. This area is the traditional home of the Mongols of the 13th century, whose depredations under Genghis Khan penetrated to as far west as Bulgaria. Languages in use are Russian, Persian, Pushtu, Khinghiz and Turki. Further East, Siberia has one or two stations at Irkutsk,

Tomsk, and Khabarovsk, however these are extremely difficult to receive and very rarely are heard. Mention must also be made of the station at Vladivostok on the Pacific coast north of Manchukuo. This station is used mainly for transmissions to Manchuluo, Korea, and Mongolia. Transmissions are in Russian, Korean, Japanese and Chinese.

As an aid to recognition of language, a brief glossary is appended for the principal tongues of the East, in addition, the most common word formations are given. This will be found useful in identifying the chief languages.

<i>English</i>	<i>Arabic</i>	<i>Turkish</i>	<i>Chinese</i>	<i>Japanese</i>
Good day	Sabakhum bilkeir	Meshaba	Dzaon	Konnichi wa
Good-bye	fi amani illah	Allaha ismaladik	Dzai hiva yeon	O yasumi nasai
1	wahid	bir	ih	ichi
2	itnein	iki	er	ni
3	talateh	iic	san	san
4	azbala	dont	szi	shi
5	klonseh	bes	uwu	go
6	sittch	alti	luh	noku
7	saba	yedi	tsih	shichi
8	tamamgeh	sekia	bah	hachi
9	tis'a	dokuz	giu	ku
10	ashara	on	shih	Jiu
100	miych	doksam	ih beh	hiaku
1000	alf	bin	ih tsien	sen
Here is	sa 'id yekun	yardim etmek	dje go	oi-wo

<i>English</i>	<i>Burmese</i>	<i>Tamil</i>	<i>Hindustani</i>
Good day	Mah bahee eah	Kalai vandanam	Salam
Good-bye	Thwohndan	Pogittu varuva vandaram.	Khuda hafz
1	tit	onru	ek
2	hnit	irandu	do
3	thohn	munru	tin
4	lag	rahu	char
5	grah	airdu	parch
6	chowk	aru	ckha
7	hkoo-hnit	eru	sat
8	shit	ettu	ath
9	koh	onbadu	nau
10	tah seh	pattu	das
100	tah yah	nuru	sau
1000	tah htowag	airgiram	hazar
Here is	dee mhah thee	ingeurdu	yahan hai

Most common word formations are, Arabic—wah, lah, ahk. Turkish—durge, afiz and bya. Chinese—cha, cheng, hsin, kwen. Japanese—ichi, han, kai, jah.

The Chinese for wireless transmission is Wu hsien tien. Amateur is Pen kung. Short wave in Japanese is Tan hacho. Frequency is Koshuhashu. Phone is musen denwa.

### ISWL LEAFLET

About a hundred new members did not receive the usual ISWL information leaflet on enrolment. Copies will be sent as soon as the new supply arrives. Old members who would

like a copy of this revised leaflet (additional services are listed and new prices of League supplies) may obtain one by sending a SAE (penny stamp only) to HQ.

## “SWN” QSL Ladder (Amateur)

Monty Preston comes to the fore this month with his 127 confirmed countries. Please let us have your States and Zones scores OM. Conrad Tilly drops to second place pending the missing data from the leader. Al Slater comes in third, with his colleague Bert Onslow a close fourth. Those readers who have blanks are requested to let us have the missing data by next time. Tnx OM's. We wish to make it quite clear that the scores listed in this ladder are for CONFIRMED RECEPTION ONLY. Here are this month's final positions:—

Names	Countries	States	Zones
M. Preston (London)	127	—	—
C. G. Tilly (Bristol)	121	44	36
A. Slater (Southwick)	96	45	33
A. Onslow (Hove)	94	47	—
R. Masters (Portsmouth)	61	—	—
A. E. Lincoln (Grimsby)	43	—	22
D. Garrard (Ipswich)	40	20	12
L. H. Waine (Yeovil)	25	32	19
D. L. McLean (Yeovil)	—	47	—

## File Your DX!

### A “SWN” innovation for the transmitter and SWL

We are pleased to announce that the promised Amateur Station Record Cards are now available. These file cards, measuring 6 in. x 4 in., enable either the amateur transmitter or the short-wave listener to keep a handy and permanent record of contacts or reception notes. Using one card for each station, it is possible to file such data as address, name, power, TX, RX, details of when QSL cards were sent and received and so on. A table is also included on these cards so that a cross reference may be obtained of the major details when a station has been worked or heard on more than one occasion. The reverse side is set aside for general notes of interest.

For the methodical transmitter, or listener, these cards will present the ideal opportunity to have an easily accessible file of data on the DX stations worked or heard. For example, if the listener hears a certain PY4 station, he has only to look at the appropriate file card to see how his reception compares with previous occasions and to check up on whether or not the station has verified the reception report. For the transmitter, he can look up a card on the second contact and see how his report compares with the last QSL. He will also find the op's name and details of his rig. Another advantage is that a check can be simply made to ascertain whether or not the first contact has been confirmed.

Altogether, we foresee an extensive use of these cards by all interested in short wave reception. Use our record cards and dispense with the clumsy notebooks and scraps of paper! The price of the file cards is 4s. 6d. per 100, including postage.

## H.A.C.

### Short-Wave Equipment

Noted for over 15 years for . . . . .  
Short-Wave Receivers and Kits of quality

One Valve Kit, Model “C” - Price 20/-  
Two “ ” “ ” “E” - Price 43/-

These kits are complete with all components, accessories, and full instructions. Before ordering send stamped addressed envelope for descriptive catalogue.

Note new sole address:

“H.A.C.” SHORT-WAVE PRODUCTS (Dept. SWN).  
66 New Bond Street, London, W.1

“You'll probably get it at

## Smith's of Edgware Road”

The Book on how to make it,  
The Material to make it with,  
The Components to put it in,  
The Equipment to test it with,  
The Cabinet to put it in.  
(AND a fair deal!)

H. L. SMITH & CO. LTD.

287-9 EDGWARE ROAD, LONDON, W.2

Near Edgware Road Met. and Bakerloo  
Phone Pad 5891 :: Hours 9-6 (Thurs. 1 o/c.)

# SMALL ADVERTISEMENTS

Readers' small advertisements will be accepted at 3d. per word, minimum charge 3/-. Trade advertisements will be accepted at 6d. per word, minimum charge 6/-. If a Box Number is required, an additional charge of 1/6 will be made. Terms: Cash with order. All copy must be in hand by the 10th of the month for insertion in the following month's issue.

## PRIVATE

BC348J: RF, IF and LF gain, tuning meter, internal 6V6 power stage and power pack, noise limiter, AVC on/off, speaker. Price £18. Buyer collect. Wanted: R1155 coil 10D/162 dial escutcheon: ISWL/G1044, 1 Cullross Buildings, Battlebridge Road, N.W.1.

R107: 100% performance, has RF, IF and audio gain controls, meter, buyer collects. Price £12. Box 1029.

EDDYSTONE "Allwave 2", complete with valves, and 4 coils. £2. Box 1030.

MCRI COMPLETE, power pack, phones, new valves, £7.—G2CVY, Eberly Dairy, Newport Road, Barnstaple, Devon.

WANTED: American Airforce transmitter, type no. BC375. In any reasonable condition. Details and price to Box 1031.

SALE: Various American crystals in holders. Frequencies between 5—6.9 Mcs. 7/6 each. Books as follows for disposal: 1944 ARRL Handbook, 6/6; PW Encyclopedia on Radio Terms, 6/9; Sixty Tested Wireless Circuits, 4/6; Wireless, Coils, Chokes & Transformers, 4/-; 20 assorted copies of Wireless World, 7/6; Audel's Radioman's Guide (700 pages), 15/-; ISWL/G750, c/o ISWL Headquarters.

FOR SALE: Ex-AM Crystal Monitor, type 4A, complete with crystals. 100-130 Mcs. coverage, 230v AC input. 50/-. Marconiphone 10" energised loudspeaker complete with 230v AC power pack, in strong wooden cabinet 35/-. Wanted: Type TA-12 transmitter. Write Box 1033.

## TRADE

12-VALVE WESTERN ELECTRIC R1585.—Midget Receiver 234—258 mcs. Size 11" x 6" x 5". Valves 3-6AK5, 7-9001, EBC33 and 12A6. 4-gang RF. Tuner. F.C., I.F.s., B.F.O. Det. AVC and Output. Easily converted to 6 or 12v Car Radio. No extra coils or other components required except power unit and speaker. All smoothing in the receiver. A remote control box is included with the set, but no connecting cables are available. These Ex-gov. receivers are in cartons and in brand new condition. Price: £4 10s. each. Carriage and packing 7s. 6d. extra. 12v. 200v. Mallory vibrapacks for above sets 15s. each, complete. Goodmans 3 1/2" speakers, £1 each. H. English, The Maltings, Rayleigh Road, Hutton, Brentwood, Essex.

COMPLETE CORRESPONDENCE COURSE covering Amateur and C. and G.I. Examinations, consisting of 12 lessons. Students trained for Certificates of City and Guilds of London Institute. Send for particulars. Orthic-Modern Institute, 72 St. Stephen's House, Westminster, S.W.1

G6MN for the "best" QSL's and approved log books, send for samples: G6MN, Bridge Street, Worksop, Notts.

COMPONENTS AND VALVES at attractive prices. Send for list. Trade supplied.—Watts, 38 Chapel Avenue, Addlestone, Surrey.

QSLs and G.P.O. approved log books. Samples free. Atkinson Bros., Printers, Eiland, Yorks.

## BUYING BY MAIL IS EASY . . .

*If you know how!*

Some people buy THIS from there, and THAT from another source. The WISE send 9d. for our 60 page illustrated catalogue containing over 1,000 amateur lines and buy FROM ONE SOURCE all the best makes. One of our clients, Mr. F. Wells, 8 Evangelist Road, Kentish Town, London, N.W.5 (Secretary of the "North West Radio Frequency Club," and "North West Chapter," of the I.S.W.L.), some time ago sent us the following unsolicited testimonial . . . .

"I was extremely pleased to make personal contact with you at the Amateur Radio Exhibition—this made me even more certain that I have lost nothing and gained much by ordering all my components by mail. I know that you will continue the same prompt service throughout 1948." F. W., London.

A few days ago, Mr. Wells, who has an almost unlimited selection of local shops to purchase from, wrote us again . . . "I noticed on the first page of your new catalogue received under cover of order 7382, dated 30/4/48, a testimonial suffixed by the initials F. W., London. I trust that I am correct in assuming that these initials refer to me? Previously I had always treated these so-called 'unsolicited testimonials' with suspicion, but in this instance, and in your case, they are perfectly justified. Carry on the good work." This is only one of the many unsolicited testimonials too numerous to publish. May we suggest that you give us a trial and find out for yourself.

60 page illustrated "Ham" catalogue 9d. post free.  
**SOUTHERN RADIO & ELECTRICAL SUPPLIES**  
 85 FISHERTON STREET, SALISBURY, WILTS.  
 Telephone: Salisbury 2108



★ **CRYSTAL MULTIPLIER UNIT.** For use with Transmitter. Contains 807 Oscillator and tuning controls for selecting crystal harmonics, covering frequency 2 to 6.67 Mcs. in 3 switch steps. Brand-new U.S.A. equipment. Don't miss it at the Bargain "Snap-Up" price of each 75/-.

★ **KIT SPARES FOR AMERICAN RECEIVERS** ABK1—145 ITEMS! Brand new American valves and components including: 6 valves 6H6, 18 valves 6SH7, 8 valves 7193, Valve Holders, Condensers, Resistors, Switches, Relays and a Dynamotor which can be connected for use on 200/250 vt. A.C. Mains, has an extended spindle and will make a useful Grinding Motor. A "Snap-Up" Bargain at 115/-.

★ **INSTRUMENT RACKS.** 5ft., for standard 19 in. panels, fitted tray. Each 75/-

Full list of other SNAP-UP BARGAINS for 2½d. stamp  
 All goods offered Carriage Paid. Send Remittance to:—  
 DEPT. SW

**L. WILKINSON**  
 ELECTRIC 441735E  
 204 LOWER ADDISCOMBE RD., CROYDON, SURREY

## Free Gifts!!!

We are including the following free gifts in all orders for Surplus Equipment this month. For orders over 10/-, we include 6 yards of 2 mm. Systoflex, for over 20/-, one pair of new U.S. Army Headphones, over £2, we send 3 Mansbridge condensers, 2 chokes and one pair of headphones. Over £5, 6 Mansbridge condensers, pair of headphones, 3 yds of 10 mm. Systoflex and one EBC33. Over £10, we include one 3180, UHF Transmitter, complete, and 12 Mansbridge condensers.

### SURPLUS EQUIPMENT IN STOCK

Type 10 rack mounted amplifiers at £15, BC 348 Rx., brand new in the makers packing at £20, 1154 Transmitters £8, Phillips PCR Receivers at £18 10s., BC603 Frequency Modulation Rec. for £7 10s., Condensers, 0.25 mfd., 2 kWV, 1/3d., 1 mfd, 250 VW. 6d., 2 mfd 500 VW 9d., 0.004 mfd 1200 VW, moulded mica at 6d. each. H.R. Headphones at 8/6d., L.R. ditto for 3/9d., S130 voltage Stabilizers 3/- each. All prices post free.

### NEW EQUIPMENT STOCKED

We are stockists of the following makes, and will supply Carriage free, and by return of post, for any sized order. Avo, Belling-Lee, Brookes Crystals, S.G. Brown, Bulgin, Celestion, Denco, Gardners, Heayberd, Labgear, Muirhead, Morganite Resistors, Partridge Transformers, Parmeko Transformers, Pullin, Q.C.C. Crystals, Radiospares, R.M.—Electric, Reliance, Rola, Taylor, T.M.C.—Condensers, Variac, Varley, Wearite, Westinghouse, Weymouth and Woden.

Our July catalogue gives complete details of all items stocked, dozens of surplus items, and new gear, this will be sent post free on request, write now, a post card will do.

## TORBAY ELECTRIC

43 COLLEY END PARK, PAIGNTON, S. DEVON

*We are repeatedly being congratulated on the high standard of the ex-Government Equipment we sell. We are discriminating in our purchases and pay the higher prices necessary to obtain these goods. Our customers also prefer to pay a little extra, and have complete satisfaction and confidence in their purchases. The offers made below are first grade picked items, and are well worth consideration.*

**CONVERTED R.1155 RECEIVER.** In response to many requests, we can now supply this famous R.A.F. Communications Receiver modified for normal AC Mains, and complete with speaker. Unlike other modifications, the power pack, output stage, and speaker, are fitted into a specially designed cabinet which fits on top of the receiver. The whole makes a presentable installation without using several small units connected by trailing wires. A really superb Communications Receiver covering 75 kcs.—18.0 Mcs. in five wavebands. Fully illustrated leaflet available on request. **ONLY £18 10s.** (carriage 12s. 6d., returnable transit case 10/-), OR the unmodified version £12 10s.

**EX-R.A.F. RF UNITS (SHORT WAVE CONVERTERS)** As advertised last month. These units are in great demand, as they require very little adaptation. We are arranging for the production of technical data on these, and also the conversion details, which will be supplied gratis with every unit. Types 24 and 25 cover 15—30 Mcs., and 30—45 Mcs. respectively. Slightly used models at **ONLY 16/6d.** each or **BRAND NEW IN CARTONS 25/-** each. (postage 1/6d.). **TYPE 27** is a tuneable unit fitted with a 3-inch slow motion dial and covers 60—80 Mcs. Slightly used **ONLY 27/6d.** or **BRAND NEW IN CARTONS 50/-** (postage 1/6d.).

C.W.O. Please

S.A.E. for lists

**U.E.I. CORP.** The Radio Corner, 138 Gray's Inn Road, London W.C.1 (Tramlines 7937)

(Open until 1 p.m. Saturdays, we are 2 mins. from High Holborn, 5 mins. from King's Cross)

## OPPORTUNITIES IN RADIO



### Get this FREE Book!

"ENGINEERING OPPORTUNITIES" reveals how you can become technically-qualified at home for a high-paid key appointment in the vast Radio and Television industry. In 108 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. A.M.I.E.E.,** City and Guilds, Special Television, Servicing Sound-film Projection, Short Wave, High Frequency and General Wireless courses.

**We definitely guarantee "NO PASS—NO FEE"**

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

### BRITISH INSTITUTE OF ENGINEERING TECHNOLOGY

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

## SHORT WAVE (HULL) RADIO

G5GX

### OFFERS

V.H.F. Signal Generators, frequency range 10-300 mc/s. Price **£10 : 10 : 0**

Meissner Signal Shifter with 80 metre output, Price **£6 : 5 : 0**

Q-Max converters, Mono-Unit plug-in coils for 10 and 5 metres. Price **£8 : 5 : 0**

Type 145 Oscillator, complete with power pack, Price **£8 : 0 : 0**

HRO Senior coil units, general coverage type, Price **32/6** each

Valves, GL211, with bases, Price **30/-** per pair

We still have a few beam indicator units available, as per our previous advertisement but we can now offer a similar unit with 3-inch dial at 25/-. Postage and packing 1/-.

## SHORT WAVE (HULL) RADIO

30-32 PRINCE'S AVENUE, HULL  
Telephone - 7168

# PREMIER RADIO

MORRIS AND CO. (RADIO) LTD.

**SPECIAL OFFER OF ELECTRIC GRAMOPHONE MOTORS.** British made, Rim driven, with 9 in. Turntables. Fixed speed (78 r.p.m.) for 200-250 volts A.C. only £4/19/6

**MAINS TRANSFORMERS** at exceptional prices. All are heavy duty and robust. All 230v. 50 cycles input.

	Price
3 500-0-500 v. 150 m/a. 4 v. 2½ a. 4 v. 5 a. 4 v. 1 a. . . . .	35/-
4 865-0-865 v. 500 m/a. Tapped at 690 v. and 760 v. 4 v. 3 a. . . . .	75/-
35 300-0-300 v. 250 m/a. 4 v. 3-5 a. 6.3 v. 5-7 a. 6.3 v. 1-2 a. . . . .	35/-
30 30 v. 4 a. . . . .	20/-
31 40 v. 3 a. and 104 v. 1.5 a. (autowound) . . . . .	21/-
32 700-0-700 v. 150 m/a. and 1000 v. 30 m/a. 4 v. 1 a. 4 v. 4 a. . . . .	40/-
33 38 v. at 2 a. tapped at 36v. 34 v. 32 v. 2-3 a. . . . .	15/-
34 1500-0-1500 v. 120 m/a. 4 v. 2-3 a. 4 v. 2-3 a. . . . .	55/-
34a 1500 v. 5 m/a. and 1500 v. 5 m/a. 4 v. 2 a. 2 v. 2 a. 2 v. 2 a. . . . .	25/-
41 550-0-550 v. 120 m/a. 4 v. 2 a. 6.3 v. 2.5 a. 6.3 v. 3 a. . . . .	40/-
42 500-0-500 v. 170 m/a. 4 v. 4 a. . . . .	35/-
43 4 v. 20 a. . . . .	25/-
46 100 watt auto 230 v. 150 v. 100 v. 50 v. . . . .	12/6

**NEW 2-VALVE SHORT WAVE KIT.** 16 to 2000 metres, Switched Coil Pack ready wired and tested. 2 Mazda HL23 Valves, \*Phones, H.T. and L.T. Batteries, Condensers, resistors, diagrams and steel case. all ready to assemble £3/19/6

**SPECIAL VALVE OFFER.**

3Q5.	10/6	1A7, 1H5, 1N5, 9/6 each. 36/- Set
6F6.	8/6	VU134 (HVR2), 10/-
6V6.	5/-	VU39 (R3), 9/-
CV6.	5/-	VR137 (EC52), 5/-
VR65 (SP61 6, 3v.),	5/-	VR136 (EF54), 7/6
VR92 (EA50).	5/-	VS70 (7475), 7/6
VR56 (EF36).	6/-	VT60A (807 Ceramic), 10/-
VT52 (EL32).	6/-	717A, 7/6
VR55 (EBC33)	5/-	12SH7, 7/6
VT86 (6K7 met).	10/6	12SL7, 10/-
VR503 (KT33C),	10/-	12A6, 7/6
VR53 (EF39)	5/-	VR91 (EF50), 6/6
VR57 (EF32).	7/6	RL18 12/6

**LOUDSPEAKERS BY FAMOUS MAKER**

5" P.M. 2-3 ohms . . . . .	10/11
6" " 2-3 " . . . . .	16/6
8" " 2-3 " . . . . .	17/6
10" " 2-3 " . . . . .	23/6
12" " 15 " . . . . .	85/-
10" Energised. 2,000 ohm field . . . . .	25/-

**HAND CARBON MICROPHONE**

Military Surplus. Has switch in handle . . . . . 2/11  
Transformer for same . . . . . 2/6

**SPECIAL OFFER**

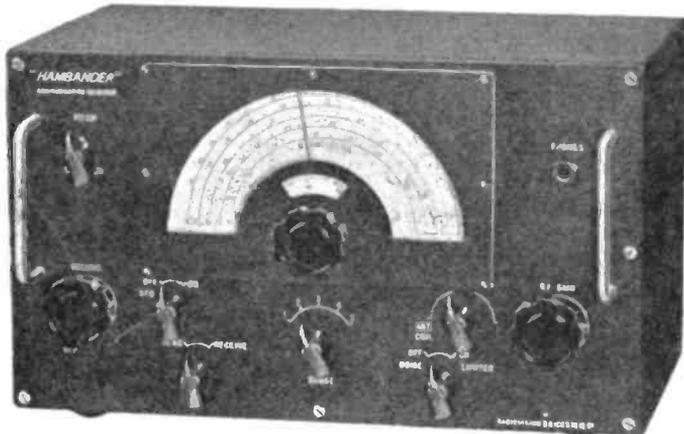
Super Sensitive Low Resistance Double Head-phones with Noise Excluding Rubber Earcaps and Moving Coil Mike with Switch. As used in Tank-Intercoms. . . . . 5/-  
A Mike or Phone Transformer can be supplied at . . . . . 5/-

OUR 1948 LIST IS NOW AVAILABLE. All enquiries must be accompanied by a 2½d. stamp.

**ALL POST ORDERS TO:** Jubilee Works, 167, Lower Clapton Road, London, E.S. (Amherst 4723.)

**CALLERS TO:** 169, Fleet Street, E.C.4. (Central 2833.)

## The COMMUNICATIONS RECEIVER YOU HAVE BEEN WAITING FOR • The



**“H  
A  
M  
B  
A  
N  
D  
E  
R”**

Outstanding performance on all Amateur Bands from 10 to 160 metres, at a price to suit your pocket • Prompt Delivery • Hire Purchase Facilities • Send 2½d. stamp for Illustrated Brochure (carriage and packing 10s.)

**£22-10s.**

**RADIOVISION (Leicester) Ltd.** 58-60 RUTLAND STREET LEICESTER Phone 20167