

Short Wave News



For Transmitter and Listener



Contents

- V.H.F. News
- On the Ham Bands
- Around the Shacks
- QRP Club Notes
- Around the Broadcast Bands
- From Our Mail Bag
- K2UN. United Nations
Radio Club
- An A.C. Mains O-v-I Receiver
- I.S.W.L. Notes
- Radio Melange
- etc., etc.

AN AMALGAMATED SHORT WAVE PRESS PUBLICATION



Remarkable Offer !

BC 348's
at
£15-10-0
Carriage Paid

"A Special Buy" of a quantity of BC 348's enables us to offer you this first-class communication receiver at the remarkably low price of £15 10s.—complete for 28 volt operation or for £20 10s.—modified for A.C. mains and complete with power pack. Packing and carriage paid. £2 case charge, returnable.

This American receiver is one of the finest released to date by the Ministry. Built to stringent U.S. Army specifications, constructed of first grade components. It is extremely sensitive and easy to operate.

Special Features :

1. Antenna alignment control.
2. Band switch with dial mask ; only band in use visible.
3. Constant sensitivity on all bands.
4. Smooth vernier tuning ; 90 turns of tuning knob for each band ; sturdy drive mechanism, uses split gears for minimum backlash.
5. Quartz Crystal filtergate.
6. High and low impedance output jacks.
7. Temperature compensated oscillator prevents frequency drift.

8. Robust, cast aluminium framework, and case with superb black crackle finish.
9. B.F.O. with variable pitch control.
10. Optional A.V.C. or manual control.
11. Built for continuous service ; no electrolytic condensers used ; all components of adequate rating.
12. Six wave-bands covering 200/500 kcs., 1.5/3.0 Mcs., 3.5/6.0 Mcs., 6.0/9.5 Mcs., 9.5/13.50 Mcs., 13.5/18.0 Mcs.
13. Valve line-up :—

1st RF	6K7	2nd I.F. CW OSC	6F7
2nd RF	6K7	3rd I.F. 2nd Det.	6B8
R.F.O. sc	6C5	Audio Output	4I
1st Det.	6J7	Voltage Regulator	99I

A built-in 28 volt Dynamotor is embodied in the BC-348 ; this can easily be removed and an A.C. power supply fitted. Full instructions are furnished with each receiver.

The BC 348 is an ideal receiver for localities without mains supply and can be used without modification from 28 volt battery supply.

Offering this receiver at this price will quickly drain the stocks available, so be sure to order NOW.

EXTRA SPECIAL. American " Bug " Keys made for the U.S. Army by the Lionel Corporation under Vibroflex patents.

This superb key is well designed and constructed and makes sending a pleasure. Built on heavy cast black crackle base, with all parts heavily plated, complete with switch.

Brand new £2 10s. each—1/6 postage.

We anticipate a big demand for this key. " Don't be late." Order early.

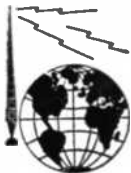
Vallance's purchase only surplus gear that is useful for the " Ham " and at the right price too ! Please inform us of your requirements.

VALLANCE & DAVISON LTD.

144 BRIGGATE, LEEDS, 1

Telephone: 29428/9

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



Short Wave News

Vol 3 No 8

Annual Subscription 16/-

August, 1948

ARTHUR C. GEE, G2UK
Technical Editor:
LIONEL E. HOWES, G3AYA

Editors:
W. NORMAN STEVENS, G3AKA
Advertisement & Business Manager:
C. W. C. OVERLAND, G2ATY

ONE of the nicest aspects of Amateur Radio, is the friendliness which exists between amateurs of one country and another. Most people enjoy a visit to a foreign country and when the visit is enriched by the interest of seeing other amateur stations, a really enjoyable holiday is assured. There is nothing like a personal visit, for cementing friendships, exchanging ideas and seeing just how they do things in other countries.

The policy of Short Wave News has always been that of encouraging international co-operation between amateurs and short wave listeners and the International Short Wave League was formed with this motive as its prime objective.

The Exchange Holidays Scheme was started last year as one of the earliest services available for ISWL members because the value of personal contact between members overseas was realised.

Difficulties in travelling abroad have prevented many who would have liked a holiday with an amateur overseas from making the journey; but in spite of these difficulties, quite a few exchange holidays have been arranged, particularly between amateurs in this country and those in Holland. The ISWL is the only organisation in the country which is giving official support to an Exchange Holiday Scheme. The most obvious difficulty with foreign travel is that of expense. Not only does the fare make a hole in the average pocket, but where accommodation has to be paid for too, the cost of even a week or ten days puts any possibility of visits overseas out

of the reach of very many of us. By contacting amateurs overseas, who want to visit this country and putting them in touch with amateurs in this country willing to entertain them in return for similar hospitality overseas, the ISWL has enabled its members to dispose of at least the accommodation expenses. But besides those who have paid visits overseas through an official scheme, there are quite a number who have made their own arrangements either individually or as a party.

EDITORIAL

★

Exchange Holidays

We should very much like to hear from anyone who has had a holiday of this sort, not only because we are anxious to assess how much inter-country visiting short wave enthusiasts are making, but also because short descriptions of these holidays would prove very interesting to those of our readers who are unable to travel themselves. We will pay for any such description at our usual rates and we should like one or two photographs to illustrate the articles with. So those of you who have visited amateurs overseas this year, let's hear from you please, so that others can share your experiences.

A.C.G.

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

CONDITIONS during the first three weeks of July were much below the excellent conditions characterising the end of June. Unsettled weather conditions spoil tropo possibilities and whilst there was quite a lot of Sporadic E, it was not on the level of June. Activity on the other hand seems to be even further increasing, no doubt due to the availability of ex-Service converters for the higher frequencies. This bears out our contention that much of the lack of interest in the V.H.F.'s in the past has been due to the cost of building-gear specially for these frequencies.

Interesting events to watch for during coming weeks are the 60 Mcs. Field Day being organised by the Danish Radio Society over the week-end of August 21st—22nd and the R.S.G.B. Five Metre Contest over the week-end Sept. 4th-5th. It is hoped that as many listeners as possible will keep watch on 'five' during these periods, so that no signals will go unreported. There should be considerable activity over these week-ends, so it will be worth while spending some time on 'five' during them.

Readers Reports

Arthur Simons, G5BD, Mablethorpe; reports that conditions have not been so good this month as last. He tells us that there is now considerable activity throughout Lincolnshire. Apart from the usual G contacts, he has nothing of particular interest to report.

Leslie Orton, Uxbridge; reports Sporadic E on July 5th, when he heard 11ABR and F9AQ and several G's working the Continent between 1925 and 2000 G.M.T.

Al. J. Slater, Southwick, Sussex; writes to say that he and Bert Onslow and G3BEX—ex-ST2AM—have joined forces on 'five.' They had a good time in the R.S.G.B. Field Day, using a Tx consisting of 6V6 CO, 6V6 doubler, RK34's as further doublers and another RK34 as push-pull PA. With the local I.S.W.L. Chapter, they set up a station on the highest local spot—Devil's Dyke—N.W. of Brighton. The Tx was run from vibropacks and gave about 9 watts. The Rx was a Type 27 converter fed into a 7 v. battery superhet, the aerial being a 3-element beam. The QTH turned out to be excellent, 34 contacts were made, the best being G2ADZ in Oswestry 190 miles away. 120 points were scored—a very good effort for their first

attempt. Stations never heard at the home QTH were heard and in view of the very much better results obtained at the portable QTH it had been decided to make G3BEX/P a regular five-metre call. An old lorry is being fitted up with the gear and it is hoped to operate from the Devil's Dyke area every week-end, wx permitting—until October. Al says that in spite of all this activity, he has had time to do a little listening. His 'counties total' is now 12 and his 'countries' 6. July 2nd provided him with some good sporadic E in the shape of OK1RM, FF, AW, and VW.

Rude Meissner, ex-D4MRJ, of Hamelin—of piper fame!—sends in a most interesting log of stations heard on 60 Mcs. On 27th June he heard the following at loudspeaker strength: G2RT, 2ADZ, 2BJS, 2ADR, GM2DI, GW2AVV, G3BW, G4LU, G5BY, G5VM, GM5VG, G6FK and G6YL. 11NQ, WK, LQ, NL, and IS6CW (Sardinia), XW, QE, AV, AG, LX, UE and HO. SM7VE, CT, BE, SM6QB and SM2SR. LA7Y, OZ3EP, PAOWL, KK, XM and UW. HB9BZ, OK2HX. F8KS, CT, JB, F9OM and F3JB. The Rx was a superhet 9-valves and the aerial was a ten-foot vertical or horizontal. This is certainly the best listeners log we have ever seen on 60 Mcs. Congrats. o.m.

Jim Bramhill, G2BMI, Hillingdon, Middx.; writes to say that he has got going on five at last. The Rx is a Type 27 converter into an AR77. The Tx is a 6L6 triet, into a pair of 807's in push-pull giving output on ten driving an RK34 also in push-pull, at about 12 watts input. Antenna is a folded dipole with a director only, the whole being rotatable. So far Jim has worked G2LC, DD, 3KP, 5JM, VB, UM, 6UH, and 8AL.

Don Bradford, Denham, Bucks; is the first SWL to report his activities to Jim, and his list of stations heard includes:—G2DD, AJ, BMI, FMF, 3BLP, CWW, FD, KP, BOB, 4KD, MR, 5LC, WP, VB, MA, JM, KH, KI, 6OT, JK, NF, KB, LK, 8UG, AL, KZ, OK3DJ, SM5VL and SM5OZ. Nice work o.m. Please let's have some more reports.

Our old friend **Cyril Greenaway, G2LC**, has been putting in some time on 60 Mcs., having worked G2BMI, FKZ/P, 3CWW, CGQ, 5LC, BJ, and 6HD.

W. A. Martin, Brixton Hill, S.W.2, has now got his Type 26 converter going nicely and has heard F9AQ, 11ABR, 11ATS and OK3ID, on July 5th. He has heard some 70 G's in nine counties. He says he is much impressed by the good activity on '5.' Thanks for the report Bill, and hope to hear from you again soon.

Well, that's the lot for this month. Please let's have your reports into H.Q. by 12th month. Tnx.

On the Ham Bands

Conducted by LES COUPLAND

G2BQC

General

I HAVE recently had one or two moans about the time lag between the receipt of logs and their appearance in the magazine. Now, whilst much is in editorial hands, contributors themselves can play a big part in speeding things up. It is with the object of trying to close the time-gap that we make these suggestions and we trust that every contributor will adhere strictly to them:—

Reports to be sent on separate sheets (or part sheets) of paper. Such items as DX QSL's Received, QRA's, Monitor Session reports, and so on to be on separate sheets. Phone and CW stations must be clearly defined. It would help enormously if logs were arranged in alphabetical order of call sign and also if they were kept to a bare minimum. By the latter we mean—keep logs down to real DX only and try to give actual data on specific stations rather than masses of stations that are only common-place reception. We would rather have a list of a dozen good catches together with some data on them than something that looks like an extract from the Call Book! Remember this feature has as its object the publicising of DX news and tips on those elusive stations; we do not encourage logs of the self-glorification type!

We are hoping to list the times the DX is heard in the rare cases but cannot, owing to space limitations, give times for all stations. If possible give an indication of when the stations in your log were heard, either individually (as in the case of super DX) or collectively (such as, say, "stations all logged between 0700-0900 G.M.T."). Also in the "data" class we would like information of the frequencies of rare stations using crystal control.

It's up to you all to help make this section as interesting and informative as possible!

Readers' Reports

Fred Pilkington, G1717, obliged with, EA7BA, FT4A1, MD2B, MM2AA (is this MF2AA?), ZB2A and ZC6WG. Fred recently heard his first VK2 (AGW) on his Marconi BC receiver. Fred, incidentally, is only 15 years old—our youngest contributor?

W. A. Martin, G70 (Brixton Hill), uses a B2 and lists the following on 14 Mcs.:—CE2BQ, MD5JM, VQ4ASC, VS4FA, VSTGR and VQ3HGE, the latter coming in R9 plus on the speaker.

R. W. Ainge, G219 (Crewe), tells me that VR5pl is on 7 Mcs. cw with 136 watts. Anyone heard him yet? VS1AQ is now QRT and is now signing G3DPR. All who worked him in VS2 will get their cards in due course. The best DX at G219 was on 28 Mcs., viz:—AR8AB, EL2A, OQ5BQ, ST2FU, VK6HL, ZS6LF. On 14 Mcs. we noted HC1FG, TG9RV, XE1CO and YN1HB.

Derek Sellen, G1450 (Ipswich), our one-valve maestro, logged AP2g,4a; C7ok, CP1ap, UJ8ac, VP3acs, 9e; VQ3hge, VK3nc, YI2am and ZD1lg. Very nice OM.

Bill Iball, G941 (Wigan), sent along a very nice letter. Bill uses a battery 0-v-1 and assures me he does use candlelight! This appears to be no handicap as Bill logged these on 14 Mcs.:—VP9F, PY1ACO, UA9cim, VS9gt (Oman), ZS6dj, KP4cc, BP4to, AP2h, VE8oe, TF3ab and VE4dl.

Denis Rickers, GW1048 (Wrexham), wonders if W6RWQ/VR6 is a pirate. No, OM, he is definitely genuine and we know that G6GH and Reg Masters have both had cards from him. The op was visiting Pitcairn while on a cruise and he took his ham gear with him. Denis lists these:—D4AVL/MD7 (he is using a BC610), HC2DY, OA4CV and TI2OA.

G. W. Cardwell, G1396 (Barnsley), using a 6-valve TRF heard these on 14 Mcs.:—VE7JB, 7AIE, HC2KM, NY4BA, ZC6LA, XE1AC, ZL1MF, 3HC, 4HF and VK6HL.

Reg. Vincent, G748 (Enfield), again obliges with a very neat log for four bands. On 3.5 Mcs. he heard VE1CR, 2RG, W1CPI, 2EG, 3BFZ, 4EL, 8REP and 9IMI. A PAØ was heard calling PY4Z1. The usual run of DX was heard on 14 Mcs., better ones being CM9AA, HH2X, HP1LS, YS1AB, VP9F and SHF1X. Reg gets a sly dip at me for saying 28 Mcs. was dead, by logging CT3MN, KP4CI, M13BC, OQ5BR, ST2FU, ZB1AK, 2B, ZC6JP and the latest "Albanian" ZA1A.

M. Harrison, G54 (Darlington) sends some useful gen and some nice DX, on 14 Mcs.:—AP4m, C6yz, 7ok, CR7mb, 6ai, CT3mn, KV4ah, M13fg, OQ5qo, UAokaa, UH8kaa, ZD1bd, 2ky and KZ5cc. Martin says that FQ8SN regularly operates on 14395 kcs., a useful pointer to those who have not yet had this country. On 7 Mcs., Martin logged W6ydl, 7bwu, 8yow, VE1kq, 3awb. Very FB.

R. Poppi, G1805 (Beckenham), uses a "Hambander" and lists these 14 Mcs. phones:—AP5CR, AP1BC, 8AB, C4AC, HH2X, HI6EC, HK7KD, HP1DW, J9ABW, KH6AW, KZ5AO, OQ5AV, PK3WG, TG9RF, VK2BM, 3AFT, 4WF, 6RV, VE5ZM, 7ZR, VP2AG, 3CT, 6CE, 9L, VQ2HC, 3WR, 4NSH, VS7GR and rounds off with YS3PL. A really good effort OM—let's hear from you again.

L. H. Waine, of Yeovil, not only sent along his usual log but also a nice photo of Newquay, where he has been resting his DX ears. Next year this will be rectified by taking a portable rx with him! On 14 Mcs. cw Leslie pulled in MI3zg, TF3ab, UA9ga, UR3aa (this is UR2aa OM), UAokaa, VK2pe, CT2ab was logged on 7 Mcs.

J. S. Harden, G1522 (Failsworth), submits his first log, heard on a commercial superhet. He moans about D4's who use BC610's and Italians who spread 30 or 40 kcs. I agree with you OB, and can only assume that the respective licensing authorities must be very inefficient. The log includes HC2KJ, MF2AA (Trieste), VK2NJ, XE1CQ, YS1GM and ZL2NZ.

Don Robertson, GM1051 (Wick), turns up on the dot with his customary fb log. Starting off on low frequencies and working up, this is what 7 Mcs. produced:—W7zt, 7tcq, 4bol and VE7om. 14 Mcs. turned up with KAlis, J2vfw, VK3xs, AR1ww, EP3h, ZC6ao, ZS3ea, (sounds queer), AP2h, Clan, Wøozw/KS6, KL7it, VE7zm, KG6di, ZL3BE/J, FQ8SW, CT3MN, D4AVL/MD7, VQ3HGE, EQ1RX, KH6GS, VP2AG, HC7KD, TG9AM and YS3PL. On 28 Mcs. Don logged MD5AA, ZS6KO, PY8MD, ZS6JZ and OE5RA, VQ5PBD, VQ4HRP, ZS4H, VP4TZ and ZE2JB.

Bill Hamilton, GM871 (Motherwell), is another newcomer to this feature and says he hopes to give Don Robertson some competition! He says that he will try to catch the sigs on the way up to Don at Wick! Bill lists D4AVL/MD7, EK1MD, HA4EA, HC1FG, HH2X, K2UN, OA4AM, 4AT, OE9CL, PY7AB, TI2GC, VO2BN, 6AM, VY9F, VQ2JC, YSIAC, ZB2A and ZB6XY. Your guess is as good as mine with ZA1A, OM!

D. L. McLean (Yeovil), tells us about the DA's. Apparently DA's 1, 2 and 3 are in the American Zone, 4, 5, and 6 in the British Zone and DA7 is Russian Zone. No Russian hams are operating from their Zone. The task of sorting out the best from his 14 Mcs. is so difficult but here goes: AR8BC, C7TY,

D4AVL/MD7, EL5B, FQ8SN, K2UN, HH2F (not X?), MD2B, MF2AA, OQ5CF, VE7FC, VK2BT, VQ2JC, 3HGE, 4ASC, 5WCP; VU2LU, VP2AG, 9F, 9L; W7GC (Nevada, at 0540), 7JPY (Arizona, at 0730), XE1AC, YS1GM, ZC1AL/ZC6, ZLICD, ZS1CK, 2BJ, 3F, 5EW, 6AJ. 28 Mcs. was also lively down in Yeovil and produced AR8AB, EL2A, FF8FP, FQ8SN, H18WF, KZ5MB, MD4JG (heard at 1230), OA4AB, OQ5AR, PK2RK, ST2AM, VK6HL, VP4TH, 6CDI; VQ2DH, 5PB; XZ2KN, ZE1JB, ZP8AC and numerous W's and ZS's. Fine effort indeed OM.

Cpl. Singleton (R.A.F. Dunkeswell, Devon), is yet another "first" who sent also a fine letter. Welcome to the "Corner" Les. An O-v-1 battery RX is used and Les says he has been a SWL since 1936, with the usual break during the war. Les sends along a nice log of NFD stations, all of which were portable but we have deleted the suffix "P" in order to save space: EI3G, G2AK, AN, BAB, CXH, AZF, GA, NW, NY, XA, YH, YU, ZZ, 3AAB, AEZ, FJ, FN, HT, LN, LR, NA, TA, GA, 4FB, 5FA, RV, UM, YK, 6CW, HD, TD, UD, WO, ZT, 8AW, HX, JK, NF, PX, RB, RL, SM, GI2HLT, GM3KC, 4GK, GW2FRB, 5BI, 8CT. Les says he has never heard Top Band so full of signals and that lots of people were surprised what 5 watts would do!

Vic Thorne, G3DFI (ex-VS1BX), clocks in with his "7 Mcs. worked" log and some fb stuff he has contacted, too, such as PY2aia, 7ws, 5dz, 2tb, 1fw, 2ajt, LU7az, 8ae; EA3oo, 5be, 7au; MC1a, MD5kw, UA3bd/UP2, VP4to, ZB1ai, lap; SV1sl, HA7q, SU1ss, OE1ch, HP4t, OH6pr. CT2ag, OX3rg and OX3u. All this on an 807 PA and a centre-fed 7 Mcs. half-wave aerial. Thanks, Vic, for your QSL when you were VS1BX—I certainly needed that one! Yes, we will try and keep the mag. up to scratch, but the Editors want watching (Sh!).

B. G. Martin, G1001 (Cheltenham), increased his country total by logging D4AVL/MD7, CT2AB, CT3MN, TA3FAS, VQ4NSH (not "MSH", OB), ZC1AL, HP1LR and GC5OU. The latter was on 3.5 Mcs. and the rest on "good old 14 Mcs." as G4GI would say. Which brings me to...

Peter Gambles, G4GI (Woodhall Spa), who has been quietly knocking them off as follows:—ZC6xy, CE2bq, HC7kb, VP4tr, CM9aa, YV5ab, MD4jg, MB7qrp (Peter—really!), VE8mb, IS1ahl, VP3if, HC2kj, OX3ge, TI2oh, OA4bx, OA4m, MF2aa, VQ4jgk, EL8a, XE1bw, CO2se, NY4ba and TI2oa. Peter tells me that he also goes to work each day and gets in some sleep at night, but I bet he is always wearing his "cans"!

'Phone as W9XXX, CW as W9xxx, Times in GMT.

Peter Gilson, G878 (Shipley), sends along a 14 Mcs. phone log, which includes CM9AA, HC2KJ, KA1AI, OA4M, 4CE; TG9JK, 9RV; VK2AKR, 2X, 3ALO, 3HF, 7YB; YS3PL, YV5HG, ZC1AL and ZL2JQ. Keep up the good work, Peter.

Peter Crew, G1483 (Portsmouth), has heard CX3CN, HC2QM, HH2CW, KH6CT, 6KL, MD2B, MF2AA, OX3BB, TI2OA and ST2CH. All on 14 Mcs. Write again OB, 73.

F. K. Parker, G1324 (Stamford), is another member who takes a dim view of Italians' pitch on 14 Mcs. Of course, there is the point that we do not hear the G stations on 14 Mcs., or we may keep very quiet about the matter! However, the Italian 150 per cent. modulation stunt is a bit too thick. The receiver at G1324 is a mains 2-v-2 and is described in the August issue of *Radio Constructor*. The best DX has been VP8MY, C7TY, EK1AB, HC1AL, 7KB; K2UN, CT3MN, TG9AY, ZL4KR and W5ZP/KH6.

P. Godfrey, G1649 (Southgate), is another 15-year-old and has built his own 1-v-1 receiver. Using this and two dipoles, G1649 logged ZB2A, CX2CL, 2AX, 2CO; H16EC, ZL1KR, VK2ZA, OX3BD, CT3MN, ZB1AH, MD2B, and VO2BN. He is now taking up cw seriously, so look out lads, we are in for some QRM from Southgate!

Bert Endersby, GW703 (Old Colwyn), comes forward with a staggering log, which if used in full would occupy all our allotted space! Bert has a modified BC348 and here are the plums as heard this month:—KB6ab, VQ6wd, VR2ar, and AC4rf represented new countries. The local stuff (!) included C7ok, J2ahi, KG6di, KH6ig, OQ5ra, UAokfa, VQ2mi, VS1ko, Y12am, C1KF, W6YOT/C6, HL1Ai, J5LCJ, 9ADW; KA1AI, PK4PQ. The frequencies of the cw stations are KB6ab-14020 kcs; VQ6wd-14070 kcs.; VR2ar-14070 kcs.; AC4rf-14070 kcs. Looks like 14070 is a good spot on the dial!

N. Williams (Ealing), shows the benefits of listening on CW. Here is the log for the past three weeks:—AP2h, n, 4a, m; AR1ww, Clan, 4rk, 6yz, 7ok, EK1fp, EL3a, EP3h, HL1au, 1ba; HP11a, J2rlk, KG6dg, KB6ab, KV4ah, an; KZ5ah, ap; OX3be, ge, mg, rf, uf; MI3fg, 3zj; MD2j, 4th, 7af; VE7gi, 8ol; VK2eo, 3cv, ke, kb, qx, apa; VP2ks, 4tl, tr; VQ2dh, mi, 3hge, 4jgk, 4sgc, 6wd; VS2ch, 4ge, 6b, 9gt; TI2exo, fg; ZB1ap, ai, fk; ZC1cl, 6ao; ZD1as, bd, 4ab, 4at, 9aa; ZS2al, mi, 6z, al, dj, nz. What say to that, you phone merchants?

DX QSL's Received

Don Robertson : W3IET, KG6CS, KG6AAF, AR8AB, FF8FP, OA4AQ, VQ4HGE, W6DZZ, MB9BB, UR2KAA, KH6LF, VE3AWB.

H. G. Prynny : CR9AG, LU9EV, MD5AF (8 days).

L. H. Waine : C1CH, CT1RJ, PY1IK, UA1BE, VP2GE, VP4TAI, VQ4EHG, KP4E,

R. W. Ainge : HK4CO, VS1AQ.

L. Singleton : WøPRZ (S. Dakota), XZ2HP, ZD2KC, CR4AX, KG6CE, KH6IJ, VE7ZM, VE8OG, W7GC (Nevada), ZD4AM, ZS1M, W1AAH (3.5 Mcs.), 2IQ (1.7 Mcs.).

P. Godfrey : CN8BB, CN8MZ, EA7BA, EK1AO (25 watts), HA4AB, MB9AB, MB9AG, MD1H, 11AHK (Sardinia).

L. McLean : HK1FQ, MD1H, OA4M, UR2KAA, VE6CR, VK2AMU, VK2MH, VK5LK, VP4TZ, ZC1AF, ZE1JI.

C. G. Tilly. TI2RU (after 18 months!), VP4TAE, VK6HL, VE6AL, HC2KJ, VK5LT (he has not yet made a G contact!), ZS1DA, VS7AC, W6KQY (always appreciates reports) and VE4SH.

Jottings

The Island of Sardinia, hitherto using the prefix "I" has now been allocated IS. The first ones heard using the new prefix were IS1AEW and IS1AHK.

J. Webster, son of ZD3B, writes to say that another new one from Gambia will be ZD3C who hopes to be on soon.

New ones to try for:—Portuguese Guinea has turned up with CR5AA on approx. 14345 kcs., CT3MN (if you have not heard him) can be found around 14320 kcs., Basutoland, with its new prefix, produced ZS8A and ZS8AM at the HF end of 14 Mcs. Two others are FE8AD (14110 kcs.) and VQ8AV, (14350 kcs.). Has anyone any data on the cw stations AR1ww, HV5j, ZA2aa?

G Calls Heard (Overseas)

S. J. Osterman, W2-1865 (New York). RX : Hallicrafters S38. Ant : 40 ft. long wire. Heard on 28 Mcs. phone : G2ALL, AV, HF1, 3BM, 4NF, 6BW, RH, GW2FGJ. On 14 Mcs. : G2MK, PZ, PU, 3AC, AUH, BN, AH, 4KY, MS, QL, 5BS, GK, 6AY, BY, LK, 8HH, TH, QW, OV, VB; GD6IA; GM8MF, 8MN.

T. Hutton, MD4TH (Mogadishu). On 14 Mcs. cw : G2AVP, PL, MS, 3AAJ, BQR, BM, 5DR, SD, 6RB, PD, 80J.

Waldemar Kehler, (Schleswig Holstein) : Reports these on Top Band :—G2ju, yy, 3ack, bra, bsx, 6ab, 5xb, (29th May), G2bz, fty, ol, uf, 3adj, alg, bhs, btp, cnb, dsw, fk, tk, 6fa, 8lz, od, vn. Tnx, OM, and please write again.

Query Corner

As usual Turkey (?) is to the fore. G3DFI asks about TAIC and TA2KC, both heard on 7 Mcs. cw. TA3FAS also puzzled quite a few. However, Michael Dransfield comes to the rescue and tells us that this station is in reality W4FAS working semi-undercover in Turkey, and is with the American Army Air Force. A new broadcasting station is under construction at Amkara and QSL's are to go via ARRL or via W4FAS at 3624 Lauderdale Avenue, Hampton, Virginia. (Think that TA3FAS is on VFO, Michael). Taking this opportunity to clear up Michael's queries, NY4BA is at Guantanamo Bay (Cuba) which is counted as a separate country by the DX mob.

Reg Vincent presents us with K2U9 which looks like K2UN to us. Fred Pilkington says what about T4ZQ. So do we ! Don Robertson hooked ZX2C who said he was in "South Europa" and we wouldn't be surprised at that, hi. Don also caught up with AC3nc. Any data ?

P. Crew submits HS2F for our inspection and we just say, rather weakly, "probably" ! Then we got, from N. Williams, these specimens ZA2aa, YU7aa and YT7gb. All we can say is that no one has had any cards from these gentlemen.

TOPICAL DX QRA's

- AP2H : Sgt. R. Jellis, Sgts. Mess, R.A.F. Staging Post, Muripar, Karchi. 13.
 - AP4M : c/o AP5B, Racecourse Road, Lahore, Pakistan.
 - CT3AA : A. A. de Oliveira Becco, Chad-da-Loba, i. Maderia.
 - CR7BC : Box 812, Lourenco Marques, Mozambique.
 - MD4JG : c/o Post and Telegraphs, Modadishu, Somalia.
 - MD4TH : T. Hutton, Box 436, Mogadishu, Somalia.
 - M13AB : 31 via Molise, Asmara, Eritrea.
 - OQ5RA : Box 271, Leopoldville, Belgian Congo.
 - K2UN : United Nations Amateur Radio Club, Lake Success, New York.
 - KH6CT : Box 237, Lanikai, Hawaii.
 - KH6MI : c/o KH6BA, 2543 Namaur Drive, Honolulu.
 - KH6MG : Box 25, Puunene Maui, Hawaii.
 - KH6PM : Box 231, Kahului, Hawaii.
 - J9ACB : APO 331, c/o Postmaster, San Francisco.
 - VQ3JMT : RAF Mbeya, Tanganyika.
 - VQ4BFR : Box 3015, Mombasa, Kenya.
 - VQ4MHA : Box 155, Kisumu, Kenya.
 - V57PH : via RSGB.
 - V59GT : C/o RAF Station, Sharjah, British Forces in Iraq.
 - W6ANX/C6 : Box 895, Tsingtao, China.
- (Acknowledgements to D. L. McLean and Bert Endersby for QRAs supplied).

SWN QSL LADDER

For Verified Reception only.

Little change has taken place since last month, though D. L. McLean now comes into line at No. 3. He is the first reader to have Verified All States and we congratulate him on this feat. Who will be the first to produce cards from all Zones? At present it is an even chance between DLM and Conrad Tilly. (or has Monty Preston got the cards up his

sleeve !). We are still waiting patiently for complete details from a few ladder-ites, so what say OM's? Also, of course, we would be pleased to hear from any other readers not yet included in the ladder. Send along your countries, states and zones scores, but for VERIFIED reception only ! Here are this month's figures :—

Name	Countries	States	Zones
M. Preston (London) ..	127	—	—
C. G. Tilly (Bristol) ..	121	44	36
D. L. McLean (Yeovil) ..	118	48	35
A. J. Slater (Southwick) ..	96	45	33
A. H. Onslow (Hove) ..	94	47	—
R. Masters (Portsm'th.) ..	61	—	—
A. E. Linclon (Grimsby) ..	43	—	22
L. H. Waine (Yeovil) ..	34	34	20
D. Garrard (Ipswich) ..	40	20	12
D. Shallcross (Borrowash)	25	—	5

MONITOR SESSIONS

Report on Session No. 8 :

(June 26th. 2030-2200. 14 Mcs. South America).

M. Dransfield RX: R1155. Aerial: 70 ft. long wire :—CO8NB, CX2CO, LU4BH, LU5AX, PY1MK, PY2JU, PY6AG, YV5AB. Michael said that in the first half-hour he only heard two Latins, but that things bucked up after 2100. None were logged on cw. Michael wants more 3.5 Mcs. sessions.

P. Godfrey, using his 1-v-1 pulled in CX2CO, LU4BH, LU6AJ and PY2JU.

Fred Randall knocked off CE3AB, CX2BG, CX2CO, LU4BN, LU5AG, LU7AX, PY1MK, PY2AFT, PY2CK and YV5AB. Nice effort, OM.

J. Clarke (1-v-1) accounted for CE3aw, LU4dq, PY1gb, PY1hx, PY1ik and YV5abx.

C. M. Leach heard YV5AB, LU4BH and LU5AX. G89 remarks that LU4BH was a very steady signal against the fading sigs. of other Latins. He says most all "paths" except South America were well open, but that's quite usual on our sessions! RX used was R1155 with 75 aerial.

Future Sessions

By the time you read these lines, Sessions 9 and 10 will be all over (announced last issue). Following periods are as follows :—

Monitor Session 11

Date : August 14th. Time 2030-2200. Band 14 Mcs. Target : Latin America.

(Continued on page 202)



AROUND THE SHACKS

No. 19

E. KALEVELD, PAØXE, HAARLEM

EVERT Kaleveld, PAØXE, is the Holiday Scheme Manager for V.E.R.O.N. He obtained his transmitting licence during the first post-war examination in April, 1946. He is chiefly active on 7, 14 and 28 Mcs. cw., and with an input of 50 watts he has WAC and WBE on 14 and 28 Mcs. On 7 Mcs. he uses QRP and with an input of 10 watts, only needs South America to have WAC! His total of countries worked is 86.

Evert says that he was unable to get his licence in pre-war days, because in Holland, one must be 18 years old and he was not old enough then. He got some operating practice during the war however, by operating an underground radio station. For this little enterprise he spent five weeks in a German prison camp but was eventually released by mistake!

Our photo shows the present shack with Evert at the key. (Yes—he is left-handed—we have not reversed the photo by mistake). On the writing desk, in front of the speaker and mike, is a simple superhet standby receiver. Behind the key is a special 10/5 meter superhet. On top of this receiver are the VFO QRP 7/14 Mcs. Tx for cw and occasional phone. Beside it is a superren receiver covering from 56 to 300 Mcs. with plug in coils and acorn valves. The main receiver is behind Evert. main receiver is the power pack for the QRP. It is a TRF, 3-v-1 for all bands. On top of the rig.

In the right hand corner are the VFO and main transmitter, with an input of 50 watts cw on 7, 14 and 28 Mcs.

PAØXE is the fortunate possessor of a good variety of measuring gear. On the shelves above the table are to be seen an oscilloscope with built-in amplifier and sweep, a C/R bridge with magic eye indicator, a test oscillator, an all purpose meter and a frequency meter. All gear is home made and we feel readers will wish to join us in congratulating Evert on the excellent station he has built himself.

By profession Evert is a train despatcher on the Netherlands Railways at the Haarlem station, and as a further aside on his activities, he mentions that he is married, is a lover of good books and of English literature.

As readers of his recent article on "Amateur Radio in the Netherlands" which we published recently will know, Evert is also adept at writing, and we are very pleased to be able to inform readers that they may look forward to reading further articles from his pen in these pages.

Evert Kaleveld, PAØXE, Zylweg 35rd, Haarlem, Netherlands, would be very pleased to send data of any German valves to readers of the *Short Wave News* or the *Radio Constructor*. He requests that an International Reply Coupon be sent to cover postage, please.

QRP CLUB NOTES

BY
MAL GEDDES
G2SO

THERE have been several suggestions that the SWN should sponsor another Low Power Contest, so I am prepared to go ahead with details, and suggest some time in October. I will endeavour to arrange something new in QRP Contest ideas, and the final details will be published in the September issue. If there are any ideas with regard to bands, time, etc., please write the EDITOR not later than the 8th September.

A very nice letter has been received from PAØXE of Haarlem, Holland, in which he states that he has caught the low power "Bug," and has had some very fine contacts. Previously with an input of ten watts the following have been worked:—ZL, W1, 2, 3, 4, 8, 9 and ø, PY, FA9, MD1, ZC6, UAø, plus all Europe, all on 7 Mcs. Nice work indeed. On 14 Mcs. all W districts, CX, HC, KS4, KV4, UK2, 3, 4, ZL2, 3 and 4, ZC1, ZD4, CN8, FT4, and again all Europe. All above contacts on CW. PAØXE decided that this input was QRO and therefore reduced input to 2 watts. To date he has had some very nice contacts with G. SM. LA, F. D2. A letter just received, however, from G3XT reports a contact with PAØXE recently in which he stated that he had worked W6DUC obtaining a report of RST 55/69x with an input of 2 watts, using VFO, BA and 120 anode and screen volts to an 80 PA. This QSO was of course on 14 Mcs.

G3XT has been very active on 7 Mcs. with 3.1 watts to a Hartley VFO and has received two reports of RST599!

Sdn/Ldr. B. Goodale, G3DNU, R.A.F. Shinfield Park, Reading, Berks, is active with a battery triode oscillator on 7005 kcs., and is anxious for skeds on that band, most evenings between 1900 and 2300 hrs. B.S.T.

I suggest that here is a chance for other keen low power operators to assist G3DNU, and no doubt he would be pleased to receive reports on his transmissions, as his HT voltage is 60 v. only.

In these Notes some months ago, it was mentioned that G3BEC was operating with low power on eighty without success, but in a recent letter he mentions that he is now running three watts to a COPA with an aerial of 132 ft. end fed, with a certain amount of success on 3555 kcs. His second contact was with G6ZN the QRP expert. His power supply unit consists of a home built 130 volt supply, which also supplies his

O-V-1 receiver. All contacts have been on eighty, as 3BEC possesses one "rock" only. He mentions one interesting fact in his letter. He says:—"Was surprised to see in this month's SWN under 'My Favourite RX'—G3XT's—and to see that it was an O-V-2 and not a fancy job at that. I was under the impression that most QRP TX chaps used super receivers, but I guess I must be wrong." The writer might mention here that pre-war days he used a home built straight two-valve RX and managed to contact many stations all over the world. It was very good for CW but of course for "phone" stations it was rather useless.

Apparently the HA stations are still under cover, but are hoping to obtain their licenses in the near future, according to information received from HAøAG who is active on twenty metres with two watts, and has been in contact with numerous G stations. This operator has been active since 1927 with the call at that time of EWPG, and is endeavouring to obtain English radio material. A note however has been passed to the EDITOR of the SWN, and no doubt will be mentioned elsewhere in this issue. HAøAG and DA2CB (2 watts) have both been worked by one of the co-Editors of the SWN—G3AKA, so Norman does get time to come on the air!

It has been suggested that any QRP contest held by the SWN should allow Continental amateurs to participate, so what do you think fellows? October perhaps appears a long time to wait, but to get a contest organised it will take up to the September issue. Any suggestions?

See you in the contest, 73—G2SO.

* * *

CONVERTING THE TYPE 27 R.F. UNIT FOR 60 MCS.

Mr. Cyril Wright, G3CCA, of the Leicester Telecommunications Laboratory writes:—"It has rather surprised me that other people have not decided to use "slug-tuning" to convert these Units for 60 Mcs., as the coil formers are threaded for the "PYE" type iron-dust core. These cores cost 3d. each, so for 9d. one can convert the Type 27 into a good 60 Mcs. converter. We have tested this method and checked the performance of these Units at the Laboratory and with dust cores instead of the 'rebound' air spaced coils, the figures were about 80 per cent. better. Further more it can be easily seen that by increasing the inductance one does not increase the d.c. resistance of the coil and so the "Q" of the coil increases. At high frequencies there is a certain amount of "iron-loss" due to the presence of the core, but even so the "Q" and the over-all performance of the unit is greatly improved."

Around the Broadcast Bands

A Monthly Survey by "MONITOR"

All times are given in G.M.T.

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

DOWN here in the West of England conditions have been much like the WX—at least almost as poor—with the best DX still coming from the VK stations in the late evenings. Much QRM has been noted on the bands and as Sidney Pearce mentions in his report this month things are getting tough for the DX. Anyway let's look on the bright side again and see what really was heard recently.

● Asia.

Lebanon. Sidney Pearce (Berkhamsted) has heard Beirut "The Arab Voice of Lebanon" on 8035 kcs. giving English transmission on Mondays only from 1830-1845. Signals were R7 with CW QRM.

Malaya. P. E. Woolmer (Grantham) reports B.F.E.B.S. stations in Singapore and says best freq. at his QTH is their 1530 kc. channel which is usually R8 around 1600. This reader has just received a QSL card from them (Veri scarce QSL's these days, Chum!) which gives their other freqs. as 6770, 9690, 11730 kcs. with 7.5 kw power to each. Requests reports to: . . . B.F.E.B.S. Thomson Road Studios, P.O. Box 434, Singapore, Straits Settlements.

(Has any reader heard "Radio Malaya" recently on any of their various freqs.? Your scribe would greatly appreciate any news of them, also when best received here. What say, somebody?).

Syria. E. W. J. Field of Watford states he has received a Registered Air Mail letter Veri from "Radio Damash" Damascus which gives schedule as 0500-0600, 1200-1300, 1600-2000. Programmes are in Arabic and radiated over a temporary TX on 6, 7.5 and 12 Mcs.

Palestine. A station believed to be in Tel-Aviv and announcing as "The Broadcasting station of the State of Israel" and operating on approx. 6835 kcs. is reported by Sidney Pearce. Signals were R7 with some QRM. News in English is now Broadcast at 1730. J. Burdon of Portsmouth send in a very neat log full of DX only and in it he mentions the news in English at above time and that it is preceded by 6 pips on the half-hour (also at 1745). Call "This is Kal Israe-el." Reception is sometimes hampered by the "Democratic Greek Army Station" which he states uses the same channel for a BC in Greek and also French at 1900 and well received being usually QSA5 R7-8 at this time, while the Israel station was heard QSA5 R7 on June 19th at 1730.

D. O. French (Norwich) has heard a point to point transmission in the 18 Mcs. Band at 1200 on the 23rd of June. ZCA Tel-Aviv was heard calling WRHN (Tangier), for half an hour unsuccessfully and making some nasty sarcastic remarks *re* the non-appearance of WRHN! D.O.F. says that they apparently have no oscillator, so the operator has to keep saying something all the time!!

Iran. EPB Teheran 15100 kcs. is reported by D. O. French giving English news at 1215, and appearing to sign off at 1230 with clock chimes after some records. (Signs at 1230 OM). E. W. Field sends along schedule just received from Radio Teheran which reads as follows:

Transmissions are given in three sessions, Morning, Mid-day and Evening. Morning Session: 0245-0500 (Winter), 0200-0330 (Summer), over EQA (MW) EQB 6150 kcs. and EQD 4795 kcs. Items in this session consist of: National Anthem, Announcements, Daily Service, morning gyms, heavy National exercises, news, Review of the Press and records. Persian only is used, but listeners can however identify records played.

Mid-day Session: This service contains one hour BC in foreign languages and remains unchanged (1130-1230) over the following stations: EQA, EQC, 9680 kcs. from 0845-1230, EPB, 15100 kcs. from 0915-1230. Items are as follows: 0850 Workers Programme. Eastern music on records. Talks, Western music, Solos, Symphonies and other classical music, News in Persian, Review of the Press, followed by news in Arabic, Turkish, French, Russian and English (1215) closes transmission.

Evening Session: Over EQA, EQB, EQD. 1400-1900 (Winter), 1500-2000 (Summer). This session is of a varied nature and contains 2 half-hours of Native music 2 half-hours weekly of Eng. and French by radio, Commercial Ads and Daily dance music. For listeners abroad they suggest 1030 and 1130-1230 for verification. Reports are welcome and should be addressed to: The Director-General, Wireless Dept., Ministry of Posts and Telegraphs, Teheran, Iran, Asia.

Sidney Pearce has a letter veri from Radio Tabriz, Azerbaijan, which mentions their schedule is: 1st trans. at 1000-1130 on 11960 kcs. (No English is used), 2nd trans. is in the 49 metre Band but no mention of freq. is made. 1430-1830. Programme: 1730 in Russian, 1740 French, 1750 English, 1800 Jazz orchestral music by Radio Tabriz Musicians. L. W. Lewis (St. Leonards-on-sea) has QSL for 6Mc freq. stating it is 6090 kc.

● Africa.

Gambia. "Radio Gambia" Bathurst. 9530 kcs. J. Burden had a nice catch in this one and especially so as it was the last BC by them of the present series. Heard from 2115-2240 when closed down. Was QSA4 R7 when first heard reception improving at 2215 with QSA5 R9 signals. Announcer mentioned that they hoped to return to the Air in the near future and request was made for reception reports. Music was given throughout. Announcer was native but spoke very good English. The announcement: "This is Radio Gambia operating on a frequency of 9530 kcs./sec. 31.48 metres," and "This is Radio Gambia, we should appreciate reports on the reception of our signals" were given alternatively at the end of each musical item. J. B. uses a Philips PCR7 RX with a 25 ft. Semi-vertical Aerial.

Northern Rhodesia. ZQP Lusaka 9710 kcs. sends QSL card to Sidney Pearce with schedule: Daily to Africans 1500-1700. Sundays 1530-1630, on 9710, 7220 and 3914 kcs. 0900-1030 on Sundays to Europeans.

French Camerouns. "Radio Douala" Douala 9160 kcs. approx. R6-7 signal evenings with some CW QRM. News in French at 1830. Signs off daily with March around 2015, Sundays 2115, Signs on French at 1800 (Pearce). J. Burden says they usually put in an R8 signal into Portsmouth at 2000. He states that the freq. has been changed from 7950 to 9150 kcs. and its schedule appears to have been extended by 15 mins. Programmes are entirely in French and consist mostly of Symphonic and Dance music. Heard best after 1900 (D. O. French).

Sudan. "Radio Omdurman" Omdurman 13320 kcs, heard from 1730-1800 with English news and recordings. Signals had bad QSB from R5-1 (Lowis).

Portuguese Guinea. Bissau "Emissora de Guine" 7948 kcs. CQM4 heard with R6-7 signals from 2230 to close at 2300 with Portuguese Nat. Anthem after National musical prog. (Lowis). Fair signal from 2130. News in Portuguese at 2215. Suffers heavy CW QRM at times. (A. V. Wilkinson, Manchester).

Angola. CR6RA Luanda 9470 kcs. is reported by A. V. Wilkinson at 2045 with light musical prog. and announcing as "Luanda Africa Portuguesa Occidentale," also "Radio Clube do Angola." Uses 3 chime signal and has Male and Female announcers. Closed at 2100 with National Anthem.

Gold Coast. "Radio Accra" has been heard operating on 9370 kcs. by one of our younger readers Fred Pilkington of Littleport, Cambs. News in English was given at 1645 and signals were QSA4 R8.

● North America.

U.S.A. (West Coast). D. O. French has heard some good DX from Sunny California by way of KNBX on announced freq. of 15250 kcs. with AFRS prog. around 0600-0700. Science Magazine on Wednesdays is heard at 0730. Schedule believed to be 0530-0845 for S. Pacific Area. Suffers Hetro. QRM. KCBA, 15150 kcs. and KCBF, 17850 kcs. were both logged with AFRS prog. (0315-0845) and heard at 0600. KNBA 9650 and KNBI 15130 kcs. heard taking UNO, BC, 0800 English, 0815-0845 Chinese and sign off (Field).

Newfoundland. VONH St. John's 5970 kcs. heard R6 with QRM from a Latin American at 0030 (Lowis).

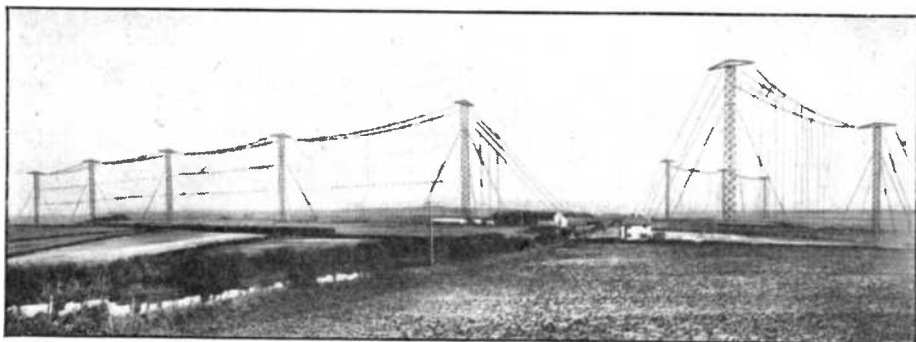
Canada. C.B.C. schedule effective from May 30th is sent in by E. W. Field. European Transmissions: 1300-1400 CKCS, 15320 kcs. 14-1600 CKCX, 15190 kcs., 1600-2230 CKCS 15320 kcs. 1300-2230 CKNC 17820 kcs. All stations open at 1400 Sundays. Transmissions to Australia, New Zealand and South Pacific: 0845-1035 Sundays only. Over CHOL 11720 kcs. CHLS 9610 kcs. To the Caribbean Area: Daily from 2300-0020 over CKCX 15190 kcs. CHOL. (Fred Pilkington also reports this).

● Australasia.

Australia. Sidney Pearce latest changes by Radio Australia for BCs to British Isles, as follows: VLB3 11760 kcs. 1400-1445 with VLG3, 11710 kcs. in parallel to 1500 VLA6. 15200 kcs. and VLC6, 9615 kcs. Best channel generally VLB3. BC at 2000 is now over VLB2, 9650 kcs. and often heard with R7-8 signals in parallel with VLA8, 111760 kcs./VLC 1520 kcs. Sidney says that VLB2 is much better than VLB was on 9540 kcs. which had terrific QRM from "Voice of America" Munich. Dennis French says that VLA6 is heard best afternoons at his QTH despite the QRG change for U.K. to VLB3. Best for Australian DX Programme (VLA6). VLB3 is very weak in Norwich, Dennis adds. J. Burden says the DX Prog. is best in Portsmouth at 0525 when given over VLA5, 15320 kcs. and VLG11, 15200 kcs. being R8 QSA5 while the former was R9 QSA5. Programme is also to be heard over VLB5, 21540 kcs. and VLC9 17840 kcs. VLA5/VLC9 beamed to North America while VLG11/VLB5 to South Africa.

● South/Central America.

Mexico. A. V. Wilkinson lists two stations in Mexico City namely XEBT 6000 kcs. (QSA5 R6 at 0030 with Dance Music) and XEWV 9500 kcs. QSA4, R5 at 0530 giving call as "La Voz la America Latina" followed by American Swing music and English vocal numbers. L. W. Lowis has a QSL from XEBT which gives the QRA as: Las Emissoras



Aerials at the Cable and Wireless Transmitting Station
at Dorchester, Dorset

(Photo by permission of Marconi's Wireless Telegraph Co.)

de America, Estaciones Radiofusores Comerciales XEB y XEBT, Calle Buen Tono 6 Mexico. Apartado Postal 7944 is also mentioned! News in English is given daily at 0330. Closes 0615. Power 10 kW. relays XEB(MW).

El Salvador. YSUA 6250 kcs. San Salvador has been heard with R8-9 signals at 0330 (Lowis). A. V. Wilkinson logged them, though weak, on May 10th QSA3 R4 at 0400.

Nicaragua. YNXW Managua 8190 kcs. heard R4 at 0130 (Lowis).

Costa Rica. TIGPH San Jose logged with R5-6 signals at 0330 (Lowis).

Colombia. HJCQ Bogota sends letter Veri to W. L. Lewis from Radiodifusora Nacional, Ministerio de Educacion Nacional, Bogota. Schedule: 1500-1900, 2200-0415 Weekdays 1600-2000, 2315-0415, Sundays. English at 0150 daily and 0130 Weds. only. Transmission taken by HJCAB, 4850 kcs. (10kW), HJCQ 11680 kcs. (12 kW), HJCT 6200 kcs. (3 kW). This reader mentions that HJCQ was very interested in his report of April 8th as on the following day they had "serious disturbances" which resulted in damage to their studios and all their QSL cards were destroyed and now operating on reduced schedules. W. L. L. was also complimented by this station (also XEBT) on his excellent Spanish. (VFB OM).

Peru. OAX4Z Lima 5890 kcs. heard consistently peaking to R9 around 0400 (Lowis).

Paraguay. ZPA3 "Radio Telem" Asuncion, 11870 kcs. R4 at 2330 (Lowis).

Chile. CE1174 Santiago, 11740 kcs. heard with Italian and Portuguese at 0015-0100 (Lowis).

● **Europe.**

Andorra. Radio Andorra, 5980 kcs. now closes at 2400 instead of 2330 and is received consistently with R9x signals by Lowis.

Greece. Pearce reports "The Voice of Greece" Athens on 15345 kcs. with R7 signals. News in English daily at 2230-2245. SVM 9935 kcs. was also frequently heard around 2100 contacting United Nations in Rhodes.

Iceland. L. W. Lowis reports TFJ Reykjavik on 12230 kcs. heard Sundays. 1615-1645. R8-9 Icelandic only used.

Denmark. OZH2 Copenhagen 15320 kcs., heard testing around 1500 and asking for reception reports to be sent to: Danish State Radio, Short Wave Service, Radio House, Copenhagen. (Lowis).

Germany. "Radio Munchen" Munich heard afternoons in German until 1600. R6-7 on 6080 kcs. freq. and R5-6 on 6160 kcs. (Pearce). FOVA Danish Brigade Radio. Summer Time schedule according to latest veri is 1100-1200, 1400-1600, 1800-1900. On Thursday last period is from 1800-2145 Freq. 6225 kcs. (Pearce).

Albania. P. E. Woolmer has QSL from ZAA Radio Tirana, Tirana 7850 kcs. English session at 2215-2230 daily. Schedule: 2000-2300 daily in Russian, Roumanian, Italian, French, Greek, Turkish, etc.

● **Six QRAs.**

Sidney Pearce has kindly consented to send along a few Station addresses each month and will be listed under the above heading in this article. We trust they are of interest to readers.

SHORT WAVE NEWS

ZQP. Northern Rhodesia Broadcasting Station P.O. Box 200 Lusaka Northern Rhodesia.

XTPA. The Canton Broadcasting Station Canton China.

HP5K. Cadena Panamerica de Radio-difusion Apartado 33 Colon Panama Republic.

ZOH. Office of the Controller of Programmes, Broadcasting Station Colombo Ceylon.

Radio Algeria: 10 Rue Hoche Alger North Africa.

Radio Stuttgart: Neckarstrasse 145 Stuttgart Germany.

● OSLS Received.

Verifications obtained by readers over the last month. E. W. J. Field (ISWL/962), from Radio Damash (12 Mcs.), VUD7 Singapore Radio Dakar (11712 kcs.). Sidney Pearce (BSWL 336): VUD3, LRX1, Radio Wien (7240 kcs.). YVIRV, XGOY, HP5K Madrid (new card) Radio SEAC (6075 kcs.), ZOH, XTPA, ZQP. HCJB (also has new card). TGWA, VLQ3, VLG6, VLR2. John Burden (ISWL/G1535): VLH3, VLH4, VLH5, VLO3, VLR, VLR2, VLG6, QM4 (registered Air Mail letter verie in England), Radio Omdurman SBT, SDB2, TFJ (FB card showing three photos. The Telephone and Broadcasting Building at Reykjavik. The Radio Choir, TX Panel). Printed on same side of card is the Icelandic Flag and wording "Rikisutvarpid-Iceland State Broadcasting Service Reykjavik Iceland," and other side of card gives schedule which states that only Icelandic language is used. John says he has only recently started sending out reports and is just receiving QSLs back. (Looks as if you've made a good start OM !). Fred Pilkington (ISWL/G1717): CKCS and WRUW (Special ISWL BC). P. E. Woolmer (ISWL/G116): ZAA, CKLO, VLA8 Rome (9630 kcs.), Singapore (15300 kcs.), HCJB (12455 kcs.). A. V. Wilkinson (ISWL/G666): CKNC, CKCS, CXA19, PCJ, PGD, WRUL (ISWL BC). D. O. French (ISWL/G426): YFA4. Charles Southall (ISWL/W3-990): HLKA, CXA19, ORY, WRUL (ISWL BC). CKCX, RNE Radio Andorra, HVJ, PJC2. D. Rickers (Wrexham): CHOL, CKLO, CKCX, VLA6, VLB9, VLC, WNRX, WRUL, WRUW (ISWL BC). FZI, HVJ, LRX, Radio Ushuaia. L. W. Lewis (St. Leonards-on-Sea): XEBT, Paris FHE3, Radio Tabriz, HJCQ.

● Honours List.

Please state countries and station heard therein (U.S.A., WRUL), also totals heard and verified for this list. Send in your list and anything that is doubtful will be "blue pencilled" by your Scribe! All time listening. Sidney Pearce comes forward with his list this month and heads the Countries verified with

108. A lot of readers seem to forget that England counts as a Country! Hasn't anyone a BBC veri? How about their Television Sound outlet. Now to the latest standings.

Name and Country	Countries Verified	Countries Heard
S. Pearce (Eng.) ..	108	113
A. Cushen (N.Z.) ..	107	—
J. Beaunoir (Natal) ..	84	105
M. Preston (Eng.) ..	73	119
E. W. Field (Eng.) ..	52	76
J. A. Jagger (Eng.) ..	50	98
A. Levi (N. Ireland) ..	49	54
Dr. T. B. Williamson (Eng.) ..	-47	102
A. V. Wilkinson (Eng.)	41	99
C. M. Southall (U.S.A.) ..	41	76
E. Friend (Eng.) ..	40	62
L. W. Lewis (Eng.) ..	39	74
D. O. French (Eng.) ..	29	62
E. Strangeway (Eng.)	20	71
S. D. Tovey (Eng.) ..	12	56
R. Iball (Eng.) ..	10	55
J. Burden (Eng.) ..	6	104

Quite an impressive list this month. Who will be the winner of the Certificate for the most Countries Verified by December 31st, 1948?

● Acknowledgements.

The Editor and "Monitor" wishes to thank all readers who sent in news last month for this column.

N.B.—All reports and news for this column should be addressed to: Monitor c/o SWN. Reports must be written on single side of paper and bear ISWL No./name on each, by 1st latest.

73 es GUD DX.

* * *

On the Ham Bands—(Cont. from page 196)

Monitor Session 12

Date: August 28th. Time 2000-2200.
Band: 7 Mcs. Target: Anything outside Europe.

Monitor Session 13

Date: September 10th. Time: 1930-2100.
Band 3.5 Mcs. Target: Outside British Isles.

Monitor Session 14

Date: September 19th. Time 0830-1100.
Band: 14 Mcs. Target: Stations outside Europe.

Deadlines are: Session 11 and 12, *September 8th.* Sessions 13 and 14, *October 8th.* That's all, so go to it, OM's!

“from our Mail Bag”

From W. H. Harris, ISWL/G42, Great Bealings, E. Suffolk, comes something unusual. “May I draw your attention,” he writes, “to one of the bad sides of QSL or rather SWL card swapping. The enclosed was sent to me from the so-called CXO Club in Belgium with SWL cards. I have forwarded this ‘document’ because I feel you would like to let it be generally known to members that such a practice exists and you will be only too pleased to warn them against it.” The “document” read thus: “A Brand-New Chain Letter for Smokers! Do you smoke a cigarette from time to time? If so, did you ever smoke a foreign cigarette? We offer an easy way to receive some. Within four days send a copy of this letter to four foreign friends in which you write the name of the second first and add your own at the end. To the first one, who falls off, you send a packet of cigarettes. As soon as your name reaches the top, you will receive a lot of cigarettes.” Perhaps!

* * *

We were very pleased to receive from our old friend David Mitchell, ex-GW6AA, a reception report card from GW6AA/MM reporting reception of G2UK’s signals 350 miles S.W. of Gibraltar. On the back of the card, David writes, “I am using Ivor Vaughan’s midget T.R.F. receiver as described in the *Radio Constructor*. It’s first class.” David’s report card—printed specially for the trip—is certainly an interesting one. On the front after the usual data, it carries the following words:—“I am on my way out to New Zealand via South Africa and Australia, and will be on the air soon with a “ZL” call-sign, when I hope to have the pleasure of working you.” We hope we shall hear you on the air very soon now, David.

* * *

Another nice letter from Barry S. Clarke, now VK5BS, Edwardstown, S. Australia. He says:—“Regarding your query as to if ‘S.W.N.’ is available out here, the answer, I am glad to say is ‘yes,’ although in very strict supply.” He continues:—“So far operation has been restricted to 7 Mcs. but personally I find the dx on this band good. From your corner of the earth (the 7 Mcs. gang may like to know) the Europeans are definitely audible during the early hours of the morning around 0500 (Australian time) corresponding to approx. 2100 hrs. G.M.T. Quite a few times I have called G, GW and GM plus ON4 and F stations but up to now have had no success. On the other hand, night time here is OK for the Pacific side and here

the success story is better with W’s, KL7’s, ZL’s, C7’s, etc.” Barry concludes with the following P.S. “You may like to know that ‘S.W.N.’ does the rounds at the B/C studios and is voted ‘FB’ so if only more could be obtained I know they would be well and truly welcomed.”

* * *

A very interesting letter from Charles Southall, Philadelphia, U.S.A., tells of his experiences whilst giving the recent ISWL Broadcast from WRUL. He writes:—“I arrived in Boston, the morning of the broadcast and at 1700 G.M.T. went over to the studios there. The building looks just like all the other stone houses along Commonwealth Ave., and one would hardly suspect that it houses the modest Boston studio and control room of WRUL. Looking half like an office and half like a private house, my first thought was, ‘Am I in the right place.’ The studio is on the third floor and the control room (being remodelled with new equipment) looks down to it. On one side is room for a few visitors and everything is informal and friendly.

About two hours before broadcast time, Mr. Wyman Holmes and I discussed the proposition in the main office and merely made out a short list of questions we were to ask each other. Not sticking to this at all we only had one musical piece and Wyman asked me something I didn’t have any answer for and I had to think in a hurry! I was scared to death when I thought all of a sudden that I was spelling “Philadelphia” before the mike! After the broadcast—though spelling it right—I received a lot of kidding, hi! Try it sometime—fast! There was no script, though I had SWN, a folder and other hurriedly copied information on the table before me. After I went on the air, I nearly knocked over the mike trying to adjust it, but other than that the broadcast came off without further mishap. Afterwards I pinched myself to see if it was all real, looked at Boston, had clams, etc., for supper, saw a movie and caught the midnight train for Philly. All that week I eagerly awaited for the first letters and I might say that Arthur Levi beat HQ to it by one day, hi! I wish publicly to thank Mr. Wyman Holmes (station manager), Mr. Walter S. Lemmon (President and Founder) and all the WRUL staff for the splendid co-operation shown.”

We at ISWL HQ should like to thank you, Charles, for the excellent job, you made of the broadcast.



K
2
U
N

UNITED NATIONS RADIO GOES ON THE AIR

(From information supplied by U.N. Information Centre)

K2UN, the call letters of the New United Nations Amateur Radio Club's station, stand for "Come to the United Nations"

—symbolic of the Club's aims, which are :

"—to preserve and foster the spirit of fellowship among the radio amateurs of the world—to promote international interest in the UN's role of building a better world, and to build prestige for the United Nations through friendly co-operation with radio amateurs everywhere—"

Already the club has enlisted some 50 Secretariat workers as keen and active members. They devote much of their spare time to operating the station under the supervision of a licensed radio operator. Every evening from 7 to 10 p.m. they transmit and receive messages, developing contacts with amateur stations in all parts of the globe.

A special attraction of the UN station lies in the fact that, with the five continents within its range, K2UN makes it possible for the overseas members of UN Secretariat to talk directly to their families and friends back home.

K2UN has two transmitters, each of one kilowatt, the maximum input-power permissible in the United States. One, operating on the 80 and 40 metre bands, and using "doublet" aerials, covers a large part of the U.S. from the transmission point at Lake Success. The other transmitter, with a rotary beam broadcasting on the 20 and 10 metre bands, is capable of contacting amateurs all over the world.

To reach the amateur studio, you take the main conference corridor of the UN headquarters building at Lake Success. The studio nestles between the Security and the Economic and Social Council chambers—the two nerve centres of the United Nations. Through the glass-panel front you can see its modern equipment. The large console, built

by Temco Co., is the last word in the amateur radio technique, and an object of envy of operators all over the world. It is equipped with a panoramic adaptor, which is a real boon to the new station. This instrument, a kind of traffic guide to the conditions on the amateur short-wave band, indicates how many stations are on the air, how strong they are, and it gives an idea of the amount of local interference, which helps to locate other amateur stations trying to contact, Lake Success.

K2UN follows strictly the traditions of amateur radio—contacts on individual basis, man to man, station to station. Of course no propaganda broadcasts are made, but it is planned to answer individual amateur operators' questions on the United Nations. Another project is to arrange periodic talks between experts in various divisions of UN Secretariat and radio amateurs who in their daily lives practise in similar fields. For instance, an expert from the Legal Department might talk to operators who are themselves lawyers; a Food and Agriculture Organisation official may address farmers in New Zealand and Canada, and a World Health Organisation specialist talk to doctors in Bombay or Brussels.

The United Nations amateurs have received every assistance from the International Amateur Radio Union. This body, numbering some 100,000 members, is very keen on spreading the knowledge of the United Nations, and has already placed its facilities at the disposal of the UN Department of Public Information. Through its channels brief UN news bulletins have been disseminated by short-wave twice weekly to all continents.

By joining this fraternity of enthusiasts of an international hobby that knows no borders, United Nations Radio Amateurs are forging a new link between Lake Success and the wide world.



(Top left) Harvey McCoy, W2IYX, at the controls of K2UN. (Top right) Workmen erecting one of the rotary beams at Lake Success. (Lower) Brig.-Gen. Frank E. Stoner, Chief Communications Engineer, operating the station, with Robert Saron keeping the log.

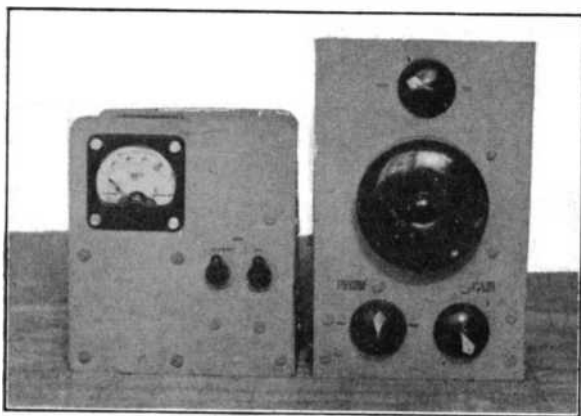
(Photos by courtesy of U.N. Dept. of Public Information)

KEEPING OF LOGS (Cont. from page 209)

Broadcast station logs should be made of the language used, type of programme, and if musical any of the items that can be identified. It is also useful to be able to think in both frequencies and wavelengths and thus obviate the necessity for calculation. It should be noted that the two most important headings, i.e. Call and QSL Received are on the outside, thus facilitating instant check up on reports sent.

My own particular preference is for entering Amateur logs by Call sign, that is Canada, India, and Australia, etc., under V, and Phillipines, Puerto Rico, Guam, etc., under K. Broadcast stations are entered in the other

book under continents. To the real DX enthusiast a graph is most useful. This is easily done by tracing a map of the world on to a large sheet of paper about 45 ins. by 30 ins. By means of coloured pencil dots DX calls can be marked on their country of origin. In this manner it is possible to build up an overall picture of one's DX achievements and it will show which regions are not received too well, in most cases a fault which the realignment on a different beam of the antenna will improve. Each logbook should contain at the end spaces for miscellaneous information such as W states, rare DX, station schedules, and any other data appertaining to short wave listening.



AN A.C. O-V-I MAINS RECEIVER

BY
JOHN WHITEHEAD
G1323

THE set to be described was designed around two salient features—the use of A.C. power and the provision of neat unit construction.

The second of these features is not an essential item in the construction of the O-V-I itself, but mention is made of it for the benefit of those who, like the writer, anticipate extensions to their layout. In any case the present description involves only a separate power pack, an idea common enough these days and one which offers the advantage of availability for driving alternative equipment.

At the outset it was realised that, since the set would be used mainly with phones, great care would have to be exercised in eliminating all traces of hum. This was achieved successfully by extra attention to smoothing and decoupling, the outcome being a background which remained silent up to the oscillation point, the latter being noticed only as a faint hiss. In this respect the 0.001 μ F capacitors across the heaters and the 5.0M Ω resistor on the A.F. grid play a large part. Being designed for maximum gain the popular R.C. coupling was rejected in favour of a transformer and no evidence is apparent of those theoretical pitfalls—hum pick-up and resonance. Several transformers were tried out in this demod.—A.F. coupling position, including a Ferranti A.F.5, but best results were achieved with a 3-1 component which had lived in the junk drawer since being dismantled from a Phillips Rx., of about 1927 vintage and of which further details are unfortunately unknown.

The basic circuit follows recognised practice and the diagram will convey all necessary details. The anode load resistors could equally well be assembled as approximately 2 M Ω and 11 K Ω , the 1+1 M Ω and the 5.6+5.6 K Ω being used only because they were the nearest values available at the time.

Reaction is smooth and controllable, "rough" setting being obtained on the 50 K Ω

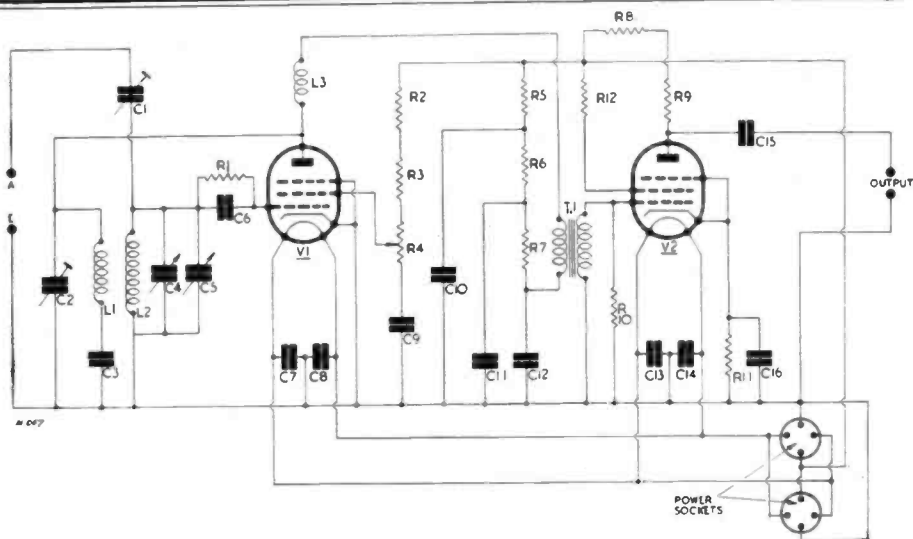
potentiometer in the demodulator screen while fine adjustment during actual signal reception is carried out on the 100 μ F variable capacitor. This combination makes available a wider range of controlled regeneration than is normally available and it is quite silent in action, a point which is sometimes absent in screen potentiometer control of reaction. The 3-38 μ F trimmer gives sufficient by-pass adjustment for the break into oscillation to be preset to a hiss.

Tuning is effectively controlled by the Muirhead dial, but sensitivity is so strong that a separate spreader is essential, the one indicated being a one rotor, one stator, double spaced job, cut down from a standard 50 μ F Denco. Even this small capacity does not give as wide a spread as could be desired and a spreader is being designed on rather novel lines to give full scale reading for each half degree on the Muirhead.

The coils are home wound on Denco Maxi-Q (polystyrene) octal formers. Standard Denco Maxi-Q coils were tried in the first place but, in view of the aerial used (a 5 ft. vertical "fishing rod"), they failed to put the ham bands in a satisfactory position on the dial—in fact they failed to produce any hams at all! The standard No. 4 Maxi-Q coil gives a coverage of approximately 13 Mcs., whereas the rewind coil resulted in a total coverage of 3.6 Mcs., giving 20 degs. of ham signals on the 20 metre band. About 15 degs. of spread was also obtained for the 40 metre hams after rewinding. Coils for 5, 10 and 80 metres are under reconstruction.

The writer will gladly supply details of the new spreader and full coil winding data upon request but it must be noted that results will depend upon a similar aerial rig and it is doubtful if many enthusiasts use such an inefficient aerial system as the one mentioned!

The only departure from conventionality in the power pack is the inclusion of the two S.P.S.T., Q.M.B. switches. Contact is made first on Sw1, allowing the heaters to warm up.



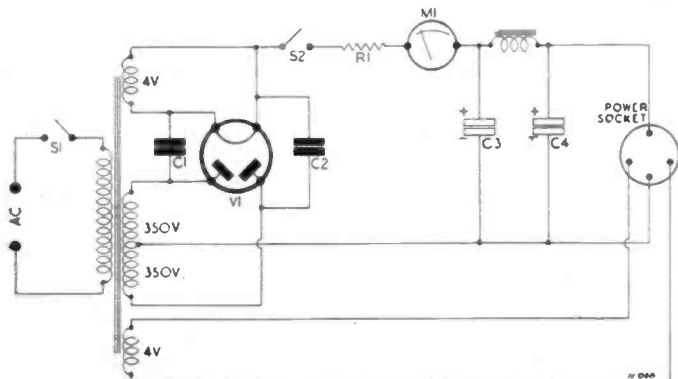
The Receiver Circuit

C1, C2, $3/38 \mu\text{F}$. C3, $100 \mu\text{F}$. C4, $50 \mu\text{F}$. C5, $5 \mu\text{F}$. C6, $100 \mu\text{F}$. C7, C8, $.001 \mu\text{F}$. C9, C10, μF . C11, C12, $.25 \mu\text{F}$. C13, C14, $.001 \mu\text{F}$. C15, $.001 \mu\text{F}$. C16, $50 \mu\text{F}$. R1, $5 \text{ M}\Omega$. R2, $1 \text{ M}\Omega$. R3, $1 \text{ M}\Omega$. R4, $50 \text{ K}\Omega$. R5, $47 \text{ K}\Omega$. R6, $10 \text{ K}\Omega$. R7, $27 \text{ K}\Omega$. R8, $5.6 \text{ K}\Omega$. R9, 5.6Ω . R10, $5 \text{ M}\Omega$. R11, 330Ω . R12, $47 \text{ K}\Omega$. L1, L2—see text. L3, 2.5 mH .

The H.T. circuit is then closed by Sw2, thus avoiding surge voltages. The $3 \text{ K}\Omega$, 20-watt resistor is necessary to give sufficient drop owing to the small current consumption of the two valves. The 150 mA. meter is not essential but was included (since it was already at hand) to give due warning of any overloading when driving other apparatus. The two $0.05 \mu\text{F}$ capacitors are important hum reducers.

As regards the unit construction arrangements the only point, so far as the power pack is concerned, is the termination of the H.T. heater leads at the 4-pin valve socket on the side of the chassis. From this a four-core flex conveys the power to the O-v-I. The

relevant plugs were obtained by cutting down the bases of a pair of extinct valves, one plug being mounted at each end of the flex. The O-v-I carries two 4-pin sockets on the back of the chassis, one to accommodate the leads from the pack, the other to convey power to the next unit in any particular set-up. Each unit constructed will be thus fitted with a power-IN and with a power-OUT socket and, in this way, leads will be kept as short and tidy as possible. Further, when any of the units are not in use there will be no attached leads hanging around. In this connection two points must be heavily stressed—(a) insert all requisite plugs before switching on, and



The Power Pack Circuit

C1, C2 $.05 \mu\text{F}$. 500 v.
C3, C4 $8 \mu\text{F}$.
R1, $3 \text{ K}\Omega$ 20 w.
M1 0-150 Ma.
V1-1W4/350.

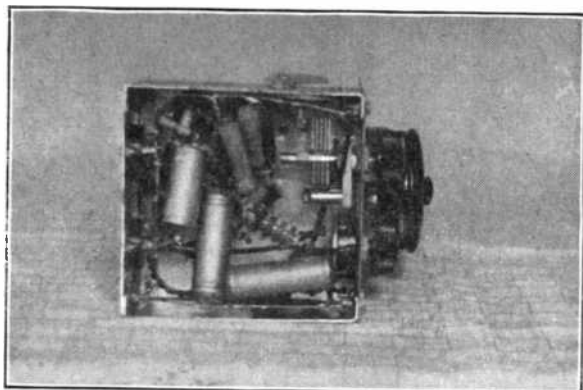


Photo showing under chassis arrangement of components in receiver

switch off before removing any plug. The writer has used this "live plug" method for many months and has never had a shock nor a short, but that does not remove the skull and crossbones! (b) All plugs and sockets throughout the entire layout MUST be wired in the same sense.

The slight anxiety of having to remember these two points is far outweighed by the neat, workmanlike appearance which the scheme makes possible.

The valves used in the O-v-I are both Mazda S.P.41 which, at the moment, seem rather scarce, and the A.F. transformer, as stated, is obsolete. Otherwise the O-v-I components are all readily obtainable at the prices shown in the attached component list. As to the power pack, the valve is a Mullard IW/350. The Metro-Vick transformer is of unknown age and may not now be obtainable, while the origin of the mains choke has been lost in antiquity, but it is of excellent manufacture, a point of importance in obtaining a silent background.

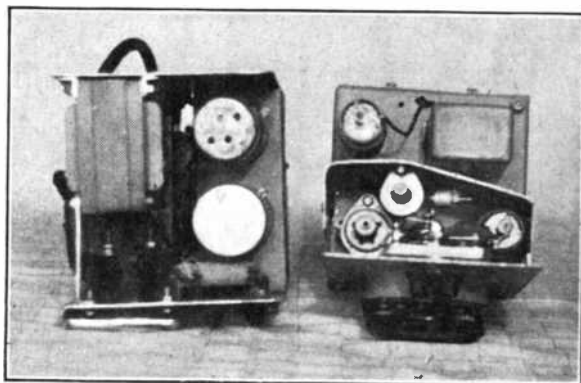
The dimensions of the units are :

O-v-I : Panel	5" x 8"
Chassis	5" x 5" x 2 1/4"
Pack : Panels (front and rear)	5 1/4" x 6"
Chassis	5 7/8" x 2 1/4" x 1 1/2"

Construction is of 18 s.w.g. aluminium throughout.

Finally the writer wishes to stipulate that he does not in any way claim perfection and is, in fact, still experimenting in a variety of directions on the units described. He feels that a great many QRP Rx enthusiasts are missing a "good thing" by sticking to battery power and the present article is put forward solely in the hope of arousing interest in mains-driven one or two valve rigs. Should this object be achieved the writer will be more than pleased to give and to receive any comments, queries or suggestions. He hopes, moreover, that Mr. Jotcham, in organising the League's new QRP Rx section, will include as eligible receivers of the type described—on a two-valve-limit basis.

Above chassis view of power pack and receiver



The O-v-I Component List is as follows:

	£	s.	d.
2 3/38 μ F Concentric air-spaced trimmers		1	6
5 Denco Maxi-Q coil formers		10	0
2 Denco 50 μ F variable capacitors (one for cutting down for spreader) ..	14	4	
1 100 μ F silvered mica capacitor		1	0
5 0.001 μ F capacitors		5	0
2 0.05 μ F		2	6
2 0.25 μ F .. (Metalpack)		4	6
1 4.0 μ F .. (Micropack, 450 v.)		3	9
1 50.0 μ F .. (Micropack, 50 v.)		4	0
1 Denco R.F.C.S., R.F. choke (2.6 mH)		1	6
11 Resistors, $\frac{1}{2}$ watt		9	0
1 50 K Ω variable resistor		4	3
2 Mazda S.P.41 valves	1	5	8
1 100 μ F variable capacitor		4	9
5 Valve holders (1 octal, 2 Mazda octal, and 2 four-pin)		5	0
1 A.F. transformer	say	10	0*
	£5	6	9

The Power Unit Component List is as follows:

	£	s.	d.
1 Mains transformer	say	1	15 0*
1 8+8 μ F, 500 v., T.C.C. capacitor		12	6
1 3K Ω , 20 watt resistor (Bulgin)		3	0
1 Mains smoothing choke	say	1	5 0*
2 0.05 μ F, 500 v. capacitors		2	6
2 S.P.S.T., Q.M.B. switches		3	0
1 150 mA meter	say	1	0 0*
1 Mullard 1W/350 valve		12	6
	£5	13	6

Items marked * are near equivalents at present obtainable at the prices shown.

THE KEEPING OF LOGS

By M. Preston

MOST S.W.L.s will readily agree that to ensure maximum enjoyment from their hobby, the keeping of a detailed log is essential. Not only does it give an overall aspect of day-to-day listening, but is most necessary for the compilation of reports to Amateur or Broadcast stations. The newcomer to S.W. listening is therefore earnestly recommended to compile one from the beginning, and the following hints are offered from the writer's experience.

Firstly two logs should be kept, Amateur and Broadcast, my own preference is for entering all data in a rough notebook and then transferring to the larger books. This method does ensure neatness, a great asset when your logs are inspected by friends or sent to S.W.L. societies. These books should be large and ruled; in size 13 ins. wide and 9 ins. long, they should also preferably be indexed A to Z,

if this particular type is not obtainable it is a simple matter to index pages oneself.

Dealing firstly with Amateur logs; divisions should be made for the following—Call, Location, Date, G.M.T., Frequency, Q.S.A/R. or R.S.T., Q.S.B., G.R.M., CONDX, WX, Dial heading, Notes, Report sent, Rep. Received. Regarding broadcast stations, divisions can be made as follows, Call, Location, Date, G.M.T., Frequency, Metres, QSA/R, QSB, QRM, Condx, Notes, Report Sent, Report Received. Variations of these headings can be made of course, it is all a matter of your own personal inclination. Regarding the heading notes, this should contain (for Amateurs), details of transmission, if in QSO, the stations call and any other relevant items which will serve as a cross check for accuracy to the recipient when a report is submitted. For

(Continued on page 205)



International Short Wave League

MONTHLY NOTES
BY G3AKA

ANNUAL SUBSCRIPTION 1/-

Chapter Activities.

Barnet (Sec. : F. Randall, 15 Windsor Road, Barnet).

Though still a small group, Barnet solidly continue interesting meetings every fortnight. G708 has recently applied for his ticket, so maybe the club will soon have its first transmitting member. How about more members in the neighbourhood joining the gang ?

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

Despite some falling off of activity, natural at this time of year, the club reports well attended meetings. It is planned to arrange for the members to visit premises of radio works and so forth. Meetings are still held weekly at Ingham Road, N.W.6.

Rotherham (Sec.: B. Kendall, 13 Fraser Road, Rotherham).

Membership is still increasing and good progress is reported. A field day has been arranged and a complete programme for the winter is under consideration. We are sorry to hear that the Sec. of the twin-Chapter at Sheffield (J. Blakely) is ill and we wish him a speedy recovery.

Knaresborough (Yorks.)

A report from the Yorks CR mentions that a local Chapter is to be formed in Knaresborough, starting off with the nucleus of six members. A preliminary meeting has been held and the task of locating a suitable club-room is now being tackled. Support from local members would be appreciated. Please write to P. Lumb, 25 Pearl Street, Starbeck, Harrogate.

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

Considerable progress has been made since last month and membership is still increasing. The question of another Chapter in West London (preferably around the Hammersmith area) has been raised and an appeal is made to any member who can offer assistance in this direction. Any offers ?

The first of the monthly Query Bees provided much interest and not a little fun ; the proud winner being W. Jordi. Closely following for second and third places were H. Lee and R. W. Carter. John Clarke read the questions,

Greg Lovelock picked the numbers, G3AKA gave the answers and John Hebborn wielded the gong. (The cast appeared by permission of their respective agents !).

At a recent committee meeting it was decided to launch several schemes. The first is a Construction Exhibition, a prize being offered to the builder of the best piece of gear exhibited. A judging committee is to be appointed. A contest for the design of a QSL card for the club station has also been announced. The club will also take part in the "SWN" Monitor Sessions and is raising a team for the Contest.

Two visits to radio factories have been arranged, details of which will be published shortly. Work on the transmitter and receiver is progressing satisfactorily.

Ipswich (Sec.: H. W. Dean, 11 Royal Hospital School, Ipswich).

The Chapter is growing steadily and is in a good position with regard to gear ; HQ having a Peto Scott, an R107, a Canadian 19 Set, a BC 348 and two other receivers !

A successful field day was held on June 13th, with four stations taking part. Each station had to provide its own gear and points were allocated on a points system. Listening was from 1400-2300 and resulted in a victory for Derek Sellen, who, using his now famous one-valver, knocked up 214 points (which, incidentally, included some new countries for him !). J. E. Dean came in second with 171 points, H. W. Dean was a close third with 160, whilst David Webb fell into last place with 92 points. All operators, except J. Dean, had second ops.

Since the field day was so successful, the Chapter forwards the suggestion that we hold a similar listening field day on Inter-Chapter lines. As far as we at HQ are concerned we are quite prepared to draw up the rules and organise the contest. We would appreciate a few lines from other secretaries who are interested in the project. What say, OM's ?

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

A general meeting in order to discuss the formation of the Chapter and to elect a committee has now been arranged. Will all Manchester members please note the date—

Friday, August 20th, at 7.30 p.m., to be held at the secretary's home address. The secretary appeals to every member in the city, who is interested in the Chapter, to make every effort to attend this preliminary meeting. He is doing everything possible to form a club for your benefit, so please *do not let him down*, OM's. It would be appreciated if members would either write to Maurice or else phone him (home number) at WYThenshawe 3158. We are relying on your co-operation !

Mansfield (TR : F. P. Atkins, 11 Lord Street, Mansfield).

Activity in Mansfield does not warrant the formation of a club, although several members hold informal get-togethers. It would be appreciated if anyone living within easy reach of Mansfield would contact the TR so that a club could be formed.

Dagenham (Sec. : P. E. T. Redman, 108 St. Andrews Avenue, Elm Park, Romford.)

The South-West Essex Chapter's monthly news-sheet proves that the club is going ahead nicely. Talks recently delivered have been " Radar " by Ken Goodley, " Workshop Practice " by J. H. Davey and a hectic discussion, started by Peter Redman, on "Straight v. Superhet " almost ended in a revolution ! At a recent general meeting, these decisions were taken :—

Further activities to include morse tuition for both beginners and the advanced ; Basic Radio talks to be given every other week with more general talks dovetailing in ; Raffles and open discussions on controversial topics to be held frequently ; A portable receiving field day to be held. It was also decided to arrange visits to the Kensington Science Museum and to the RSGB Amateur Radio Exhibition.

As the result of a ballot, the details of future meetings are now every second Tuesday (in place of Wednesday). A quarterly subscription of 2s. 6d. has been fixed. A suggestion box is the latest innovation (we hope you get no embarrassing suggestions !).

A club receiver is now in the course of construction and it will be a battery-operated superhet built with components supplied by the members themselves.

Finally, the secretary assures a warm welcome from any new member in the district who would care to drop in and meet the lads.

Clacton (Sec. : R. J. Appleby, 29 St. Andrews Road, Clacton).

The CR, Ken Goodley, and SW Essex DR, Peter Redman, are co-operating with the Clacton Secretary in their endeavours to hold a general meeting in Clacton in order to discuss (a) the development of the ISWL in

Essex, and (b) the formation of a club in or around Clacton. This note is, in brief, an appeal to all Essex members to rally round and help your reps. in building up the League in your county. If you live in or around Clacton, please write to the Sec. (Address in heading). If outside the Clacton area, please contact your TR at 34 Blenheim Avenue, Valentines Park, Ilford.

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

The last general meeting went smoothly enough, except for a minor " flap " when it was discovered that the morse oscillator was missing ! The talks on the questions set at the last Amateur Radio Exam were continued by Mr. Needham, the series providing much interest to members. After checking logs for the last listening periods, it was found that J. Waters came home first with 124 points. Arising out of these sessions, S. Edmunds raised the point that little interest was shown by members in the 28 Mcs. band and promptly volunteered to take along his converter to the next meeting just to show how easy it really is !

Enquiries are afoot to arrange a visit to the Droitwich transmitter and we hope all turns out well. R. Nicholson has agreed to give a talk on " Station Construction " for the September meeting.

SCOTTISH NEWS

From Jack Tompson (15 Chambers Street, Innerleithen, Peebleshire).

This month, Glasgow is to the fore with news. The TR is negotiating for a club room and providing he gets sufficient support from members, the first Scottish Chapter will soon be formed. So, Glaswegians, please get in touch with you TR and play your part in getting your club formed. The QRA is W. A. Gorman, 15 Northburn Street, Glasgow, C. 4. Write now !

Activity in Scotland as a whole is rather low, particularly North of the Forth, although Edinburgh is progressing. We need, urgently, representatives for the Scottish counties and for large towns, so if any GM member has any spare time please drop me a line and help strengthen Scotland's position in the League.

It is hoped to put three Scottish teams in the field for the forthcoming ham band Contest, but we must have a few more volunteers—and quickly ! So, what say ?

In closing, I would like to mention that any GM member, not catered for by a local representative, is invited to drop me a few lines from time to time. Let me know what you are doing, OM's, and help us to plant Scotland well and truly on the ISWL map.

QSL CORNER

A Resume of Bureau Activities.

The first news this time is of a general re-organisation of the Bureau. The Incoming sections are handled jointly by A. Baldwin and F. Headland of the East London Chapter. The Outgoing sections are catered for by G. Lovelock. An appeal for assistance, to help in handling the outgoing cards, which has become too heavy for one person, at a West London meeting brought forth two helpers, to assist in the mailing of outgoing reports. The victims were Geoff. Ford and M. Beresford !

From Frank Headland we get a few appeals directed to members using the Bureau for QSL'ing. (a) Please send envelopes of a reasonable size. Many envelopes submitted would not accommodate the smallest QSL card ! (b) Please write, in large letters, your ISWL numbers on the top left-hand corner of your SAE's. (c) Make sure that you have your ISWL number prominently displayed on your SWL cards. This would prevent us getting QSL's addressed to "ISWL Bert" or "Mr. Ron" !! Also, who are the members, for which we hold cards, addressed as "G-SWL Zone 14" and "SWL R1155" !! It is obvious that much time and energy have been wasted simply due to thoughtlessness in not making sure your name and number are clearly shown. (d) We appeal, in fact we Beg, the following members to send along SAE's in order that we may despatch cards which we hold for them. Is it too much trouble to send a supply of envelopes to collect the cards for which much trouble was originally spent ? We ask this because many of the numbers listed below have appeared several times !

G170, 173, 255, 274, 292, 347, 407, 501, 638, 647, 706, 710, 713, 748, 760, 811, 814, 815, 825, 847, 858, 897, 950, 962, 1019, 1036, 1329, 1450, 1459, 1462, 1474, 1504, 1649, 11662, 1715, 1874, 1896, 1906, 1984. Also G1-395.

We cannot hold these cards indefinitely, so please let us have those envelopes !

Finally, we would like to reiterate the great advantages gained by using the Bureau for your QSL's. Why not read again the data on the Bureau contained in your ISWL information sheet ?

Incoming Cards.

It would be impossible, in the restricted space available, to list all the cards we have had for members, but we are going to attempt to mention some of the more interesting ones.

Italy has been the most prolific QSL-er this time. Cards have come in from I1AYN,

AEW and AHK (all Sardinia) and IIAEV (Sicily). I1KZ and I1FP both oblige with comic cards, whilst I1AGR has the most original one we have yet seen—it is *Triangular* in shape ! A great surprise were the cards from I3BBC—which must have sounded awfully like a phoney ! Other I's of note were WN, AKF, SZ, RM, GX, ON, SJ, AMU, BMC, etc. I1PH proved an unusual card in blue and orange.

The OK's have been well to the fore, the most interesting being from OK1PVV—the station of the Prague "Sample Fair." A striking batch from 1SC and a nice one from 1WF show that the OK's have some good designers. Amongst the others we note 1RW, 1FF, 1EA, 3ZL, etc.

France supplied very many cards, 8EA's card showing the op praying for a return QSL, F300 having a map of France and 8VK provided a card with a central picture advertising French wines !

Only two batches from Peru, but both cards were very attractive. OA4AT is a modernistic design, very neat, and OA4M shows what to us looks like an Inca working a portable ! The warrior is complete with a llama (?) who is looking after the RX. In multi colours, this is a very fine card. Whilst in Latin America we note cards from CO2KO, LU3DH, XE1BC (striking card) and HP2CA. The latter was working /MM and was operated "by a former American freighter now registered under Panama flag. Is not a license Panamenian Amateur radio station" !

Holland supplied a few interesting ones like those of PAøJA (photo), RU, BC, WV, CT (very FB), KI and UX. PAøCT has a view of a lake and buildings—most attractive. Denmark waded in with a few nice batches, such as those from OZ7BW (showing a four-master ; a boat, not an aerial system !), 7UU, 7EH, 7FY, 7KC (views) and OZ3A. The latter had Danish flag emanating from QRA and shows map of Denmark.

Other Europeans of note were those from CT1SQ, 1QY (view of castle in purple), 1QN ; HB9GS, 9FMM, 9AG ; LX1BT and LX1AS, the latter still using his pre-war design of an ink sketch ; D4ABA, 5AA (French Zone) ; OH6NS (view of shack and op), 2RY (very attractive modern design), 2SH and 60B. From Hungarian hams we have had large numbers of fine cards, notably from HA2C, HA4AB, 4EA, øAG, øSN, øLG and 8Z. Some of these HA cards are really superb. We were pleased to see a batch from SM1MM, which is on the island of Gotland—the most difficult Swedish district to hear. Also from this country came the cards of SM6KA (a most elaborate affair and nice too), 5IQ (another comic card) 5WI, 3UO, SHF1, etc.

The elusive Russians have come forward with cards from but four stations, viz, UA1KBB, UB5KAB, UA1BE and UA1KBA. The ones from IBE show a whisky gent in an elaborate background and UA1KBA's card depicts various buildings and a large medallion.

The best of the batch from Africa are from CN8BA (another nice fat batch), EA9AI (who now has a new card), MD1H, MD5DA (showing blue camels (!) and pyramids with the call in gilt) and MI3ZJ, the latter being a novel idea. The card is black all over except for a panel in the centre which depicts some form of animal life presumably abundant in Eritrea. VQ4ERR and VQ3EDD also come forward with batches.

Others of particular note have been PK4VD, VO4X and VO1AC (ink sketch of fishing boats), VP4TAI (plain but very neat), VP9T, VK2AGU (two photos in a home-made type of card), ZS1CN, still using his pre-war type of card with his original call (ZU1T) overprinted. The back of this card is literally crammed with data. ZL4FO and ZL2GX obliged from down under, the former now having a kiwi in place of his own photo on his famous card. Winding up, here are a few notes on some of the best W cards passed through the Bureau: W6FZQ has a nice card in silver and black; W6FL ("six fancy ladies") has a card appropriate to the ops version of his call phonetics!; W4AHF sends a batch of his fine photo-type cards; 2BXA, 9YFV, 8KML, 1CJH and 7JEF/KG6 (printed on the card as "/K66") are a few more who have made work for the Bureau managers.

Bon Voyage: Good luck to Dick Paterson, GM1703, on his journey to Nyassaland. The TR for Edinburgh expresses his appreciation of the work done by Dick whilst he has been in Edinburgh.

TRADE NOTES

EDDYSTONE 640 PRICE REDUCTION

Stratton and Co. Ltd., announce that the price of their popular Eddystone 640 Communications Receiver has been reduced to £27 10s.—free of purchase tax. In order to enable as many amateurs as possible to enjoy the possession of one of these receivers, Stratton's are also prepared to offer very generous Hire Purchase facilities, details of which can be obtained from their Registered Agents.

The characteristics of this receiver are too well-known to amateurs to need further

comments from us. May we remind readers that it is designed specifically for Amateur Band use, covering all bands from top-band to ten. It is a nine-valve job, with R.F. stage, noise limiter, B.F.O. and crystal filter and all the other usual refinements required by the discriminating amateur. At this new low price, we feel certain this receiver will become one of the most popular to be found in British Amateur shacks.

An interesting addition to the Eddystone range of receivers is the '670' Marine Receiver. This receiver is intended for "personal cabin use," for those who are at sea and are thus often out of range of medium-wave broadcast stations and who therefore require a reliable short-wave receiver. The frequency coverage is 30 Mcs.—522 kcs. in four bands and the receiver has many unique features, such as AC/DC operation on voltages varying from 110-230, interference filter unit, provision for headphones or 'personal speaker' etc. The price is £37 10s.—free of purchase tax.

* * *

We have received from the Woden Transformer Co., Ltd., copies of their latest catalogue leaflets describing their well-known mains transformers, chokes and modulation transformers. Types and sizes to meet all amateur requirements are available and those contemplating a rebuild needing components of this type are strongly recommended to send for these leaflets before making their purchases. Details are also available of a very useful range of standard replacement mains transformers most useful to the service engineer and a further interesting line is a series of auto transformers rating from 60 to 1000 watts. This literature and the latest retail price list can be had on application to the firm at their Moxley Road, Bilston, Staffs, address.

Q.S.L. Cards

We have received samples of some very attractive SWL cards from Messrs. Wood's of 11 The Butts, Worcester. The cards sent us are those used by several ISWL members in Worcester and show the cathedral in the centre and the city heraldry above the circular block of the cathedral. The cards are printed in three colours and are large enough to accommodate quite a large amount of data. We understand from Messrs. Wood's that similar cards for members residing in other cities and towns, and showing appropriate half-tone illustrations, are obtainable. The price of these cards is £5 per 1000. Though this firm is specialising in the designs mentioned we are informed that QSL or SWL cards of any design would be undertaken. Enquiries will be promptly dealt with and samples sent on request.

Radio Melange

A pot-pourri of current topics

NOTES AND NEWS FROM NORTHERN IRELAND.

By "Emerald."

Northern Ireland with the amateur prefix "GI" has quite a large following of amateur transmitting and short-wave enthusiasts. In the former there are over 100 licensed amateur transmitters, these being situated mainly in the area in and around the capital, Belfast. However QRM is not severe as there is a good measure of the "ham" spirit and a considerable lack of VFO's (whether for the best or worst can't be said ! !).

In "GI" four clubs exist to cater for the enthusiast, two of these being in Belfast, the others being in Londonderry and Ballymena. Perhaps the oldest radio club in the British Isles is that of the City of Belfast, TMCA (GI6YM) founded in 1922 and which celebrated its silver jubilee last year. This club has upwards of 100 members and is on the 3, 5, 7 and 14 Mcs. bands (CW at present).

Prior to the war the component position in "GI" was very favourable, but post-war conditions have produced little or nothing in the way of a varied selection of components except in the case of ex-W.D. surplus. Consequently orders have to be placed with firms in England, thus necessitating three weeks to two months before delivery can be effected.

On the post-war return of transmitting facilities a few amateurs made good use of the 28 Mc. band then along with 56 Mc. being the only two bands licensed for transmitting. Upon the restoration of the pre-war frequencies, however, most amateurs got going and for a while two ardent old timers GI3ZX and GI5OR held nightly skeds on the top band.

Keen dx-ers GI5UR and GI6TK are usually to be found on "twenty" or "ten" along with 5QX, 5TK, 3VQ, 3ZX and 5SJ. These dx-ers occasionally visit "forty" when condx are bad on "ten" and "twenty" and seem to be quite as successful as on the HF bands. "Eighty" and "forty" are the most used bands in "GI" and for some months past GI6YM transmitted morse practices weekly on the former band. Unfortunately, insufficient support and reports on the transmissions caused the project to be discontinued.

At the moment of writing an awakening interest in V.H.F. work is taking place. GI6TK, 6VU and 3ALT are already "on"

the 56Mc. bands and each hope to have the honour of being the first to get a signal across to "G" or "GM" on this band. GI2FHN having built a 56 Mcs. convertor, hopes to join the "hunt" in the near future. The latter's brother is at present in "G" and licensed under the call GI3BGJ.

* * *

BUILT SECRET RADIO SET IN JAP CAMP

Tan Bin Hussain

SWN Far East Correspondent.

Governor Gimson of Singapore recently presented the British Empire Medal to Mr. Thomas A. Dineen, an ex-sergeant in the EMS Volunteer Force before the private session of the Singapore Advisory Council.

A citation says Mr. Dineen was at a camp on Blakang Mati Island near Singapore from May, 1942. Owing to his electrical knowledge he was able to construct a radio receiving set. He was in charge of the official secret wireless news which disseminated throughout the camp. In October 1943 an unexpected search just missed locating the set and as a result the set was destroyed. Mr. Dineen then constructed another set actually in the building in which he worked with the Japanese. He was aware at the outset of the risk he was running if detected by the enemy. The fact that the camp was able to receive and distribute authentic news was of great assistance in keeping up the spirit and morale of troops on the island which was isolated from contact with other prisoner-of-war camps.

The citation says Mr. Dineen showed a high courage and devotion to duty.

Listeners will know him more by his pre-war call sign—VS2AK of Kuala Lumpur.

* * *

A cutting taken from the Burton *Daily Mail* recently, sent us by Eric B. Hardy, Hon. Sec., Burton-on-Trent Radio Society, makes interesting reading:—

"An instance of how amateur shortwave enthusiasts have intervened in emergency with outstanding results, has been brought to my notice. A Burtonian and a Dutchman were talking together from their homes recently in radio morse, and after chatting on technicalities, the Dutchman signalled an S.O.S.

"Two children here are seriously ill" he said. 'The doctor has recommended a special serum which we can't obtain in Holland. Can you do anything to help in England.' It was late in the evening, but the Burtonian left home immediately in search of help from local doctors and chemists. Next day, the requisite quantity of serum went by air to Holland. News came by radio to Burton that it had arrived and was being administered.

"Later, a letter arrived from the parents, written in Dutch, stating that the children had now recovered, and the balance of serum was being used by the doctor to cure other children. The Dutchman and the Burtonian will meet for the first time personally, next Friday in Burton."

* * *

RADIO HELPS MOTOR RACING

BRITISH RACING DRIVERS ADOPT RADIO-TELEPHONY

Radio-telephony, the uses of which are rapidly increasing in every industry or service in which two-way contact has to be maintained between mobile units and a central base, was applied to motor racing for the first time on Tuesday, 25th May, in the Isle of Man, where three H.R.G. cars competing in the Manx Cup race at the British Empire Trophy meeting were fitted with Pye V.S.W. radio-telephone units.

Peter Clarke and his team, Jack T. Scott and E. W. Holt, used throat microphones and earphones instead of the standard hand mikes and loud speakers; the mobile units, weighing only 40 lbs. and measuring less than one cubic foot were installed in the cars and the master station was in the pits. Developed by Pye Telecommunications of Cambridge from war-time tank equipment, the units are shock-proof and fully tropicalized.

After this "dress rehearsal" at the Isle of Man, the two-way radio telephony system of Pye Telecommunications Ltd. was given a searching trial at Spa, Belgium, on July 10-11, when pits-to-car R.T. had its first test in a race of long duration. The H.R.G. team captained by Peter Clarke consisting of three cars and six drivers, was "on the air" to the pits for the whole 24 hours of the Spa-Francorchamps race.

Racing on an undulating course which contains the longest and fastest straight in Europe, the team were out to discover the effect of constant radio communication on drivers submitted to intense strain by both day and night. Each driver completes in turn 30 laps of the triangular course, taking about three hours, during which he would ordinarily be out of touch with everyone except by means of hand signals.

The mobile radio which was used was exactly the same as that employed extensively in taxis and industry, and by the *Daily Express* to transmit news and pictures. It is an amplitude-moderated set operating on fixed frequencies between 27 and 125 Mcs.

A new development is expected to be a transmitting or receiving set for use in very high speed racing. Pye have already designed a mobile set weighing four pounds which, carried in the driver's pocket, operates not like the present transmitter-receiver, from the car battery, but from a dry battery with a life of ten hours.

* * *

GERMAN LICENCES

Gerhard Geissler, ISWL/D-2069, writes to say that licences are now being issued to German civilians for the operation of amateur transmitting stations. Gerhard, together with some ten ex-D4 hams, recently took the examinations—which are similar to those held in this country, *i.e.*, a morse test and a theory exam. It is interesting to note that holders of pre-war transmitting licences are NOT exempt and must sit both tests, which to our mind shows that the authorities do not intend to leave any loopholes that occur when "exemptions" creep into the picture! No indication has yet been received as to what form the call-signs will be issued under but we hope to have news shortly. In the meantime, if you hear or work any unusual D calls they may easily be the first officially licensed German hams to go on the air since the war.

* * *

NOW RELEASED

Good News for League Members

The ISWL badges are now available. We took delivery a few days ago and all outstanding orders have been dealt with. For those who did not read the "preview," here are the details again.

The badge measures 1 inch by $\frac{3}{4}$ inch and is of the standard ISWL insignia, as the rubber stamp, and is in three colours. The background is in amber, the "ISWL" and flash (and the top and bottom panels) are in green and the outlines are in gilt. Two types are available: (1) Stud type, for fitting to coat lapels and (2) Brooch type, for pin fitting. This type is ideal for the YL or XYL! The price for either type is 3/6d. Please state preference when ordering.

Those are the details and we advise members to order early in order to avoid disappointment, since supplies are restricted on this first batch. Wear the ISWL badge and spread the gospel! As an office wag said "Use the League badge and get the New Look!"

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.

- | | | | |
|-----|---|-------|------|
| 3 | 500-0-500 v. 150 m/a. 4 v. 2½ a. 4 v. 5 a. 4 v. 1 a. | Price | 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. | | 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.5. (Amberst 4723.)

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

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

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

Write for details to:—The Principal:

Professor H. F. TREWMAN, M.A.(Cantab),
M.I.E.E., M.I.Mech.E., M.Brit.I.R.E.

E.M.I. INSTITUTES LIMITED
Dept. 50, 43 Grove Park Road, Chiswick, London

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

E.48

Have you had your
copy yet of the ...

DATA BOOKLET No. 1 ?

THE
BASIC SUPERHET

describes

- THE BASIC RECEIVER
- Adding a BFO Stage
- Adding an RF Stage
- A Preselector Unit
- Valve Connections
- Coil Data

Available from local booksellers at
1/-, or direct at 1/2 from

AMALGAMATED SHORT WAVE PRESS LTD.
57 MAIDA VALE, W.9

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 with 500 volt 200 mA power pack, brand new at £12. 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 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

Supplied by return of post

We hold stocks of all these

AMERICAN PUBLICATIONS

THE RADIO AMATEUR CALL BOOK!
Latest Edition. Call signs, names and addresses of over 100,000 Hams throughout the World. Order your copy at once. Owing to new Government import restrictions we cannot guarantee future supplies. PRICE 10/- Post 9d. extra

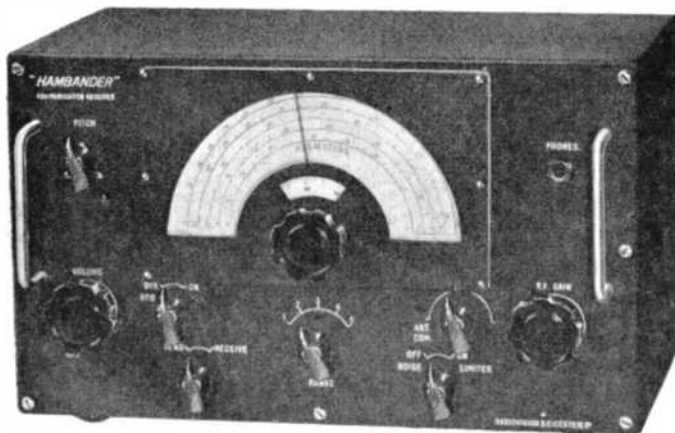
THE RADIO HANDBOOK—11th Edn.
This latest all new edition, greatly enlarged page size, contains everything the Ham wants to know. Constructional articles on Receivers for all bands, low and high power Transmitters, oscillators, buffers, modulation and speech amps, etc. Aerials for multi and single band operation, etc. Tube tables, large photographs, etc., etc "It's all in the Radio Handbook." PRICE 17/6

Either of the above excellent publications supplied by return of post.

"CQ"—THE RADIO AMATEUR'S MAGAZINE. An American "Ham" magazine, packed with dozens of articles for the Amateur and S.W. listener. 12 Large Monthly issues 17/6

DALE INTERNATIONAL
Publications, Ltd.
105 BOLSOVER STREET, LONDON, W.1

The COMMUNICATIONS RECEIVER YOU HAVE BEEN WAITING FOR • The



"HAMBANDER"

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

£22-10s.

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

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

SALE. Switch units, three switches in bakelite box. Panel mounting $3\frac{1}{2} \times 1\frac{1}{2}$ slot. 1/- each. Insulated covered terminal blocks, two-way, large; $2\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$, 2/6 doz. Small; $1\frac{1}{2} \times 1 \times \frac{1}{2}$, 1/9 doz. Spring biased key switches, 4 makes, 4 breaks, 9d. each. 2-inch rotary beam element stand-off insulators, to fit $\frac{1}{4}$ -inch rods, 2/- doz. Valves:—Type 53, 59, 46, 47, 210, 83, ACHL and SP61's, 4/- each. 12J5, 1832 and 6SG7, 6/6 each. Meters:—Ferranti 0-10 v. A.C. £1. 0-200 m/a r.f., 5/- 20K 100 w. resistors, 5/-. $3\frac{1}{2}$ -inch Celestion speaker in mike stand, 15/-. 4 mfd 1500 v. wkg. capacitors, 5/6. 2×4 v., 3a. fil. trans., high voltage insulation, 14/6. 200 m.a., 10 H, choke, 7/6. Selection large ceramic stand-offs; SAE for details:—Ben Raithby, GBGI, School House, Helpringham, Sleaford, Lincs.

ELECTRIC RECORD PLAYER—Alba Maestrophone—and 4-valve amplifier with 8" Marconi speaker. Best offer over £14. 29 Chapel Road, Penketh, Warrington, Lancs.

B2 RX TX POWER PACK XTAL spares, complete as new. Best offer over £15. Box 1032.

SALE : Eddystone Short Wave Coils, 9-14 metres (one), 48-94 metres (two), 24-48 metres (two). Six-pin, 3/6 each coil. Eddystone tuning capacitors, as used in All World Four, grid, bandspread and reaction—4/- each. 6 inch PM speaker, tapped input—15/-. Ecko Eliminator, 110 v. AC input—5/-. Eddystone chassis, valve holders—1/- each. Eddystone 15 uF tuning capacitor—3/6. LF Transformers (Ferranti AF3)—2/6 each.

1224A Receiver as new, £4 5. Ecko Eliminator, 230 v. input, 150 volts output—15/-. variable tappings. — E. W. Jordi, 103 Gloucester Road, South Kensington, London, S.W.7.

SALE : 7-Valve All-Wave Philips Communication Receiver, good condition, £17 10. Greenmead, Brockenhurst, Hants. 'Phone 2210.

SALE. Valves to clear:—EF50, VR136, VT 105, VT 52, VR53, VR54, VR55, VR57, VR116, VR99A, HL22, Pen A4, Pen B4, MH4 at 2/6 each. 7Q7, 7R7, PT15, VS110, 4074A, 6L7, 6Q7G, 6SN7, 12E1 at 3/6. Pair 801s 10/- Transformers:—750-0-750 v. 250 mA with 4 v. 3 A, winding, 43/- c.p. 300-0-300 v. 150 mA, with two 4 v. 3 a. fil. 10/- 600-0-600 v. 250 mA with 4 v. 2 a., 4 v. 6 a., 4 v. 3 a., and 4 v. 4 a. all c.t. 30/-. 4 v. 3 a. c.t. 4/6. 5-inch speaker in b.c. cabinet, 10/-. Large G.P.O. Type brass key 5/-. 4 mfd. 1000 v. d.c. wkg. capacitors, 5/-. 2 mfd. ditto 2/6. Cylcon, 0.001 split stator Ditto single section 2/6. "Stonehaven," Horncastle Road, Boston, Lincs.

WANTED.—12 v. or 6 v. Accumulator, Good condition but cheap. Pyatt, 3 Oakley Avenue, Ealing, London, W.5.

HALLICRAFTERS.—S-22R. Skyrider Marine, £20. J. Turnbull, 40 Acris Street, Wandsworth, S.W.18.

URGENTLY WANTED: Q.S.T. Jan. Issue, about Q. Fiver. Will buy—Northcott, 60 Harwell Street, Plymouth.

TRADE

FLASH! Amazing news. At last we can supply the well-known Eddystone "640" Communications Receiver at the very low price of £27 10. Brand new and fully guaranteed for 12 months. Hire-purchase terms are available. Write now. Southern Radio & Electrical Supplies, 85 Fisherton Street, Salisbury, Wilts.

CALL BOOK. Complete list of HAMS throughout the world 10/-, plus 9d. postage. Radio Handbook latest edition 17/6. post paid. Order now, the above are in stock. C.Q.—the Amateur magazine published in the U.S.A., subscribe now, only 17/6 for 12 large monthly issues. Dale International Publications, 105, Bolsover Street, London, W.1.

KEEN AMATEUR has interesting offer for any ISWL member who wishes to obtain any items of ex-WD equipment. Send your enquiries and needs, early, to Box 1034.

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



We have the finest stock of
British and American radio
books in this country

Write or call for complete list—

THE MODERN BOOK COMPANY
(Dept. SWN)

19-23 Praed Street, London, W.2

"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 in it,
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.)

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

SHORT WAVE (HULL) RADIO

G5GX

SECTIONAL AERIAL MASTS

33 Feet (also half wave vertical on 20) complete with guys, picket, halyards, insulators, etc. In canvas carrying bag. Carriage paid.

ONE for £3 : 10 : 0

TWO for £6 : 10 : 0

FOUR for £12 : 0 : 0

WHY NOT MAKE TWO GOOD 60 FEET MASTS

BEAM INDICATOR UNITS

2 in. dial 20/-, plus 1/- for packing and carriage

3 in. dial 25/-, plus 1/- for packing and carriage

10 WATT C.W. TRANSMITTER

As reviewed in "SHORT WAVE NEWS"

now available at £10 : 5 : 0

FROM

SHORT WAVE (HULL) RADIO

30-32 PRINCE'S AVENUE, HULL

Telephone - 7168

SHORT WAVE CONVERTORS. EX-RAF RF UNITS. Complete ready made converters that require little alteration. Normal voltages, input. TYPES 24 and 25, cover 15-30 Mcs. and 30-45 Mcs. respectively, and are complete with 3 valves, slightly used models at 16/6d. each, or **BRAND NEW IN MAKERS' CARTONS 25/-** (postage 1/6d.). TYPES 26 and 27 cover 45-60 Mcs. and 60-85 Mcs. respectively. They are fitted with a 3" illuminated slow motion dial, and are also complete with 3 valves. **BRAND NEW IN MAKERS' CARTONS, ONLY 35/-** each, or a few slightly used TYPE 27 only at 27/6d.

TELEVISION CONSTRUCTION UNITS. Two items of ex-RAF RADAR gear which will make a television receiver with little alteration, and the provision of a power supply. ITEM 1 is the R 3118 1½ METRE SUPERHET RECEIVER. The I.F. is 12 Mcs. and the I.F. Transformers provide for 4 Mcs. band width. This unit incorporates its own power supply for normal AC mains input, and it is complete with 15 valves as follows: 6 type SP61, 3 EA50, 2 EF54, and 1 each EC52, P61, 5Z4G, and Y63 Tuning Indicator. **ONLY 79/6d.** (carriage etc., 15/-).

ITEM 2 is the RADAR INDICATOR TYPE 6. This incorporates a 6" Short Persistence Tube VCR97, and 4 valves Type EF50, and EB34. **ONLY 67/6d.** (carriage etc. 15/-). **EACH PAIR OF THE ABOVE UNITS IS SUPPLIED WITH A COPY OF THE CONSTRUCTION DETAILS FOR "THE £15 TELEVISION RECEIVER."**

C.W.O. Please

S.A.E. for lists

U.E.I. CORP.

The Radio Corner, 138 Grays Inn Road, London W.C.1

(Terminus 7937)

(Open until 1 pm. 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

SOUTHERN RADIO

AND ELECTRICAL SUPPLIES

EDDYSTONE—Semi-automatic morse key. Now available in limited quantities for immediate delivery. Early ordering is advisable. £3 17s. 6d. "640" and "504" receivers, modulation level indicator, "S" meter, rack equipment and other lines available for immediate delivery.

LABGEAR—Four band 150 watt coil turret. 3.5 to 28 Mcs., £5 12s. Power Amplifier Tuning Assembly, with 50+50pF split-stator condenser of 0.05 inch air-gap coil base and swinging link for the DSL type 150 watt coils, 55/6. NI Neutralising condensers 0.5-4 pF, 4000 v. Pk Wkg., 7/6.

FEEDER CABLE—300 ohm ribbon, 9d. yd., 80 ohm twin 7½ d. yd., co-axial 75-85 ohms heavy duty 10d. yd., or 8 yd. coil 5/6.

EX-GOVT. EQUIPMENT

R1132 VHF receiver 100-124 Mcs., 10 valves plus voltage stabiliser, precision slow motion tuning "S" meter, BFO, etc. Complete with circuit £4 19s. 6d., plus 10/- carriage and packing.

R3515 21 valve unit, contains 1F strip suitable for television and host of components. £3 7s. 6d., plus 10/- carriage and packing. Test Set 74. Special purpose scope with VCR139A 2½" diam. C.R.T., 230 v. AC mains power unit, 5 SP61 valves, 1 6J5, 1 6Q7, 1 EA50, 1 VR135, 1 5U4, and 1 high voltage rectifier. Easily converted into an oscilloscope, £5 19s. 6d., plus 15/- carriage and packing. Rotary Converter Type 195. Input 24 v., Output 230 v., 50 c. AC, £5 19s. 6d., plus carriage and packing.

60 page illustrated Ham Catalogue, 9d. Bargain List 3d. Both post free.

85 FISHERTON STREET, SALISBURY, WILTS.

Telephone: Salisbury 2108

CLYDESDALE

The Radioman's Shop For Bargains in Ex-Service Electronic Equipment

**BRAND NEW.
RADIO COMPASS RECEIVER UNIT
BC-433-A or C.**

with Radio Control Box BC-434A and Flexible tuning Drive.

Comprising a (BC433) Superhet Receiver, with 3 wavebands 200-410 kcs., 410-850 kcs., 850-1750 kcs., and 15 valves, 2/6F6, 2/6J5, 4/6K7, 2/2051, 5Z4, 6L7, 6N7, 6SC7, etc., for 115 v., 400 c/s. Remotely controlled by (BC434) which contains tuning dial, WC Switch, and right reading "S" meter (5 mA. f.s.d.) etc., flexible tuning drive connects tuning drive in BC434 to 5 gang condenser in BC433. Dimensions BC-433-A or C. $8\frac{1}{2}'' \times 21'' \times 12''$ BC-434-A $7\frac{1}{2}'' \times 4'' \times 7\frac{1}{2}''$.

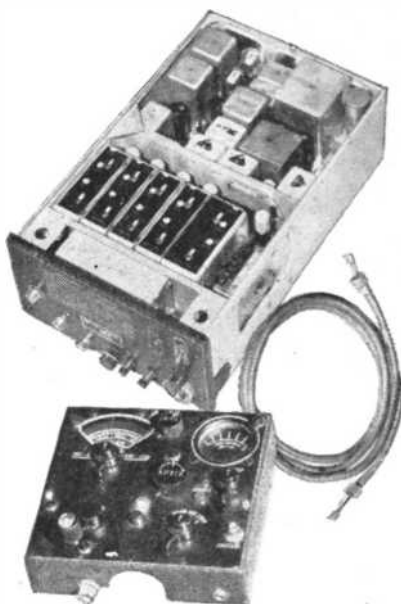
Service Instruction Books with each receiver

CLYDESDALE'S PRICE ONLY

£6 15 0

Per set Carriage Paid

Set of Compass Equipment Circuits at $\frac{2}{6}$ per set.



Brand New, in Makers' carton.

Ex-R.A.F.

5 AND 6 METRE OPERATION. THE FAMOUS R.F. UNIT TYPE 26.

Variable tuned from 65-50 Mcs. 5-6 Metres.

R.F. UNIT 27.—Variable tuned from 85-65 Mcs. 3.5-5 Metres. These units enable any Mains set that tunes to 40 metres (7 Mcs.) to be simply converted to a 5 and 6 metre receiver.

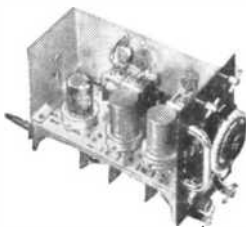
See *S.W. Mag.* for May—*S.W. Listener* for July.

With three valves, 2 VR136 (EF54), VR137 (EC52), S.M. Drive condensers, etc., in metal case $9\frac{1}{2}'' \times 7\frac{1}{2}'' \times 4\frac{1}{2}''$. Power Supplies Required H.T. 250 v., L.T. 6.3 v.

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

JFS6E. 6-way Jones type Socket with cable entry cover. For R.F. Units, 24, 25, 26, 27, R1481, R1132, etc.

CLYDESDALE'S **3/6** Each
PRICE ONLY Post paid
6 for **17/6** 12 for **30/-**



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

CLYDESDALE SUPPLY 2 BRIDGE STREET
CO LTD • GLASGOW - C.5

*Phone SOUTH 2706/9

VISIT OUR BRANCHES IN SCOTLAND, ENGLAND AND NORTHERN IRELAND