

SHORT WAVE NEWS

Vol. 2 • No. 7

JULY, 1947

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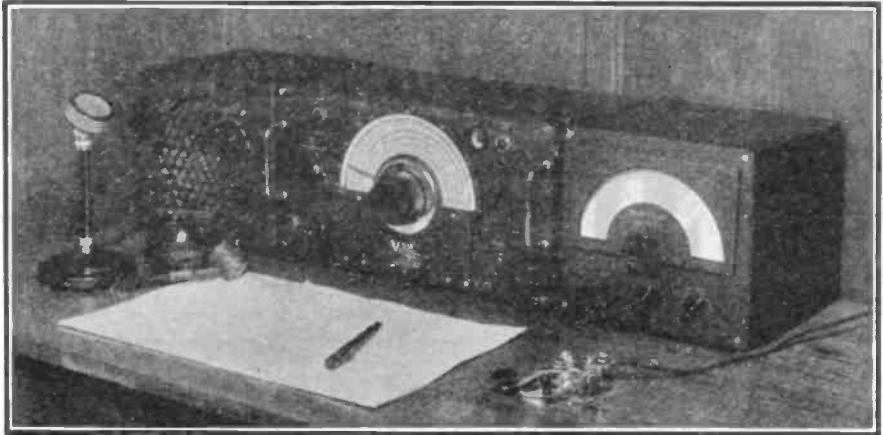


At W2IXY—full story this issue

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Short Wave News

Vol 2 No 7

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July, 1947

Editors:

ARTHUR C. GEE, G2UK

W. NORMAN STEVENS, G3AKA

Advertisement & Business Manager:

C. W. C. OVERLAND, G2ATV

EDITORIAL

We Expand!

DESPITE the stringent paper rationing imposed on post-war publications, and the humble-sized *S.W.N.* we are forced to produce at present, the success which has rewarded our efforts, since that first issue in January, 1946, has surpassed our wildest expectations. Our present circulation could be multiplied many times, were it not for the fact that we are debarred from doing so. Another headache is finding room for the many articles we would like to publish.

During these past eighteen months, we have received a great deal of correspondence from readers at home and overseas, and they all want the same thing—a larger *News*. Further analysis of these letters reveals that there is a demand for more constructional features. With so much else to pack into each issue, our constructional features have been seriously handicapped and we have had to limit our choice of such articles to not more than two or three per issue.

A New Venture

As we cannot at present enlarge the *News*, we have decided to introduce a new monthly radio journal under the title "*THE RADIO CONSTRUCTOR*". This journal will cater solely for the amateur interested in the practical side of our hobby. It will be the same size, format and price as the *News*. Details of the first issue appears elsewhere in these pages. As we will have 32 pages at our disposal in the new magazine, we shall endeavour to produce some really comprehensive constructional features, which will cover all aspects

of radio, viz.: Transmitters, SW receivers, BCL receivers, amplifiers and modulators, test gear, and the like.

We would like to make it clear, quite clear, to readers that the character of the *News* will not be changed in any way. We will still include constructional articles similar to those we have already published. The *Radio Constructor* is quite a separate publication and will not affect the *News* in any way.

Re-Shuffle

The production of a new periodical will necessitate some rearrangement of staff duties. This Editorial gives me a golden opportunity of handing a big bouquet to my colleague Norman Stevens. His name has appeared on the *News* as Assistant Editor, but in actual fact he has been far more than that. It is he who has been responsible for the production, arrangement, make-up and display of the *News* and to him the magazine owes that individual distinction of character which has produced such favourable comment from our readers. The *News* is very much a "team effort" and this same spirit will be carried on to the *Constructor*.

To add more force to this statement, we have decided to run both magazines under a joint-editorship and our two names will appear side by side under the heading of "Editors."

We know that one of the things which has made the *News* so popular is the friendly atmosphere we have tried to instil into its pages, and we shall both endeavour to make this atmosphere apparent in the *Constructor* as well.

A.C.G.

DON'T MISS THESE ITEMS

- ★ "These You Can Hear" ... page 149
★ "The Radio Constructor" ... page 151
The S.W.N. QRP Contest ... page 156
S.W.N. Amateur Monitor Scheme page 164

V.H.F. NEWS

WHAT a month! It really is quite impossible to give in detail all the DX—both tropo and Sporadic E—which has been worked. All your conductor can hope to do this month is to give a general picture of the terrific activity on 60 Mcs. during the past few weeks. The pundits first described the band as sounding like 14 Mcs. Then they revised their opinion and said it was more like 7 Mcs. on a Sunday morning! Somewhat overstated perhaps, but you'll gather that the pessimists who have been saying "five is finished" got a rude shock this month. And it may be well to stress here, that the forecasts which are emanating from some quarters that the new amateur frequency allocations will contain nothing for British amateurs between 30-100 Mcs. is nothing but guess work. The spreading of such rumours has done considerable harm to VHF interest already. Ed. Tilton, VHF Editor of "QST," in a letter to G6DH says, "The 50 to 54 Mcs. band will undoubtedly be retained in U.S.A." There is a possibility that the British objection will be overruled, so until the results of the Conference are made known, adopt the slogan of our national radio society—the RSGB—and "Don't Listen to Rumour." We do not pretend to be in the know about these ques-



The other end — The 6m beam at ZSIP which recently pulled in PAoUM.

tions, so we are not going to give our readers the impression that we are; but we are prepared to wait until an *official* statement is made, before worrying about the future.

The band began to show signs of increasing activity as far back as May 24th. This seems to be generally agreed as the date things first began to look up, although on May 14th, GM2TW heard I1DA calling GM3DI, but no contacts were made. On the 24th, GM8MJ was looking over the band at about 2030 GMT and heard OZ7G calling CQ. 8MJ established contact and the two stations had a QSO for 20 minutes. Signal strengths went up to S9 at times, but there was rapid QSB. OZ7G stated he had heard quite a number of GM stations including GM2DI and GM5VG. 8MJ used a Sterba curtain and OZ7G a rotary wide-spaced 4 element beam. GM5VG has since had a card from OZ6PX saying he had heard him on phone and CW at 2050 GMT on May 24th. There is also a report which we have not been able to confirm, that G5TH worked SM5FS on May 24th.

This GM/OZ activity was probably tropospheric in nature and is interesting in that suitable conditions existed between GM and OZ only. Later in the day, G6DH worked ON4KN, so it seems that suitable tropo conditions gradually spread down the East Coast.

On May 25th, the band opened for Sporadic E again. G6DH and G8RS both worked FA8IH, and FA8IH heard G6UH.

May 28th, PAOUN heard G5IG between 2130-2145 GMT and May 29th, G6DH made his first contact with PAOUM. Talking of first G/PA contacts, 6DH says that the first G/PA QSO was between G2AO and PAOPN in August, 1939.

On May 30th, things really began to get moving. PAOUM reports on events that day thus:—"Short skip at 1430 noticed on 28 Mcs. At 1445, sigs. heard up to 48 Mcs. 1500 MUF went down a bit. Built up again until 1745, when Italians started to come through, the entire band being so full that it was difficult to sort them out." PAOUM succeeded in working I1XW who was using a Ground Plane aerial. PAOUM also worked F9BG. PAOHL worked F9BG. ON5G worked I1DA and F9AQ. G5GX worked I1XW. G5BD worked I1XW and heard I1XD, I1DA, F9AQ and FA8IH. Besides these presumably Sporadic E contacts, tropo. conditions were good, G6DH working ON5G and G2NH working PAOPN and ON5G.

May 31st produced a contact between PAOUM and ON4DJ, and on June 2nd, G6DH worked PAOPN and ON5G.

Sporadic E showed up again on June 4th when FA8IH worked G2TK, G6DH and G5MQ all together, when they all came back to his CQ at 1955 GMT! There was some activity on June 6th, but June 7th was the next great day. G2XC worked FA8IH, and heard HB9CD and HB9BZ. G8JV worked I1AY and HB9CD and comments that the band was full of HB9's and I's. G5BD found the band wide open between 1845 to 2000 GMT, hearing 4 HB9's, one F and 9 I's. G6MI worked I1XW and heard I1AK. G6DH heard HB9BZ, I1XY and I1AY. HB9BZ worked GW5YB and called a GM who did not come back to him. FA8IH worked G6DH, G2NH, G2TK and G6UH. And how is this for a 60 Mcs. log supplied by OK4IDT, via G6DH, of signals heard in Czechoslovakia on the evening of the 7th?

1750	GMT	G6LK	phone	R5	S8
1800	„	G5BD	phone	R5	S7
1805	„	G8DM	cw	RST	567
1900	„	G6DH	cw	RST	579
1905	„	G5BY	phone	R5	S9
1910	„	G2XC	cw	RST	558
1915	„	G6VX	cw	RST	599
1930	„	F8GH	cw	RST	579
1935	„	G2MR	cw	RST	579
1940	„	G8VB	cw	RST	559
1950	„	G5MP	cw	RST	558
2000	„	ON4TD	cw	RST	568

Further activity is reported for June 10th, when G2XC worked FA8IH, and June 11th, when G6VX worked HB9CD and FA8IH, PAOPN and ON5G were audible in the London area. Which brings us to June 13th, the best day of the year so far. In forwarding an extract of the log of G6DH, Eileen Heightman says:—"Who says Friday, 13th is unlucky? Here is the log of G6DH for June 13th, one of the best days for Sporadic E so far this year, the 5 metre band being wide open for DX for at least six hours from 0930 to 1600 GMT." The following have been extracted from 6DH's log:— 1115 GMT F9BG (Toulon). 1200 F9BN (sigs. peaking to S9 both ways). 1210 FA8IH. 1220 W5BSY/MM called cross-band. 1230 F9CD heard. 1240 W5BSY/MM contacted. 1305 F8ZE called. 1345 FA8IH contacted (sigs. peaking to S9). 1710 ON5G contacted (? tropo). 2015 several phone carriers heard up to 48 Mcs.

W5BSY/MM was on the steam ship *Crest of the Wave*, off Cape St. Antonio, Spain. He has a regular cross band sked with 6DH on 50 and 28 Mcs. and he keeps regular watch on the 60 Mcs. band. He

reported reception of ON5G, PAOUN, G6DH, G5BD, G2MV, G5BY, G5MP and G2XC on 60 Mcs.

FA8IH had a good day on the 13th too. He worked PAOUM, PAOUN, ON4T, ON5G, ON4KH, G6DH, G2MV, G5MP and G5BY.

June 18th, was the next day to show up tops. In the evening, FA8BG in Oran, was heard by PAOUM. Later F8JB was heard by PAOUM. At 1800 GMT, the band opened wide for Italians, but there seemed to be little amateur activity. G6DH worked F3HL at 0658 GMT on the morning of June 18th. F3HL was using 25 watts to a quarter wave vertical aerial. ON4DJ was heard at 2120 GMT for the first time since the war.

The climax of the month came at 1935 GMT on June 23rd when PAOUM worked ZB1AC to create a new DX record (RST 557 both ways).

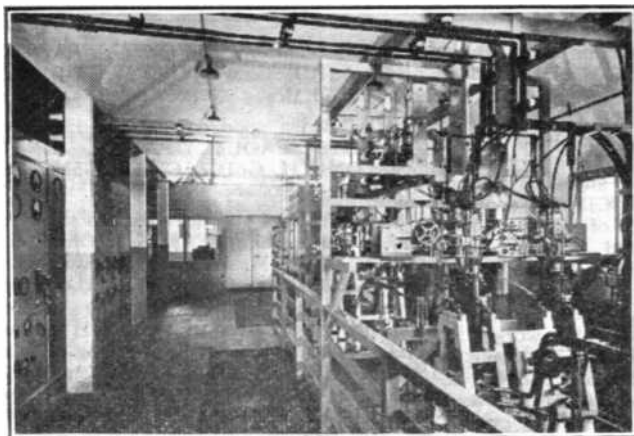
Well, so we could go on but this month's VHF News already looks like a Calls Heard column. Most of the above refers to Sporadic E activity, but tropo. conditions have been equally good during the month and all the logs and reports sent in show extensive activity throughout the country. Best days for tropo propagation appear to have been the last few days of May and the beginning of June. June 10th, 11th, 16th and 18th were all good days, coinciding with the recent spells of fine weather. So you lads who have put your 60 Mcs. receivers away, get them out again, and wait until you hear something definite about the future of five, before you pack up on the band!

COME AND GET 'EM!

The following have QSL's waiting for them at I.S.W.L. QSL Bureau. Please let us have those S.A.E's so that we can send along the cards, O.M's. Thank you.

J. Wagstaff, G. Williams, R. Russell, S. Coles, R. Twidale, E. Nottingham, N. Hughes, J. Self, D. W. Waddell, S. N. Cowley, R. C. Collett, P. J. Masterson, J. Toop, J. Blomfield, J. F. Mathers, M. Preston.

We would also like to repeat that we cannot accept SWL reports addressed to W stations for distribution through the Bureau. The A.R.R.L. does not accept SWL reports. Another point is that the D4 Bureau is also chary of SWL reports and we advise members to go easy on reports to any D4's in order to avoid disappointment. In any case you can hardly blame a D4 for not wanting SWL reports from this country—it's hardly DX!



A peep inside the transmitter building at PCJ

Around the Broadcast Bands

Monthly Survey by
"MONITOR"

All times are given
in G.M.T.

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

R EPORTS, etc., for this column should be sent to "Monitor," c/o "S.W.N." Please state times in GMT, frequencies in kilocycles and don't forget to put your ISWL number or name on each sheet of paper. This greatly assists your scribe in compiling these notes. Now for the month's news:

● Asia

China. Sidney Pearce (Berkhamsted) one of the most consistent contributors to this column, sends in schedule of XGOY Chungking. Effective from March 16th and recently received by Air Mail:

11913 kcs. English beamed to Australia from 0955-1130.

9658 kcs. French beamed to Eastern Asia from 1130-1335.

7153 kcs. French beamed to Eastern Asia from 1130-1335.

7153 kcs. English beamed to N. America from 1340-1545.

11913 kcs. English beamed to Europe from 1555-1650.

7153 kcs. English beamed to Europe from 1555-1650.

Special programme given Sundays "Bringing Christ to the Nations" at 1400 hrs. on the 7 and 9 Mcs. frequencies.

Macao. "Radio Macao" formerly on 7520 and 7280 kcs. verified by letter stating that transmitter will be replaced shortly when new gear is received from the States.

CR8AA "Radio Clube de Macao" 9230 kcs. verified by Air Mail and signed by the Acting Manager, Luiz Gonzaga Games. New equipment shortly. Present gear un-serviced since the war. Schedule is as follows: 0930-1430. Transmissions are 0930-1200 Chinese, Commercial and music; 1200-1230 Portuguese Music; 1230-1245 Portuguese Guitar Numbers; 1250-1300 News in

English; 1300-1430 Dance Music, Cosmopolitan Music, Variety, Classical and Opera. The Club's magazine "Macao Radio Magazine" is not being published because of newsprint shortage, but will again be sent out as soon as publication is possible. (Arthur Cushen).

Hong Kong. ZBW3 is now on 9515 kcs. and gives BBC news BC at 1100 and 1300 (Gillett). Paul Dilg also mentions them on this frequency and adds that they sign off at 1500.

Ceylon. Radio SEAC Colombo 15120 kcs. has been heard by Bill Iball giving musical programme at 1810. Signals R9 Q4/5 with quick QSB..

Indonesia. Radio Soerakarta, Soerakarta 14555 kcs. announces as on 14490 kcs. and in parallel with 7420 kcs. channel. Signs off at 1530. English programme from 1400-1500, also heard weak at 2245-2330 when faded out (Dilg). YHM Jokjakarta 11000 kcs. heard by your scribe with R8/9 signals Q3. Very bad CW QRM. News in English at 1645. Lady announcer gave call and mention of "The Voice of Free Indonesia."

● Africa

Kenya Colony. Nairobi. Now heard on 4890 kcs. with R7 signals from 1730 until close at 1900 daily except Weds. and Sats. when they continue until 2000. Has Native music before 1730. Reported by Sidney Pearce who, like your scribe, uses a "Sky Champion" Rx.

(You might let me know what type of aerial you use there, O.M.)

Union of South Africa. Johannesburg. 4895 kcs. (approx.) heard evenings until sign off after the Epilogue at 2105. (Pearce).

Fr. West Africa. "Radio Dakar," Dakar 15385 kcs. heard at 1830 to close at 2200.

R6 signals with bad CW QRM. (Pearce).

International Zone. Tangier. "Radio International" 6195 kcs. A. Wilkinson (Manchester) a newcomer which we welcome to this column, sends in schedule received with a letter veri from the station director: Herbert R. Southworth. 1300-1600 and 200-2400. Station came on the air on September 18th, 1946. QRA: Radio International, 34 Goya st. Tangier, I.Z.

Signals very good. (Not Morocco as you state in your report, O.M.)

Ethiopia. Letter and QSL received from ETAA Addis Ababa, 15074 kcs. states that they expect to be back on the air daily soon using voice transmission. QRA: Ministry of P.T.T., Director of Radio Services, Addis Ababa, Empire of Ethiopia. W. H. Erholm is the station Director. (Wilkinson).

Union of South Africa (Commercial). ZSS 18890 kcs. and ZSS3 13895 kcs. Capetown operated by Cable and Wireless of South Africa Ltd. Sent letter veri to scribe for "Royal-Tour" Broadcasts for BBC. QRA: Kodak House, Shortmarket St., Capetown, or Box 962 Capetown.

Fr. Equatorial Africa. Brazzaville. FZI "Radio Brazzaville," 17840 kcs. heard around 1900. Signals often reach R7. (Pearce).

● **West Indies/Central America**

Haiti. HH2S Port-au-Prince, FWI, 5948 kcs. heard R5 Q5 at 0100-0230. Gives call in English, Spanish and French. Mostly musical programmes. (Wilkinson). QRA: Societe Haitienne de Radiodiffusion, Box B81, Port-au-Prince, Haiti. Rarely QSLs. Your scribe has their card after 10 years wait! Replies in French with plain QSL.

Panama. HOXA Panama City 15100 kcs. is reported at 2200 with call "Radio Central Americano HOX-HOXA." Signals were R6 Q5. Believe it is Centro not Central as you mention O.M. Have their QSL card which states this: QRA is Radio Centro Americano, Panama City, Republic of Panama.

● **Australasia**

Australia. Another newcomer although an old timer is R. W. Iball ISWL/G941 (no QRA on report). Please state your ISWL No. and QRA on each sheet of paper, O.M., also frequency in kilocycles where possible). "Bill" reports: VLA6 15200 kcs. at 2155 with news BC. Signals were R4 Q3-4 with severe QRM, VLC9, 17840 kcs. at 0700. R7 Q5. Slight QRM, also at 2200 with dance music session. R8 Q5 and a very fine signal.

VLC4 15320 kcs. was logged at 1325 with French programme at R7 Q5.

VLC9 was also heard at 1355 and 0245.

**BROADCAST STATION
COUNTRY PANEL**

**No. 12: EMPIRE STATIONS IN
THE AMERICAS
(excluding Canada)**

ZQI: Kingston, Jamaica. 200 watts. On 2330 kcs. (1030-1130 GMT) and 4700 kcs. (2130-2330 GMT).
... Port Stanley, Falklands: 3600 kcs. power and schedule unknown.

VONH: St. Johns, Newfoundland. 5970 kcs. 300 watts. 1400-1900 and 2000-0300 GMT.

VONG: St. Johns, Newfoundland. 9475 kcs. 300 watts. Not in use at present.

ZFY: Georgetown, British Guiana: 6000 kcs. 500 watts. 1045-1245, 1445-1645, 19495-0045 GMT.

ZIZ: Basseterre, St. Kitts: 6083 kcs. 250 watts.

ZNS2: Nassau, Bahamas: 6090 kcs. 600 watts. 1145-1230, 1630-1830, 2100-0300 GMT. Not heard recently.

ZIK2: Belize, British Honduras: 10598 kcs. 200 watts. Exact schedule unknown but operates from 1400 until after 0000 GMT.

Signals were R8 and R6. Q5 on both transmissions.

Sidney Pearce reports: VLA8 11760 kcs. with BC to S. Africa, closing at 1730 one Thursday. Since then Broadcast in South African Beam has been heard closing at same time but on 9615 kcs. VLB9? Very bad QRM from Moscow. 3rd BC to British Isles. 1745-1915 well heard over VLC11 15210 kcs. (although some QRM at times from WBOS), VLA8* has sideband QRM sometimes from Voice of America station in Algiers. Forces broadcast from 2115 heard R7-8 over VLC9 in parallel with VLA6. Latter suffers background QRM from U.S.A. station. BC to N. America and S. Africa received R6-7 over VLA5 15320 kcs. until close at 0545. In parallel VLG6 15240 kcs., VLB8 21600 kcs. and VLC9. Transmission to Canada and East Coast of U.S.A. is now given at 1200-1315 due to DBST coming into force in the States. Stations VLB 9540 kcs. and VLC7 11840 kcs. carry this broadcast.

● **North America**

U.S.A. West Coast. Iball reports KWID 17760 kcs. at 0230, KNBX 11790 kcs. at

0900, KGEX 17880 kcs. at 0215, KNBI 17770 kcs. also at 0215. All in San Francisco. Not KMBX and KMBI, O.M.

Sidney Pearce has heard many West Coasters in the 16 and 19 metre Bands and notes seasonal changes in schedules. He lists the strongest heard as KNBX 15340 kcs., KCBR 17780 kcs., KCBA-F 17770 kcs., KWIX 17760 kcs. and lastly KGEX on 17880 kcs.

Canada. CBC sends schedule as follows for transmissions to Great Britain and Europe:

CKNC 17820 kcs. 1400-2300, CKCX 15190 kcs. 1400-1600, CKCS 1605-2300. To Caribbean and Latin America: CKNC is used from 2320-0035 and until 0105 Sundays, also over CKRA 11760 kcs. from 2320-0035 including Sundays. Report to: Canadian Broadcasting Corporation, International Service, P.O. Box 7000, Montreal.

CBC send out a monthly booklet containing schedules to listeners who request them. These booklets are distributed in Great Britain through the London office of the CBC, 200 Oxford St., W.1. They are also sent by air to listeners in Europe by arrangement with Scandinavian Airlines System. Details of CBC Service programmes are published regularly in England in "Canada's Weekly."

● Europe

Andorra. D. G. Lane ISWL/G960 of London, W.1, mentions that "Radio Andorra," 5980 kcs., transmits a short English programme from 2100-2120, consisting of dance music and announcements. Listeners are invited to send in requests for future broadcasts.

QRA: Radio Andorra, Roch d'ells Escolls, Andorra la Vieja, Andorra. Sends FB QSL card showing photo of aerial masts. Replies in Spanish.

Holland. PCJ Eindhoven heard with International Service at 1800-1815 beamed to S. Africa and Europe giving news and postscript to news. R7 signals on 6020 kcs., R8 on 9590 kcs. Also broadcasts on 11730 kcs. (Pearce). Schedule: 1530-1645 on Sundays and Wednesdays. (Breasil).

Germany. Hamburg. 6115 kcs. R7-8 signals from 0500 and again in evenings. Takes relay from other German stations and news in German from BBC. (Pearce).

Portugal. CSW4 Lisbon 15325 kcs. heard R6 until sign off with National Anthem at 1300. (Pearce).

Denmark. OZH2 Skamlebeak, heard R7 with QSB one Sunday from 1200. From 1300 has bad QRM. (Pearce).

Norway. LLS Tromso 7210 kcs. is new station states Sidney Pearce, who has heard them with good signals transmitting from

1500 but blotted out by Daventry at 1545. Oslo 15170 kcs. heard evenings with R8 signals.

Eire Our Eire Representative, ISWL/EI 408 G. O. Breasil, sends in schedule of Radio Eireann as follows: 1740-1800 17840 kcs. 2110-2130 9595 kcs. daily. (Point-to-point stations seldom QSL, O.M.)

THE RADIO AUSTRALIA BROADCAST

Sincere thanks to the members who sent along their reports to HQ, and to the local Reps. who passed along the details of the last minute alterations. Excellent signals made the broadcast a real success, though VLC11 suffered some QRM. All the reports have been sent off to Radio Australia by Air Mail.

The next I.S.W.L. dedicatory programme will be over the Swedish stations, and after this we hope to announce a series of such broadcasts for our members.

● QSL Section

Verifications received by readers over the past month: A. Wilkinson: ZQP, ETAA, VLC4, VLB9, A. Levi: Radio International, Radio Singapore, KOFA. Sidney Pearce: ZAA, Radio Malaya, Radio Wien, VLB, VLB8, VLA6, VLA8, VLG10, VLB9, VLC7, Leopoldville, CKLO, CKRZ, LLS, LRX1, YV5RM, Radio SEAC (17770 kcs.), XGOY, VUD2, VUD3, VUD5, VUD8, CS2WI, YV1RZ, Radio Innsbruck (Voalberg), HJAC (Air-mail. FB card of new design). G. O. Breasil: ZOY, Near East Broadcasting Station, KRHO, LRX, SDB2 and FZI.

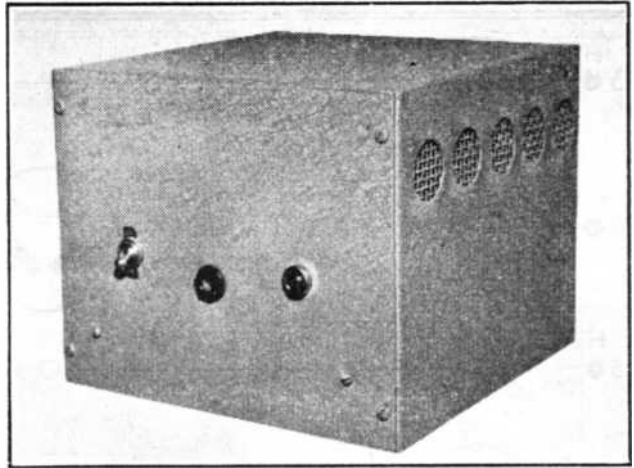
● QRA Section

Further addresses are required for this section so send along those QRA's on your veries for the benefit of other readers who may need them. Here's a few from our South African Rep. Jean Beaunoir, Natal:— CXA19 Difusoras del Uruguay. 18 de Julio 1393 Montevideo, Uruguay, S.A. Sudan. Omdurman Broadcasting Station, P.O. Box 282, Khartoum, Sudan, Africa. Singapore. British Far Eastern Broadcasting Service, Thomson Rd., Studios P.O. Box 434, Singapore, Malaya.

● Acknowledgements

Sidney Pearce BSWL336 (Berkhamsted, Herts.), G. O. Breasil ISWL/EI408 (Port Lairge, Eire), Jean Beaunoir ISWL/ZS516 (Jacobs, Natal, S.A.), R. W. Iball ISWL/G941, A. Levi ISWL/G138 (Belfast, N.I.), A. V. Wilkinson ISWL/G666 (Rusholme, Manchester, 14), D. G. Lone M.C.S.P. ISWL/G960 (London, W.1.), Paul Dilg (Monrovia, Calif., U.S.A.), A. Cushen (Invercargill, N.Z.), Rex Gillett (Prospect, Southern Australia).

The "S.W.N." Voltage Stabilised Power Pack



(Editorial Note:—Recently, in this journal, a contributor who was describing a versatile power supply, rightly pointed out the advantages of having such a unit separate from the remainder of the instrument. We shall be

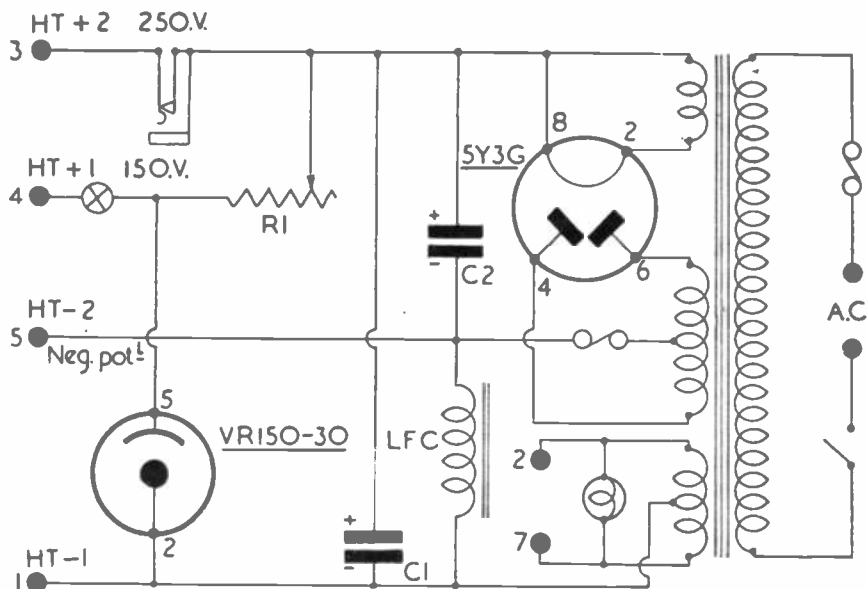
giving in these pages, over a period, constructional details of various power packs, both high and low voltage outputs, which should be of some assistance both to the constructor and transmitter.)

POWER PACK No. 1, the first of the series to be described, is a small unit suitable for use with apparatus requiring comparatively low voltages, such as receivers, frequency meters, signal generators, VFO's and small transmitters having an input of around ten watts. In such cases as a VFO, or the local oscillator of a superhet receiver, it is quite an advantage to have a stabilised voltage supply, and we have arranged for such an output in this pack. Stabilisation is obtained by making use of a VR150-30 gaseous regulator tube; such a tube connected in series with a limiting resistor, forms in effect a potentiometer across the voltage input, having the property that the output voltage, taken from across the tube itself, remains constant within certain limits imposed by the current flowing in the output circuit. These limits are fairly wide, and in the case of the VR150-30 up to 25 mA. is available with a single tube, at a voltage of 150 ± 1 volt. The limiting resistor, R1 in the circuit diagram, is adjusted to a value such that, without any load, the regulator tube just passes the maximum permissible current, i.e., 30 mA. These tubes are not too readily available in this country in the ordinary way, but we understand that **Mail Order Supplies**, of 24 New Road, London, E.1, have a quantity in stock at 15s. each.

Turning now to the theoretical diagram, the circuit will be seen to be, in the main, fairly conventional. Full wave rectification

is used, and a main output of 250 volts provided in addition to the stabilised 150 volts supply. It will be noticed that the smoothing choke is inserted in the negative H.T. line, a practice met with more often in commercial than in amateur practice. The advantage of this arrangement is that it provides a point which is more negative than the HT— line, or in other words we have a source of bias voltage, the value of which will of course depend on the resistance of the choke and the current passing through it. Any value less than this is readily obtainable by the insertion of a potentiometer, either fixed or variable.

The general construction and layout of the power supply unit can be seen in the accompanying photographs. The chassis and cabinet can be obtained for the really modest price of 27s. 6d. from **Messrs. L. J. Philpott**, 27 Chapman Street, Leicester. This price includes the drilled bracket for the output socket, by the way. The dimensions of the cabinet are 9 inches long, 7 inches high, and $8\frac{1}{2}$ inches deep. The chassis is supported by the removable front panel. The transformer is a **Partridge** product, with a 6.3 volt winding for valve heaters, a 5 volt winding for the **Mullard 5Y3G** rectifier, and a 250-0-250 volts 100 mA H.T. winding. Primary tapings permit use with any A.C. mains voltage from 200 to 240. The limiting resistor R1 is a **Bulgin 5,000** ohms 20 watt wirewound type P.R.9, and can be seen just to the right of the rectifier valve. Several $\frac{3}{8}$ inch holes are drilled in



COMPONENTS

Cabinet: E. J. Philpott.
 Smoothing Choke: Partridge.
 250-0-250 V., 100 mA. Mains Transformer:
 Partridge.
 Pilot lamp holder: Bulgin.
 Jack: Igranic.
 C1, C2: 8 μ F T.C.C.

R1: 5000 Bulgin, type PR9.
 Switch: Bulgin, type S80.T.
 Fuseholder: Belling & Lee, type L356.
 Octal Plughead: Bulgin.
 Rectifier: Mullard 5Y3G.
 Voltage Regulator: VR150-30.

SPECIAL POINTS

Stablised voltage for screen-grid, oscillator, anode, etc., suitable for frequency meter, receiver, small transmitter.

Choke in negative lead (LFC), giving a negative potential, value according to current, which can be tapped through a potentiometer giving useful potential for grid bias, AVC delay, etc.

Numbers shown on the 5Y3G are those for international octal holders.

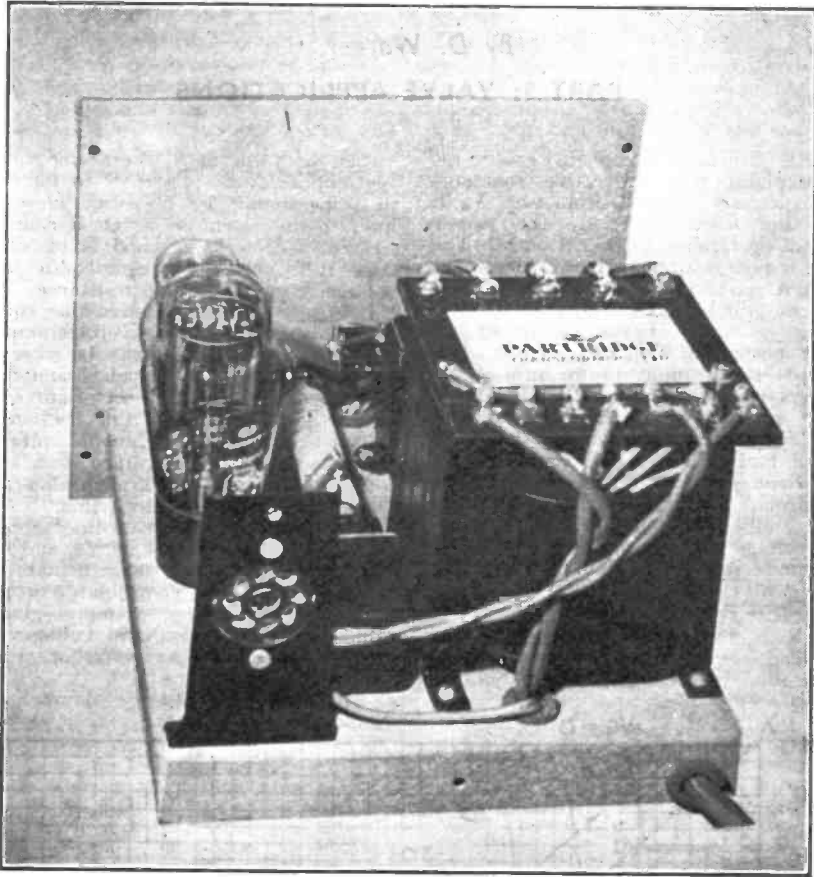
Numbers shown on output terminals are the pin numbers on the octal output sockèt, using standard number code in both cases.

the chassis underneath this resistor in order to aid the circulation of air.

To the rear of the resistor can be seen a Belling Lee fuseholder. Maybe we've been unluckier than most, but past experience has taught us to fit fuses in all cases—yes, even in battery receivers. In this instance, a 250 mA. fuse is inserted in the H.T. negative line, and a 1A. fuse in the mains circuit. C1 and C2 are T.C.C.; 8 μ F. 500 v. electrolytics.

An Igranic jack is wired in the main H.T. line, so that a meter can be inserted to measure the current flowing should it at

any time be necessary to do so; another jack could well be inserted in the 150 volt line, at the point marked X in the diagram. As mentioned before, the various outputs are brought out to an international octal socket, which is used with a Bulgin octal plug. The chassis has been kept to a minimum depth in order to increase rigidity and reduce the height of the cabinet, so the output socket is mounted on a bracket, which is supplied with the cabinet. The terminal numbers on the circuit diagram indicate the various sockets to which the outputs are taken, and conform to the standard octal numbering.



Rear view, with cabinet removed

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a quality production of 36 pages on art paper throughout, and lavishly illustrated. The book contains various "station descriptions," reprinted from previous issues of "Short Wave News," together with an introductory chapter designed to aid the beginner, and sections giving up-to-date schedules of stations, when to listen

on the various wave-bands, a chart of active stations and when to hear them and other features useful to the newcomer. THIS PUBLICATION IS AN IDEAL ONE TO GIVE AS A PRESENT TO THAT FRIEND OF YOURS JUST SHOWING AN INTEREST IN SHORT WAVE LISTENING!

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RADIO AMATEURS EXAMINATION COURSE

By D. Warner

PART 5: VALVE APPLICATIONS

THE previous article in this series explains how the valve characteristics are derived from the V_g/I_a curve, and discussed briefly the various classes of operation—A, B, AB and C. This subject is now dealt with more extensively.

Class A refers to operation conditions in which the grid bias is so adjusted that the working point is at the centre of the straight portion of the V_g/I_a curve. Provided the signal input to the grid is not large enough to overlap the non-linear part of the curve, a valve operating in Class "A" amplifies both the positive and negative half-cycles of the signal to the same extent. Class "A" operation is therefore normal practice for audio-frequency voltage and power amplification.

The voltage amplification, "A" of such a stage can be calculated from:

$$A = \frac{\mu R}{R + r_a} \dots\dots\dots (1)$$

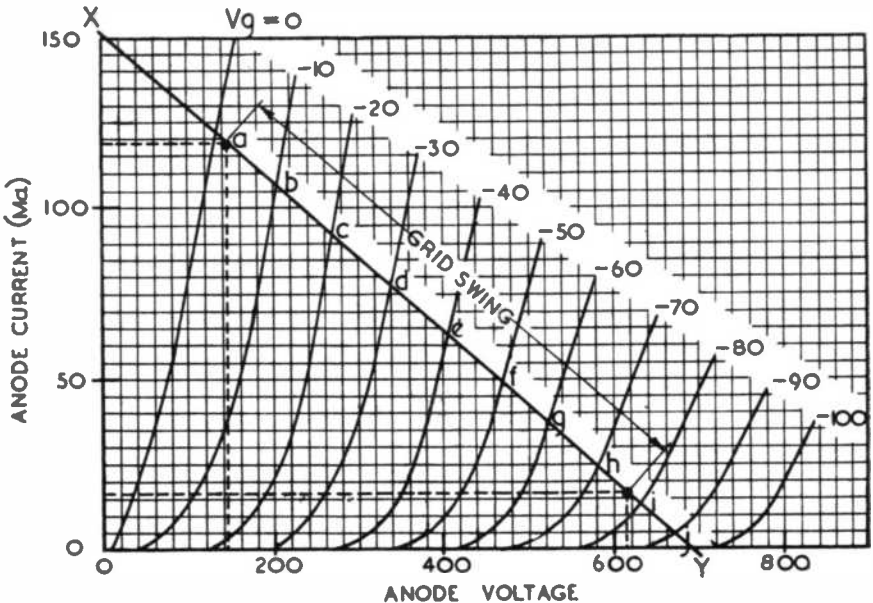
where R is the ohmic resistance of the anode load.

From this equation it is clear that the

higher the value of R, the nearer the voltage amplification approaches to the theoretical maximum, μ . There is, however, a limit to the extent to which R can be increased, because large anode loads demand large H.T. voltages to compensate for the voltage drop in the load resistance.

It is once more emphasized that equation (1) above gives only the voltage amplification. The power output can be ascertained by a combination of graphical and mathematical methods, using a set of curves such as shown in the figure giving the variation of anode current with anode voltage at various values of grid voltage for a typical power triode. In this figure, the line XY is what is known as the "load line."

Each point on the load line represents the corresponding values of V_a and I_a for a definite grid voltage, for a definite value of anode load. The co-ordinates of points a, b, c, d, etc., for example, give the values of V_a and I_a at grid voltages of 0, -10, -20, -30, etc., respectively, for an anode load of 4500 ohms.



$I_a - V_a$ curve for a typical output triode.

Announcing "THE RADIO CONSTRUCTOR"

A NEW MONTHLY FOR THE PRACTICAL MAN

To cover all aspects of radio construction, including transmitters, receivers, amplifiers, modulators, oscilloscopes, test gear, and any other electronic equipment.

The "Radio Constructor" will be published on the 25th of each month, the first issue appearing on JULY 25th and dated August. Format will be the same as "Short Wave News" and it will be obtainable through your local bookseller at 1/3 monthly or on annual subscription at 16/-.
The first issue will contain:

CONSTRUCTIONAL

- A 100 watt transmitter. First of three articles.
- A decade box, for the experimentally minded.
- An AC/DC TRF3.
- An Aerial Change-over Switch.

THEORETICAL

- The Straight Receiver (first principles) Part 1.
- Superhet Design. (Some practical pointers).

GENERAL

- Component Review.
- Trade Notes.
- Radio Conditions.

Like other post-war publications, the "Radio Constructor" will have a restricted circulation and judging by our experience with the "News," there will not be many spare copies lying around the bookstalls! MAKE CERTAIN OF YOUR COPY by placing a firm order with your bookseller or, better still, by taking out an annual subscription.

In order to construct the load line, the working point WP must first be ascertained. Point W.P. will be on the curve representing the working grid bias recommended by the valve maker, and its position is obtained by plotting the corresponding value of I_a from the V_g/I_a curve against the anode voltage at which that curve is taken.

The load line may be constructed by drawing a line with a slope which corresponds to the recommended anode load. This is possibly most conveniently achieved by taking a suitable value of anode voltage, say 600, and calculating by means of Ohms Law the current which the load resistor would pass if connected directly across this voltage. Thus

$$I = \frac{600}{4500} = 133 \text{ mA. for a load of 4500 ohms}$$

Now a line is drawn to cut the points 600 volts on the horizontal axis and 133 mA. on the vertical axis, and the required load line may then be drawn parallel to this line, but through the working point.

The power output can now be calculated from

$$P = V \times I \dots\dots\dots(2)$$

Where V and I are the r.m.s. values of the voltage and current variations corresponding to the grid voltage swing, in this example a peak grid voltage of 37 has been taken.

$$P = \frac{\text{Peak anode voltage swing}}{2 \times \sqrt{2}} \times \frac{\text{Peak anode current swing}}{2 \times \sqrt{2}}$$

or, using values

$$P = \frac{615 - 148}{2 \times \sqrt{2}} \times \frac{118 - 17}{2 \times \sqrt{2}} = \frac{467 \times 101}{8} = 6.0 \text{ watts.}$$

The load value which gives the maximum power output under the specified working conditions has been taken. It may not, however, be the ideal or "optimum" load. If the intercepts a-b, b-c, c-d, d-e, e-f, etc., are approximately equal there will not be serious distortion, but for other values of load, the intercepts may not be regular, owing to the fact that the I_a/V_a curves for various grid voltages are not parallel, and distortion will result.

Class B is the mode of operation in which one half cycle is amplified while the following half cycle is almost completely suppressed. If used in a single valve stage, the distortion would be intolerable, but in Class B push-pull stage one valve amplifies the positive half cycle and suppresses the negative half cycle and the second valve amplifies the negative half cycle and sup-

(Cont. on p.157)

International Short Wave League

MONTHLY NOTES

First Steps to Better Reporting

Having aired our views on poor S.W.L. reporting in our Editorial of May, we now intend to carry forward our aims into the practical sphere. First, however, a few words of preamble.

The importance of good reporting cannot be stressed too highly. A poor report from an I.S.W.L. member not only reduces his chances of getting a QSL but it also has the effect of gaining a black mark for S.W.L.'s generally and black mark for the I.S.W.L. in particular. Since we count ourselves as the foremost in the movement for better reporting we cannot run the risk of loss of prestige due to a thoughtless member lowering our prescribed standards.

One of our prominent CR's has put forward a suggestion that we have rather fallen in with and feel that members should be given an opportunity to approve or reject it. Briefly the plan would work like this: Stations to be notified from HQ by circular that the I.S.W.L. is pressing for a higher standard of reporting. Stations would be asked to return to I.S.W.L. HQ all reports that are so devoid of information as to be useless to the recipient, instead of depositing them in the w.p.b. HQ then to notify individual members that reports sent out by them have been rejected as of no interest to stations. It is suggested that if further poor reports are received, following TWO warnings, then the offending members to be asked to resign from the League as unworthy of membership.

Well, that's the plan. Is it too drastic? That is for you, the members, to decide. We are saying nothing at present. Now it's up to you all to write in with your views on the subject. Let us have your views, suggestions and constructive criticisms, please!

Next month, we will give some "Reporting Pointers" for those new to the hobby.

SOCIAL ACTIVITIES

Merry Gathering at Uxbridge

The inaugural meeting of the Middlesex Chapter was an undoubted success. The meeting was held at the Railway Arms, and, due to the hospitality of Mr. Bowman, there was an abundance of good things to eat and drink!

After an opening oration by G3AKA, mercifully short(!), the meeting got down to business. The name of the club was decided as the Uxbridge and District S.W. Society, and a working committee of three

was elected as a provisional arrangement. Future plans were discussed and meeting dates decided upon. Things for the future will include demonstrations of gear, talks, Morse classes, query bees, junk sales and the like. A club library is already in formation. Future meeting dates will be found in the panel on the next page.

All we can say now is that members living within reach of Uxbridge will be missing a good thing if they fail to come along to future meetings. Why not drop in at the next one, O.M.'s and meet the "locals"?

Birmingham Activities

The Birmingham Chapter is now going great guns. Meetings are now being held monthly at the Birmingham Chamber of Commerce in very comfortable surroundings. According to the CR's report, the atmosphere is convivial and the discussions lively—which is just how it should be. The average attendance has been 14. Here are the highlights of the last two meetings as copied from the minutes.

Committee of three elected with Ivor T. Evans as Chairman, Malcolm B. Taylor as Secretary and J. Lester as Treasurer. A re-election will take place in six months time. A subscription of 1/- per month was decided upon, subject to revision after six months. A portable superhet was demonstrated by Mr. J. Lester, which aroused great interest. The nucleus of a club library was started and Mr. Cakes volunteered to act as librarian. Morse classes, technical talks (designed for those about to study for the radio amateurs' examination) and demonstrations are amongst the future attractions decided on.

A number of items came up for discussion. The subject of possible affiliation to the B.S.W.L. was raised, and it was unanimously agreed that the Chapter should not entertain any such idea. Mr. Trowbridge kindly offered to print membership cards, and the offer was gratefully accepted. A popular suggestion was that a discussion on members' gear should take place at the following meeting and this was placed on the agenda.

South London struggle on

Having no permanent club-room at present, the South London Chapter have been meeting at the CR's home. Unfortunately, owing to the disorganisation of moving his address, the CR had to cancel one meeting at short notice. Then Mr. French (G329) stepped into the breach and kindly offered to accommodate the follow-

ing meeting. These South London members have had some tough luck since they formed the Chapter and if any member in the area can offer any suggestions for a suitable club-room would they please get in touch at the earliest opportunity? Meanwhile, the Chapter goes on. Good luck, O.M.'s, and hope you soon get fixed up. Will members please note new QRA—see panel.

Happenings in Lancs.

The various TR's, not to mention the CR, are all keen to form local groups, but have all reported "lack of support." Well, how about it Lancs. members? Here are the QRA's to write to:—

Oldham: G2FAY, 62 Chestnut Street, Chadderton, Oldham.

Manchester: E. D. Hebron, 9 Argyle Road, Manchester, 14.

Rochdale: J. W. Hughes, 40 King Street South, Rochdale.

Members in other parts of the county, please write to J. E. Whittle, 2 Church Terrace, Darwen.

C.Q. DEPARTMENT

Correspondence from Southport members: AC2 Lang, 4010943, Hut X33., No. 2RS, 2 Wing A Squad, R.A.F., Yatesbury, Wilts.

Data on ex-R.A.F. 1481 Receiver: E. A. Kimber, 7 Van Mildert Terrace, Stockton, Co. Durham.

"Gen" wanted on ex-R.A.F. T1396 transceiver: A. J. Brown, 137 Thomlinson Avenue, Raffles, Carlisle.

American magazines exchanged for English technical books: R. Mortimer, 384 Meadow Lane, Nottingham.

C. W. Head (6 Warwick Avenue, London, W.9.) would like to contact any reader who knows something about small Philips oscillator coils made for R.A.F. receiver.

NEW REPRESENTATIVES

We have much pleasure in announcing the following recent appointments:

TOWN

Barnet: F. T. A. Randall, G530, 15 Windsor Road, Barnet.

Barry: Dennis Vezey, GW834, 2 Hafnen Road, Barry.

Blandford: D. Hammand, G920, "Hutments" Drill Hall, Blandford.

Dover: Bernard A. Elvey, Malvern Meadow, Kearsney, near Dover.

Driffield: T. E. Price, G528, 12 Hutton Road, Cranswick, near Driffield.

Grimby/Cleethorpes: J. Trussell, G106, 171 Barcroft Street, Cleethorpes.

Malvern: S. D. Percival, G3BGR, Hill Rise, Danemore, Welland, nr. Malvern.

Portsmouth: R. Masters, G407, 62 Battenbury Avenue, North End, Portsmouth.

Swindon: H. Pithouse, G769, 5 Queen Street, Swindon.

Worcester: D. Higley, G148, 1 York Place, Worcester.

COUNTY

East London: F. V. Headland, G655, 157 Winchester Road, Highams Park, E.4.

North Wales: J. Burton, GW605, "Thornlea," Deganway Avenue, Llandudno.

Surrey: J. Smallbones, G857, 21 Bramshaw Rise, New Malden.

OVERSEAS

India: D. Shahani, VU942, Frere Road P.O. Box 185, Karachi.

Kenya: C. F. Collins, VQ4-489, P.O. Box 1909, Nairobi.

U.S.A. STATE REPRESENTATIVES

(California): Paul Dilg, W643, P.O. Box 316, Monrovia.

(Illinois): Andrew Mayeshiba, W753, 933 West Sheridan Road, Chicago, 13.

(Montana): Lucius A. Hurlbut, W688, 830 South Ninth Street, Bozeman.

(New Jersey): Albert A. Teeter, W790, Box 286, Rumson.

(Ohio East/Pennsylvania West): Francis H. Vincent, W882, 713 Seventh Avenue, Beaver Falls, Pa.

(Pennsylvania): John W. Young, W821, 2727 Penn Avenue, West Lawn.

SUPPORT YOUR LOCAL I.S.W.L. MEETINGS

South London:

W. A. Martin, 21 Brixton Hill, London, S.W.2. Meeting irregularly at present.

Uxbridge:

L. Harris, 93 Long Lane, Hillingdon. Meetings for July are on the 9th and 25th at the Railway Arms, commencing at 7.30 sharp.

Birmingham:

M. B. Taylor, 136 Alvechurch Road, West Heath. Meetings on the first Friday of each month at the Chamber of Commerce, New Street, commencing 7.30.

Chelmsford:

W. C. Mills, 3 Elm Cottages, School Lane, Broomfield. Inaugural meeting will be held in early September.

Darlington:

M. Harrison, 36 Southend Avenue, Darlington. Preliminary meetings are under way.

Malvern:

R. G. Barrell, 4 Bromyard Road, Tenbury Wells. Preliminary arrangements are under way for formation of meetings.

Readers residing in the above areas are invited to contact their representatives. Full details of meetings will be sent on request. Make a point of going along to the next meeting, O.M., and join in the fun!

AROUND THE SHACKS No.9

Dorothy D. Hall, W2IXY

(Editorial Note: This article was written for us by Leslie A. Singer, ISWL/Gzo, who has a special personal interest in the famous Long Island station).

THE forthcoming visit to England of W2IXY is truly great and interesting news. It is probably correct to say that in the history of Ham Radio there has been no other amateur who has attained such popularity and honoured status than the YL operator of W2IXY—Dorothy D. Hall.

The history of W2IXY is a fascinating story. It all began as far back as 1929 when "Dot's" husband, the late Captain Hall, first received VK2ME, that famous Australian pioneer station. The receiver in use was home built and it is interesting to note that 2ME was about the only station audible on Captain Hall's receiver. It was not very long before Dot began to take an interest in her husband's work and consequently was herself inevitably caught up in what was then a new hobby—that of short wave listening. Woman or not, only a short time elapsed before Dot was firmly gripped by the "ham bug," a grip that was to lead her to great heights.

After a few years of active short wave listening, Dot soon claimed the SWL certificates then available, in practically every case being the first woman to do so. The highlight came when Dot visited her first "hamfest" and decided most emphatically that she herself would become a ham. In October 1935 she sat for her first wireless examination which included theory and morse code, and passed with flying colours. She became licenced as W2IXY with a permitted power of 100 watts and settled down in the old American 160 metre band. Not content with working just on "one-sixty," Dot entered and passed the Class A examination exactly a year later, which gave her unlimited privileges in transmitting facilities.

In November, 1936 operations began on 20 metres, a band which has been her firm favourite ever since. At first she ran an input of 250 watts on 'phone, but soon went the "whole hog" and pushed out a kilowatt. That kilowatt signal was one to be justly proud and was one of the finest quality signals to go out on "twenty."

A prized possession at W2IXY is the "R.S.G.B. "Worked British Empire" certificate which was the very first one issued to a YL operator either on 'phone or CW! There are many other achievements which have made the call W2IXY so

famous, but these are too numerous to mention in the space allowed. However, many pre-war listeners will remember the regular daily skeds kept up by Dot with VR6AY—Andrew C. Young—in the Pitcairn Islands and the valuable assistance she rendered.

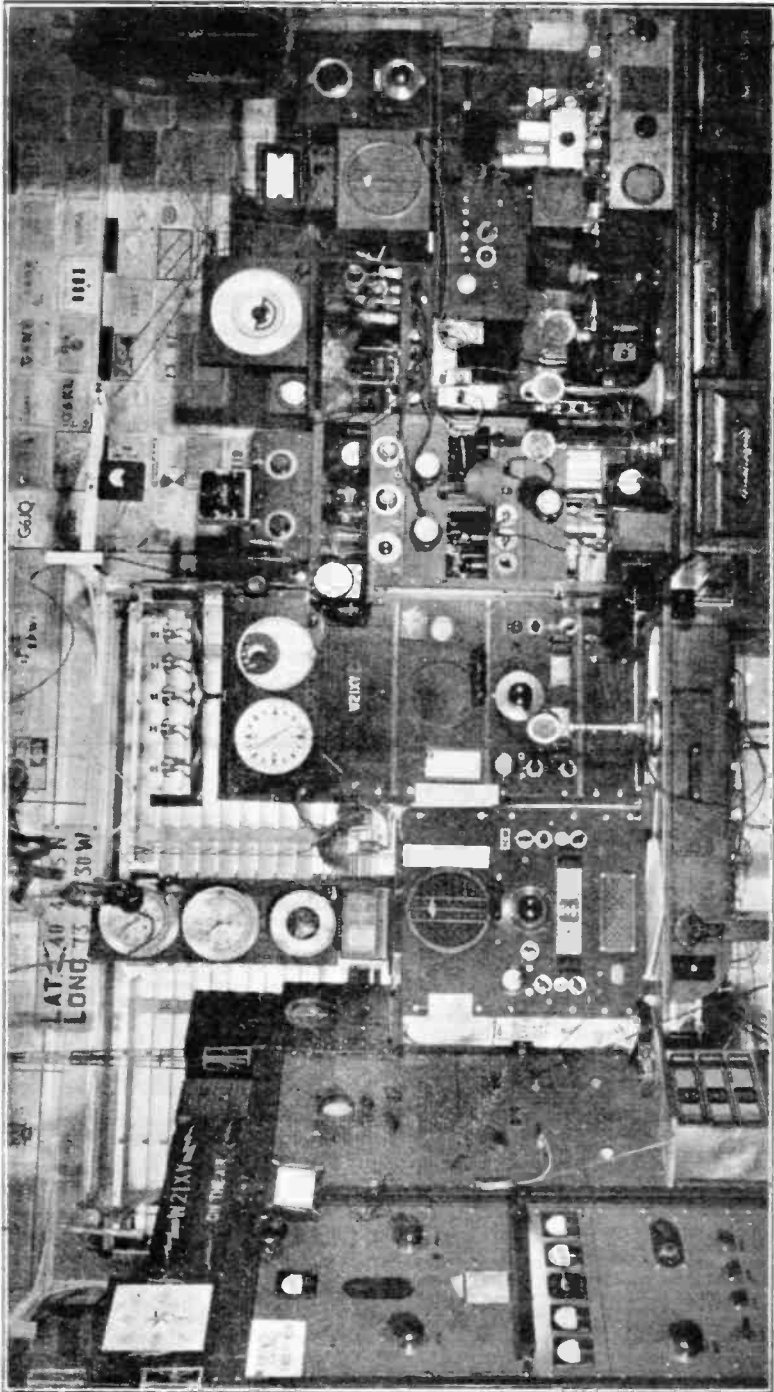
W2IXY can at present be heard here in "G" with the regularity of a commercial. Operating on the solitary frequency of 14244.3 kcs. (a frequency from which the station never moves), Dot now runs at an input to her 20 metre rig, between 600 and 700 watts and radiates a signal from her aerial—four half-waves in or out of phase—which is perfect in every detail and seems to get her voice over the whole globe. There are, by the way, separate transmitters to cover 10 and also 2½ metres, which on occasions are brought into use. The photo opposite and the one featured on the front cover, show Dot's rig in full splendour.

In private life Dot is Chief Radio Operator at WNYF of the New York Fire Department so she spends practically each day with her one interest and only hobby. She loves all forms of communications. Apart from her responsible position at WNYF, she also continues the monitoring work on "Radio Australia" which her husband Captain Horace Hall had done so thoroughly for a good many years. In this status, Dot is official North American Monitor for "Radio Australia" and so consequently she has in a way returned to her first-love through the years—from VK2ME to a now very large short-wave network.

Dot has always felt closely bound to the short wave listener and her extreme interest in the SWL fraternity is known the world over. A record of 100 per cent. replies to listeners throughout 10 years is an example for others to follow. Perhaps this is due to the fact that Dot herself still remembers the thrill of receiving those coveted QSL's back in 1929.

The ham spirit is certainly there at W2IXY, but what are Dot's own views on ham radio? She says: "In happiness or sorrow the hams are always there to cheer and keep you on an even keel . . . God bless everyone of them."

We all wish W2IXY a very pleasant vacation in England and may her "golden voice" travel the ether for many years to come.



The shack at W21XY in full glory!

THE "S.W.N." QRP CONTEST

23-59 DBST JULY 19th — 23-59 DBST JULY 26th

Rules and Conditions

1. To be held over the period of one week as above.
2. Power supply to transmitter is limited to one standard 120 V. H.T. battery.
3. Power output is limited only to that which can be obtained from the battery.
4. Points to be scored as follows: One point per contact, multiplied by the number of countries worked, i.e., 11 contacts and 5 countries will gain 55 points.
5. A contestant may contact any given station more than once, providing that not more than one contact is made per band with that station.
6. Contestants may choose any, or all, of the following bands: 1.8, 3.5, 7 and 14 Mcs.
7. Either AC or DC can be used to supply the filaments of the valves.
8. No signal transmitted with a T7 note or under will be allowed.
9. Conditions of license must be observed.
10. Contest is restricted to stations with the following prefixes: G, GC, GI, GM GD or GW.
11. Completed logs, typed if possible, must be returned to this office within seven days of the close of contest. Address logs to "QRP Contest," c/o "Short Wave News."
12. Details of equipment used during the contest must be submitted with final log.

Prizes for the contest have been kindly offered by Len Stevens, G3XV (Wellington) and Len Philpott, G4BI (Loughborough). They are, respectively, two Q.C.C. crystals to any required frequency and a small chassis and panel to own requirements. IF YOU ARE INTERESTED IN GENUINE QRP WORK, PLEASE SUPPORT THE CONTEST. FUTURE CONTESTS WILL DEPEND ON THE SUPPORT GIVEN TO THIS ONE. 73 AND LOTS OF CONTACTS!

COMMUNICATIONS RECEIVER

Ex-Govt. MCR 1, the set that was used by the Continental Resistance Movements. BRAND NEW IN ORIGINAL METAL CONTAINERS. A miniature 5 valve set covering 20-3000 metres, built to give first rate performance. All are complete with a set of 4 calibrated plug in coils, 1 pair of lightweight headphones, aerial, earth, and a comprehensive AC/DC Power Pack that operates from 97-250 volts. Instruction Book also supplied. These are the last of these famous "Spy Sets," and cannot be repeated. ONLY £10 9s. 6d. (Carriage 2/6).

TRANSMITTER-RECEIVER

The Famous Canadian Type 58 Mk 1*, which we have supplied to many hundreds of satisfied users. We are now nearing the end of our stocks of this very fine 8 valve set, all of which are BRAND NEW IN THE ORIGINAL MANUFACTURERS' CARTONS AND ARE COMPLETE READY TO SWITCH ON. Each set is supplied with 8 valves, 2 sets of microphone and headphone assemblies, 3 types of aerials, battle battery, etc. and INSTRUCTION BOOK. An illustrated leaflet is available on request. ONLY £10 10s. (Carriage 5/-)

SHORT WAVE AERIALS

In response to many enquiries, we have now obtained another batch of the TELESCOPIC AERIAL used on the 58 set. 15in. long when collapsed this extends to 102in. A most efficient and beautifully made job. ONLY 15/-.

Also available are a few of the Sectional Whip Aerials. This consists of 16 sections of copper tubing each 12in. in length, and colour coded to facilitate assembly. Complete in Web Case, ONLY 12/6. (Postage on either aerial 1/-).

U.E.I. CORP

32, ST GABRIELS ROAD, LONDON, N.W.2

CQ CQ CQ
de
G5GX

SHORT WAVE (HULL) RADIO

Let us reverse the procedure for a change, you tell us what you want and we will quote you by return of post. We can supply you with kits or completed rigs for transmitters, receivers, amplifiers, etc., in fact, anything in amateur radio.

We agree it is cheaper to buy one of our standard lines listed below but maybe they do not quite fulfil your requirements, if not, tell us so and we will see what we can do about it.

RECEIVER KITS

- 2 Valve 0.V.I. Bandsread tuning, plug in coils, 9-200 metres, Pentode output. Price complete with valves and coils but less cabinet and batteries £5 10s.
- 4 Valve 1.V.2. Bandsread tuning, 9-200 metres, black crackle steel cabinet. Price less batteries and speaker. £10
- 4 Valve 1 (Tuned) V.2. As above but with tuned R.F. stage. £12 12s.

TRANSMITTERS

- 10 watt C.W. Transmitter £12 12s.
- 25-50 watt Transmitter, all band model £18
- 25-50 watt C.W. Tx, all band, de luxe model £27 10s.

All the above complete with Valves, Xtal and coils for one band.

Further details supplied on request.

SHORT WAVE (HULL) RADIO

30/32, PRINCE'S AVENUE, HULL

Telephone 7168

A Field Strength Indicator

By G. V. Haylock, G2DHV

A VERY handy piece of apparatus, in constant use at the writer's station, is a field strength indicator and phone monitor, working on the diode rectification principle.

It is a practical method of tuning transmitting aeriels and arrays for maximum output and also indicates field strength and radiation from the aerial. Furthermore it is an aid to simplification of neutralizing of the transmitter. Yet another use is that of a modulation check indicator of telephone transmissions, by means of headphones plugged into the jack (J1).

This instrument was designed with a view to simplicity and minimum expense. The original is housed in a metal cabinet measuring 8½ in. x 9½ in. x 9½ in., into which everything is contained including the mains heater transformer (T1).

The coils used are Eddystone 6-pin type, with the third winding arranged to give a step-down ratio in order to relieve the tuned circuit from the diode load.

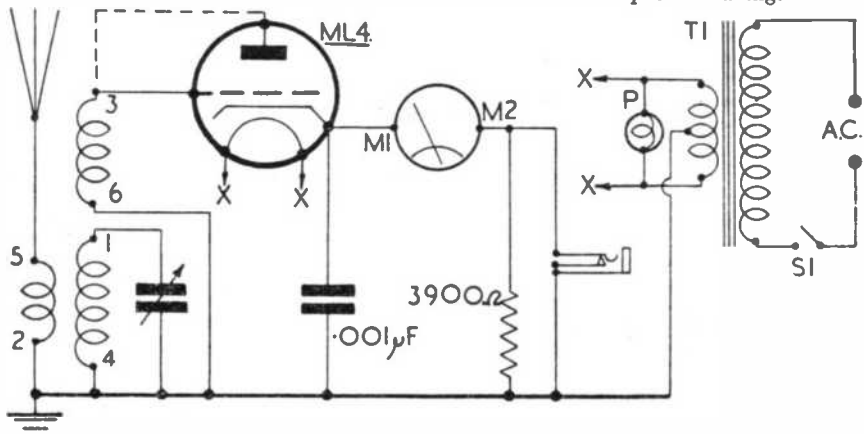
In operation, the incoming strength is indicated by deflection on the meter which in the writer's case is a multi-range meter taken to the terminals marked M1 and M2. This allows various F.S.D's to be used. A fixed meter can, of course, be used, and a 0-1 mA. movement is usual.

The valve used in the model is an ML4 (with 4-volt heater) connected as a diode, but any single or double diode or triode valve can be used. Experiment alone will indicate whether the use of the grid or the anode is more satisfactory as rectifier. In some cases it will be found better to strap the grid and anode together. Battery valves are also quite satisfactory, when the heater transformer can be replaced by a suitable LT supply.

On the front panel of the indicator are a slow motion drive for (C1), a meter (or terminals), the on/off switch, 'phone jack and an indicator lamp holder (P). The aerial pick-up need only be about 18 in. long, though an increase of length will give larger meter readings.

When tuned to resonance, the meter will show a sharp rise and the Tx should be tuned to give maximum reading on the meter. Aerial adjustments are made in the same manner.

As an aid to neutralization, the aerial "pick-up" should be loosely coupled to the P.A. tank circuit. The indicator dial is then tuned for maximum reading on the meter. Neutralizing procedure is then carried out in the normal manner until the meter shows no indication of R.F. current irrespective of P.A. anode capacitor tuning.



(RADIO AMATEURS EXAMINATION presses the positive half cycle. In these circumstances the distortion is negligible.

Class B can, however, be used for a single valve R.F. amplifying stage if the anode load is a resonant tuned circuit since the anode current pulses in alternate half cycles, excite the tuned circuit and main-

COURSE—Cont. from p.151) tain the H.F. oscillation.

Class C operation is that in which the valve is not only inoperative during alternative half cycles, but only amplifies during a small portion of the operative half cycle. It is normally used only in R.F. stages, a discussion of which forms the subject of the next article in this series.

Continuing the Shack Tour

FOLLOWING last month's rather critical survey of the Ham Shacks and Listeners' Dens I have recently visited, it is only fair that the good points noted should be given the same treatment as some of the not-so-good. Perhaps the most marked difference in this respect between 1939 and 1947 practice, is the far more general use of metal cabinets for receivers from which fact it is obvious that it is more widely appreciated now that ONLY the signal picked up on the aerial (and not in the wiring) should be allowed to reach the set. The bigger the set the more important this becomes, and to-day there are far more valves per set than ever before.

It is most encouraging to find so many constructors tackling the more ambitious types of receivers. This is largely due to the more exacting conditions of the ever-increasing crowding of the amateur bands, and also the influence of training in various branches of the Services which has given, and still gives, many enthusiasts practical experience of the more elaborate equipment. Another contributing factor would also seem to be the stimulus of considerable quantities of redundant Service gear now generally available. This latter point, to my mind, is the most convincing of all arguments in favour of the release of Service gear through normal channels. Many experimenters, especially the more youthful, simply cannot afford to take a chance if EVERY part needed has to be bought at present-day prices.

Keying Position

While thinking in terms of ex-W.D. equipment, it is to be noted that Service influence has left some mark, both in procedure, phonetics and habits, throughout the amateur movement. At least one ham I know uses his morse key strapped to his leg (above the knee)—a thing never seen in amateur practice in pre-war years! Actually it is a most comfortable position at any time, but it is the only possible one when operating from a mobile vehicle where fast, rhythmic keying is easily achieved on the bumpiest of roads. Personally I prefer the key on the side of the leg instead of on top, but this is largely a matter of individual ideas.

Another amateur had his key screwed to the back of a drop-flap which was fitted between the speech amplifier and below the CO/PA.

The flap also serves as a writing table and support for microphone, log-book, etc. The cupboard behind is used for stowage of coils, field strength meter, crystals, phones, neon tester, log-book and all the other odds-and-ends so necessary but so hard to suitably accommodate. Where there is no space available for a cupboard a sliding shelf arranged between two of the sections is a great asset.

Storage

The problem of storing these many miscellaneous pieces is always an acute one. Those already mentioned, plus test equipment, must all be stored safely yet be ready at hand when required. For this reason it seems that the wooden rack is so well favoured as with this type it is generally so much easier to use every inch of space available, even if only for a simple shelf.

One ham had built his Tx in a large steel office cupboard; the type with adjustable shelves. Fitted with additional bracing (and the power supply at the bottom as usual) it made a very neat, strong job, possessing among its other virtues the one of being practically dust-proof. With the door closed and locked everything was kept secure from the meddlesome fingers of his two small toddlers, an important item in many households. Restricted space too, confined his activities to a corner of the dining room, so its self-contained compactness also earned a greater degree of tolerance of the XYL. This idea may commend itself to the small house and flat dweller.

Records

Many amateurs like to keep a record of all their contacts and the keeping of some sort of card index where dates of all previous QSO's can be quickly found, seems fairly general. Several hams keep notes pencilled on plain postcards, duly filed, pending the arrival of a QSL when subsequent contacts are recorded on the back. It is certainly helpful to have all particulars, such as previous contacts, handle, QRA, etc., ready to hand.

Several creditable efforts in the way of crackle or ripple finishes were noted. The methods of producing them varied from blistering by heat and then stippling, to just plain stippling on the nearly dry enamel. One nice job used the following method—5 per cent. aluminium stearate was added to ordinary enamel. This was followed by baking in an oven at approximately 110 degrees F. until wrinkles formed, then increasing the temperature up to about 300 degrees F. until the enamel hardened. The

My Favourite Receiver

No. 10: J. Smith

THIS month's favourite receiver is that of reader J. Smith, which he describes as a "semi-TRF." The RF valve is a Z22 7-pin metalised pentode. The RF grid coil consists of 70 turns on a 1½ inch paxolin former insulated from the chassis by two Eddystone midget stand-offs. The coil is close wound and is tapped at 5, 10, 15, 25 and 40 turns, the tapplings being taken to a 6-way rotary switch on the front panel.

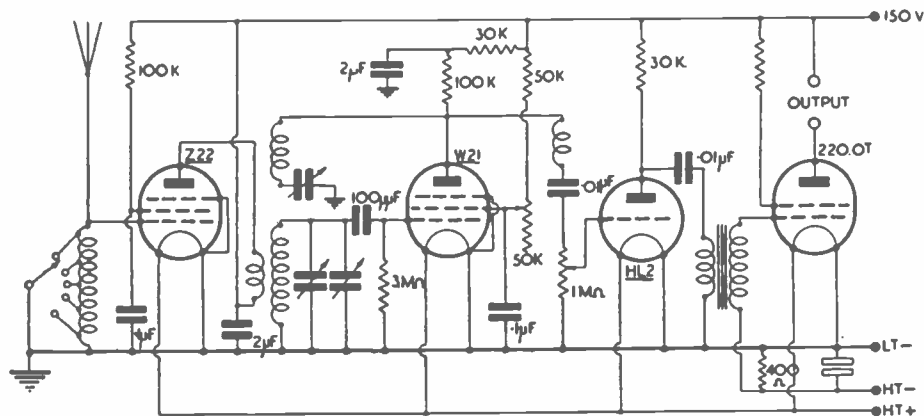
The RF stage is coupled to the detector valve (an Osram W21 vari-mu RF pentode). The coils used here are Raymart 6-pin ones and cover the range of 11-180 metres. Detector regeneration is controlled by the potentiometer in the screen-grid

lead. The bandsread capacitor is a larger one cut down to one moving and one fixed plate. Main tuning capacitor is a Raymart VC160X and the reaction capacitor a VC100X. The two controls used for regeneration give very smooth measure of control, with the capacitor as main setter and the potentiometer for final adjustments.

The audio side is taken care of by an HL2 and a 220 OT, and the output is sufficient to drive an 8 inch speaker on all but the weaker stations.

An HT eliminator supplies the 150 volts HT, and as automatic bias is used, no batteries are necessary at all. Whilst most of the component values are not critical, those given have proved to be the best after considerable experiment.

If any readers are interested in building this receiver and need any advice, Mr. Smith will be pleased to help in any way possible. His QRA is "Harpford," Brook Street, Wall Heath, Brierley Hill, Staffs.



latter temperature, by the way, is that used when a stoving enamel is baked, and those who have cookers with built-in thermometers might care to try something on these lines—the XYL or fond Mother permitting!

Popularity

So far most of the points touched upon in these two articles have been concerned with the constructional side. From the

electrical and circuit angle, I should imagine that at last the superhet is in a preponderance even among listeners and among transmitters the crystal-controlled valve of the 6L6 class driving an 807 easily leads the field in the 25 watt class.

Bence Yap

ON THE HAM BANDS

Conducted by "CQ"

● Stations of the Month

IF you hear the call LI2B, don't be misled. It is *not* from Libya. Perhaps it is the most interesting station ever heard on the ham bands, so without more ado here is the low-down.

LI2B is the call allocated to an amazing expedition termed the "Kontiki Expedition," which is being led by the Norwegian ethnologist Thor Heyerdahl. The expedition has left the coast of Peru on a raft, measuring 30 ft. by 15ft.! The object of the expedition is to test certain migration theories and the raft will drift across the Pacific ocean, being afloat for about four months. LI2B will be operating on the 14, 28 and 56 Mcs. bands, and it will be interesting to know who is the first to hear this station. Certainly a catch worth having!

Other outstanding stations this month are rather overshadowed by LI2B, but here goes. The next on the list is (or rather was) W6RWQ/VR6. The operator had to put ashore on Pitcairn during a storm, and during the five days he was on the island worked up a score of 400 QSO's. A. H. Onslow, who was one of the many to hear this station, heard W6RWQ say that Andrew Young (VR6AY) was still held up for gear and that ZL2FR was on the island and awaiting his ticket. Since then the station VR6AA has appeared and no doubt this is the new call of 2FR.

Finally, here are some more choice ones who have recently made their appearance . . . YJ1AB from the New Hebrides on 14 Mcs. . . . ST2KA, a new one from Sudan, pushing out 'phone signals on 14 Mcs. . . . YS1JR from seldom heard San Salvador . . . FK8NQ is on 14 and 28 Mcs. . . . How about VR5NC, Norfolk Islands, for a catch? On 14 Mcs. . . . FL8AE from French Somaliland heard on 14 Mcs. . . . And we hear our old friend ZS3F is active again, the one and only from South West Africa . . . According to VS1BX, a station signing VU2PB is active from the Andamans, though we have not yet heard him . . . Gambia is a not too common country, but can be had via ZD3B now going strong on 14 Mcs.

● 28 Mcs.

Despite the poor conditions generally, some readers still seem to be able to pull that DX through.

Reg Masters reports the band as dead, but has managed to compile quite a hefty log. The best ones are CP1AZ, CX4CS, EL2A, 5A; EQ2L (1200), HV1AC, MD5AF,

5DC; PK1MF, PY2QK, VQ3EDD, 4ERR, 5DTT; W2UWC, 3MKE, 4JZN, 4AYE, 5BSY (all these are /MM); ZC6FP, JF, WP, ZS1P, T, U, 5MA, Q. Also VK3dk, 3lx, 3xl, 5dn; ZL3aj, 2aw.

D. L. McLean (Yeovil) only heard CT1UU, D4ATH, CX1DB, OZ6AA, PY7DD, SU1HF, W7FS/MM (off Portugal) and ZS6CZ. These were heard between 1700-1900.

J. H. Endersby GW703 (Old Colwyn) has some nice ones in CX1CS (Q4 R6 at 2020), 1DB, HC1AB, HH2CW (59 at 2140), HK4FF, Z1AMA (46 at 1100), KZ5AB, LU3DH, UA9CF (55 at 1450) and XZ2DN.

Ken Crandall W798 over the pond there in New Orleans has a massive list of DX. Sorting through we find CX1DB, HC2OA, 1FG; HK2AH, 3AB, 3BI, 3DD, 3SC; KG6AG (0030), KH6ID (0820), 6AR, 6AS; KZ5AZ, 5ND, 5EL, 5AR, 5CS (all around 1730); PY9AT, XE1LE, GE; YV1AV, ZL2BN, 2GB (0040) and very many LU and so on. Ken has a new 28 Mcs. doublet which, he says, works OK on 14 but not on 28 Mcs. Seem to be doing all right, O.M.!

● 3.5 Mcs.

A. H. Onslow (Hove) sends along a nice 'phone log, which contains over 30 W's, the best of them being W4CPG, CYN, DOC, JSR, KOW, LK, LR, 9EDW; VE1CN, 1GF, 2DX.

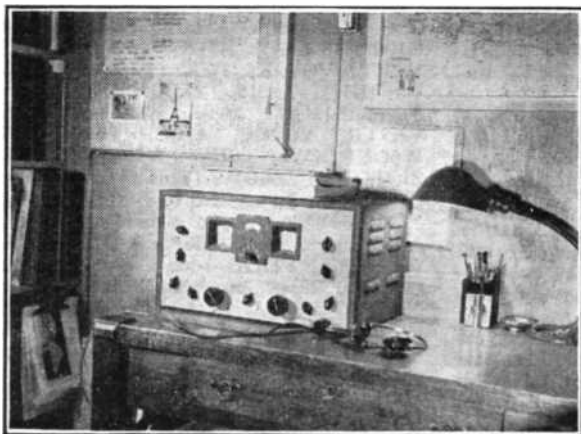
Reg Masters, G407 (Portsmouth) goes even better and lists 73 of them! The pick are W4CAY, CQW, ELL, HGJ/3, HKA, HVL, HID, KOG, KOU, MLB, 8TTN and VE3DL. All heard between 0200-0330 GMT. Reg. heard over 100 W's in two days listening at these times.

John Clarke, G10 (Brentford), short and sweet, sends along NY4cm, YU7ax and LJ2b.

● Twenty

It's that band again! Though the band has had its bleak periods during the month, it has still been the "best bet" for DX. Before we proceed with the readers' news, your scribe takes opportunity of thanking those of you who have thinned out your logs into reasonable proportions. Thanks, O.M's.

Martin Harrison, G54 (Darlington) is the first on the list. He says he still feels good after hearing VR6AA (Q5 R9 at 0620 on 14290 kcs.). Martin says the station will not have cards for a couple of months. Other DX heard has been HC1JW (0610), HH2CW



The neat listening post of Lucius Hurebut of Bozeman, Montana

Lucius is I.S.W.L./W688 and is State Representative

(0640), LI2BO (1930), OA4's AC, AR, BA, BG and BR (all around 0630), VU2BV (2010), VS7IT (1810), YI6C (2000), ZC1AL (1735 on 14250 kcs.), VSIAN (1815) and ZL4FO (0730 on 14300).

Jean Beaunoir ZS516 out in Sunny South Africa mentions his best as G2HV, 2AAP, 3FA, 6AG, 8DL, 8KX; J9ANJ, 9ANL, 2DON; VK6FL, 6HS; PK6VR, 4HB; EL3J and some W6 and 7.

Al Slater (Southwick) feels pleased with life, having logged four new and rare countries. They were AR8AB (R8 nightly around 14170 and 14240 kcs.), KG6AV/VK9 (heard as early as 1400 with R7 signals), ST2KA (heard several times between 1800-2100) with a 15 kcs. frequency drift and poor speech quality, and lastly the famous W6RWQ/VR6 (who "popped up with an R9 signal" at 0800). With these countries added to his score, Al has now heard 134 countries post-war on 'phone. Good going, O.M. Other tit-bits of the month were MD5AJ (ex-ZC1AR), XULP who says he is on a Chinese naval vessel the "Wan Cheng" (said he was on the Yangtse river when heard) and two queer ones, viz.: HI3JR and DF3AA. The rest of the log contains such items as C1CH, W6VTO/C1, J2HAL, 2YSD, 3WGT; KA1ABM, 1AK, 1CB, 1HR, 2AD; KG6AG, KH6GF, NY4AB, 4ZQ; VP2GB, 2GF, 4TE, 9L; VQ4RAW, 5DES; VS1AK, 1AX, 2BG, 7IT, 7MB; VU2BG, BK, CJ, JY and ZC6TX.

Peter Somssich HA8S (Budapest) has heard ET1ir (any data?), C1qc, PKlmd, KZ5fw, VU2cf, 2zz; ZD4ab, 4ai; ZC6dd, UA9ca, 9kca.

James H. Endersby, GW703 (Old Colwyn) mentions erratic conditions. Uses

a 1-v-2 with speaker and a 30 ft. aerial. The pick of the log is W6VTO/C1 (1750), HH2CW, J2AAR (1950), 9CAE (1510), KA1HR, PK4HB (2000), VK6RU, VQ4RAW (1930), VS1BY, 7IT; VU2BQ, 2CJ, 2DG (between 1830-1930); YI4N (1950), ZC6WP, ZS1U, 2BB (1830). Thanks for the nice log, O.M., and all the details. See QRA list for SKK2.

A. H. Onslow (Hove) threatens us with a letter each month. OK., O.M., we can take it! He endorses our efforts for better SWL reporting, mentioning that he uses our reporting pads, which he says are invaluable, and resists the temptation to chase over the band rather than compile comprehensive period reports. More power to your elbow (or pen?), O.M. A letter he received from W5HFQ is worth quoting in part. It says . . . "I can't begin to tell you how much I appreciate the detailed report. A report such as this is of much benefit and usefulness to me . . . I detest getting SWL reports just for the sake of a QSL . . . You might mention to your brother SWL's that the inclusion of a detailed reception data is a great help and that the majority of amateurs do appreciate getting same . . . Again I say, thanks a million." Well, that speaks for itself. Are you getting letters like that?

Apart from the excitement of W6RWQ/VR6, other notable ones were C1CH, HI2L, J2CAL, 9AAV, 9ABX, 9ANL; KH6EJ, 6GF; TG8IH, 9MG, 9RV; VK7NC, VS1AK, 1AY, 1BG, 1BY; VU2AN, 2AU, 2BK, 2BQ, 2DG, 2JY; VQ4RAW (Only 7 watts), W6VTO/C1, 9FEZ/J5; YI6C, ZL2FF, 2GX and 4FO.

Ken Crandall, W798, heard some nice ones, such as HI3JR (Santiago, at 0215), 8VC; J2EAR, FOX, JQJ, AAG, VFW,

3WGP, 5AAJ, 9AAS, ABE, ABX; KG6AG, 6SA; KL7JO, OX3FC, PZ1RN, TG8IH, 9LP, 9EM; VP4TU, YS1JR, 3PL, and many VK, PY, etc.

Leslie Waine and a pal have been carrying out some interesting experiments. Armed with the "S.W.N." TRF3 and a 60 Mcs. 2-valver, our friends drove out to the appropriately named Ham Hill (!)—6 miles from Yeovil—and set up station. They used an ex-R.A.F. kite to carry the aerial, which was 100 ft. long. The two most interesting points which emerged were that (1) Signal strength very much greater than when using normal aerial, showing the importance of height and (2) On 60 Mcs., the fluctuations of the aerial made it impossible to hold signals—a fault not found on the other receiver—thus indicating the great advantages of an RF stage.

Reg Masters, G407 (Portsmouth) wonders where the C and J3 stations have got to. Well, Al Slater and A. H. Onslow seem to hear them—why not get in touch with them O.M.? In his fine log we note FF4AA (who is this one?), J2AAR, AHA, BFW, YSD; KA1AR, KG6AD, ST2KA, VK7NC, 7TR; VQ4RAW, 4KTH; VR6AA, VS1AN, 2BB, 7IT; VU2BV, BG, DV, AV, ZA1A (at 1700), ZD4AH, ZD6DT, ZE1JB, ZL2JD, 3BV, 3BX, 4FO; ZS6BV, 6LF. (Hope you have now fully recovered from your bronchitis, O.M.)

Bill Harris, G42 (Woodbridge) comes forward with EL5B, J2CAL, KA1CD (1730), OQ5DW (1930), TG9RV, VK7NC (0610), VS1AN, 2GB, 7IT; VU2DG, 2BV; W6VTO/J9 (1930), XZ2BA (1920), YS3PL, YN1HB, ZC1AL, 6WP, 6MN, ZL4FO (0600). Also a fine list of HK, VK, XE calls. Bill uses the "S.W.N." TRF3, by the way.

D. L. McLean heard on his Sky Champion HC1JW, OA4BA, TG9RC, VE7AJN, VR6AA (0600), VS1AN (1720), YN1HB, YS3PL, and some good W's and Latins. All heard between 0530-0630.

G. A. Ensor, G587 (N.W. London) deplores the drivelt to be heard on 'phone (who doesn't!) and restricts his log to CW stations over 4,000 miles distant and who were sending at least 20 w.p.m. G587 now does most of his listening between 365-515 kcs., where, he says, one hears morse as it really should be sent. The log contains: CE4ad, 5aw; CX1fy, HK3fo, OQ5bw, PK1ai, 2dl; VK2nj, 2tg, 2xg, 4cl; VQ2jc, VU2am, ZC1bx(?), 6ap; ZD6dt, ZL1dy, 3ab, 3is, 4gs; ZS4am, 6ag, fn, ir, jw, lm.

And a final "round-up" . . . J. H. Moody, G824 (Poole); K6ETF, OQ5BR, ST2KA, VK4NK (New Guinea), VU2BK, W6VTO/C1, ZL1CD, 2BE, 2GX, 4FO; ZS1G, 5Q,

6DF, 6EG and VQ5TDB . . . G. H. Siell, G1007; C1AA, HH2CW, VP4TE, 9F; VS7IT, VQ4DK, 4JBC; VR6AA, YN1AB (or HB?), YS3PL, ZL2GX . . . Michael Pavely; J2LPG, 5ABA; KH6HO, PK4HB, VK7TR, VQ2HC, 4JBC; VS1AK, 7IT; W6ONP/KW6, 6RWQ/VR6, 6VTO/C1; ZL4FO and ZS6DW. (This time of the year CW DX on 7 Mcs. can be heard from about 2130 GMT and phone rather later, for the Americas) . . . C. Hartles, G213; CT3AB (at 2300), Y17GB (don't know this one, O.M.), CO8MP, etc. (LJ2F is genuine, in Norway) . . . A. E. Lincoln G289; EL5A, B; HH5PA, OQ5BW, VP9F, VP2LA, VK6DD, ZC6MN, and also GEZAA (aircraft) working hams on 7 Mcs. . . . Thanks also to J. Edwards, Peter Drake, Dave Hayes, H. Rofe, W. S. Savage and K. L. Bromyard for logs.

● DX Target—the PK's

These are the actively operating amateur stations from the Netherlands East Indies. Java: PK1AW, 1LZ, 1MF, 1MD, 1RI, 1SS, 1TC (late 6TC), 1TM, 1VN, 1XW, 2DL, 3GT (ex-PAoGT). Sumatra: PK4HB, 4IP, 4KS (Banka Is.), 4OO, 4TO, 4RK. Borneo: PK5AR, 5LK. Celebes, etc.: PK6AX, 6AQ, 6EE, 6HA, 6SB, 6VR.

Here are some QRA's not already listed: PK2DL: Lt. D. de Lee, Bdb Aid. T. Brigade, Semarang, Java. PK400: B. Modderman, Netherlands Forces, Intelligence Service, Palembang, Sumatra. PK4HB: c/o Mangalaan 40, Medan, Sumatra. PK1LZ: C. Loze, Burg Kuhweg 47, Bandoeng, Java. PK4IP: H. B. Veenhuyzen, Mil Sgt No. 145420, LVBI, Y-Brigade, Semarang. PK6HA: Lt. A. Hagars, N.E.I. Air Force, Biak.

● Query Corner

Wonderful, we have no letters about PR1B or TR1P this time! We have, however, the usual selection of puzzlers, and who better to start the ball rolling than Martin Harrison? He asks about SFNR who claimed to be MM. Any offers? Others are ZC1AL (yes, he is OK), CT2NN (phoney) and ZC6DD (See QRA list).

Reg. Masters asks about GSA2 and XTCV both on 14 Mcs. around 1900. He also suggests running some Set Listening Periods of short duration. What say, O.M.s? Reg. also asks about CT1AV, CT1ZZ, MB9AF, I2VGF, I3BBC and HV1AC. According to CT1UU (who used to operate before the war with an official call-sign) the CT's should soon be back on the air. The MB9AF should read MD9AF (is in Vienna). The I's have us guessing, whilst we think HV1AC is genuine in the Vatican though we have no proof as yet.

G3AYA wants the 'gen' on I1AHC/I6, HP4Q and FS7AG. Well, the I6 says QSL

via A.R.I., the HP via A.R.R.L., but we have nothing on the FS7 johnny.

David Huxtable also asks about FS7AG. (The QRA of OIX7 is c/o Finnish Broadcasting Co., Helsinki.)

The full data on CR7VAL is that he is the operator of a direction finding station. His call is only a temporary one and he is awaiting his official ticket. His QRA, for those who did not see it last month, is G. Valezim, Quelimane, Mozambique. This data comes from G2BQC who has a QSL.

Those of you who are waiting cards from ZC1AN will be interested to know that he was a pirate and was operating from England, and has been unceremoniously closed down!

Finally, J. K. Aldridge (think that's the name—difficult to read O.M.!), wants data on P1ZZ and OX3SL. Nothing here on P1ZZ and all we know of OX3SL is that he says QSL via A.R.R.L.

● DX Worked

G2LC, Cyril Greenaway (Ruislip) sends along his latest "snips." Cyril has been doing well with VQ8ad, ZE1jo, VS2bg, VU7br, VQ2gw, VP8ad (South Georgia Is.), EK1as, CE4ac, ZD1kr, LI2bo, CX1dz, KA1abu, UD6bm (Baku), W1nbv/MM (South of Newfoundland), UR2kaa (Tallinn) and ZK1ab.

Cyril has now worked 42 States of the U.S.A. He also has a very interesting QSL from CR4BQ. The card is inscribed with some text which reads roughly . . . "This is to confirm contact with CR4BQ. As far as I know, there is no station using that call in this area and any further information regarding the station would be greatly appreciated"!!! The card is signed by E. R. Leigh Parkin, BRS9202 with the QRA

as Western Telegraph Co. Ltd., Sao Vicente, Cape Verde.

G3BTA, Arthur Hamilton (N.W. London) reports "the usual things like VK, ZL, ZS, VQ2, 5, 8, CR7, VE6, 7, KS4, UG6 and ZC6"! He had also worked OX3gd, ZC6dd and MD5aa (G4KV) on 14 Mcs. and SM8bd (Swedish plane over France) on 7 Mcs. Since he has been on the air, just over seven weeks, Arthur has worked 48 countries and 38 of the States. Some interesting QSL's are those from W81qb (who says "Pse QSL or I'll haunt you"!), W9crx (whose card we are reproducing) and W6zz. The latter is pre-war W1WV and he says he has now had over 20,700 contacts, 2,200 of which were with G stations. Must live on the air!

G3AKF Bryan Taylor (Catterick) tells us of his latest activities. His best efforts for the month were MD9aa (ex-OE9aa), UG6ab (Erivan), C1an, C1bk, VK2ql, OX3gb, UA9cb, W7be, W6's, eoz, mek, gm and vsb. Bryan is using his G3AKF/A call up in Catterick and a certain W3 he contacted did not get him too well. The consequence was that Bryan had a letter from the W3 who was very excited at getting a "new country." He had the call down as G3AKF/AG3 and wondered where the station was!

G5KW, the one and only Ken Ellis, has now left this country en route to the M.E. again. He will probably be on the air again soon with an MD call (quite likely MD5KW). Before he left, Ken knocked off a few good ones like W7jjn, W1pph/MM (S.S. Explorer, off Bombay), VS7rr and KP4dn.


G3AYA Lionel Howes still likes 7 Mcs. as a DX band. Recently he has hooked

G3BTA is one of the lucky "Fish" who hooked one of these cards!

You Were Hooked At
11:45 PM C.S.T.
5-2-47

In The 14 Mc. Pond

Tackle 666-666
O13 250w.
NC101X REUR



WE CATCH THE
BIG ONES IN!
WISCONSIN!

You Scaled
RST 570

3/2 Ant. **W9CRX**

1030 S. 122nd STREET . WEST ALLIS 14, WIS.

Remarks HOWDY ART. SURE ENJOYED OUR CHAT. YOUR
25 WATTS CERTAINLY CAME THROUGH FINE! 73

Here's My Bait! How About A Nibble? Jerry Morris
- VIA ARRL - *Jerry*

Amateur Monitoring Scheme

LAST month, in our Editorial, we published a preliminary announcement about the Amateur Monitoring Service we are able to give to our readers through the courtesy of the Leicester Telecommunications Laboratory. Here, as promised, is the detailed scheme:

(1) First monitoring session will be on August 14th/15th, and will be for the 3.5 and 7 Mcs. bands only. Mr. C. L. Wright has arranged for his amateur station G3CCA to be on these bands so that contact can be established with the laboratory and readers will know that their signals are being monitored successfully.

(2) Readers who wish for a "monitor check" should write us immediately. Requests will be dealt with in strict rotation.

(3) Mr. Wright asks us to stress the fact that his amateur station is not in any way connected with the laboratory, but that reports will be telephoned across from the laboratory for transmission. The idea of G3CCA being on the air is to establish an actual QSO, an obviously better arrangement than stations sending test calls out into the blue, so to speak.

(4) We would like to make quite clear that any amateur who may contact G3CCA at times other than the monitor periods will not get a laboratory report.

(5) Readers who would like a check on their 'phone or CW transmission on the first and succeeding sessions, should write in now and we will fix skeds. The basis is strictly "first come, first served" and there will be no exceptions to this rule.

For the benefit of those who did not see last month's issue, the laboratory reports will include tracings from the signal/noise meter, aerial voltage measurements, and reports on quality and readability. Scientific monitoring equipment is available for the service.

Next month we will give details of the "Random Monitoring," but in the meantime let's have your names and QRA's in order to fit you in to the first session. Mark your envelopes "S.W.N. Monitor Service," please!

VO2k, VE3ajx, PY5bg (Parana), UB5kah, OH2qn, CO5fl and the usual W's, etc.

G5BD Arthur Simons (Mablethorpe) worked AC3SS on 14 Mcs., and was told that AC4YN had *not* QRT'd as stated in some quarters. The station is still on the air but is on 7 Mcs. at present. Both 4YN and 3SS use only 20 watts.

G6GH, Geoff, Hutson (Boston) reports his usual string of good DX, which includes W6rwq/VR6 (believed to be the first G-QSO with this station), W3edd/VK9 in the Admiralty Is., CR7ad (at 1930), ZS3D (at 2000), ZC6sx (1730), UD6bm (Baku), UH8af (Ashkabad), UG6wd (Erivan) and UD6aa (Baku).

Geoff. also makes these comments:—

Card received from CR4AA, despite statements that he was phoney!

W7ONG's QSL received which gives me WAS at long last.

MD contacts do **NOT** count as a new country as this is part of the sovereign state of Egypt and should count as SU contact.

● Gossip

Ken Ellis, G5KW, says that SU1HF is the *only* SU station now on the air and he is operating under cover. Apparently the Egyptian government are opposed to ham 192

stations and it is likely that no licences will be issued in future. Exit SU!

Following up on the issuing of MD5 calls to the Forces in Suez Canal Zone, the authorities have started issuing MD9 calls to Forces in Austria. Thus OE9AA has become MD9AA. We hear that the amateurs in other areas, like Palestine, will soon be issued with similar prefixes in the M series. In fact we have just learnt that the prefix MD6 is now being issued to Iraq and that YI7G (ex-G5JG) is now operating as MD6DJ.

If you heard W2CPX recently this station was located at the Centenary Philatelic Exhibition in New York. The call was issued specially for the show and the station was operated by various prominent hams, including Dorothy Hall, W2IXY. Don't ask us why a ham transmitter at a stamp "do"—we are still wondering ourselves!

A little item we liked was told by the VK QSL manager. A large-sized envelope came through the mail and when opened was found to contain a wad of fifty bank notes! Investigation showed that the notes were those of the Central Bank of China (1930 vintage) and of five-dollar denomination. The reverse side of these notes showed that the hams that run the WoMCF/C1 station had overprinted them as QSL cards!

(The notes, by the way, are not worth the paper they are printed on as far as currency goes). In the same column of "Amateur Radio," the QSL manager mentions a card he had just received from W8LHH for a QSO in 1938! The W, obviously a stickler for politeness, apologises for the delay. The moral is—never give up hope of those rare cards you are waiting for!

● Topical DX QRA's

Collected by your scribe, with acknowledgements to Ken Crandall, A. H. Lincoln, D. L. McLean, A. H. Onslow and E. W. J. Field for several of those listed.

- CP1AP: Box 346, La Paz, Bolivia.
- EL3A: Rupert Lloyd, American Legation, Monrovia, Liberia.
- HH2CW: Apartado 153, Port-au-Prince, Haiti.
- HS1SS: U.S.A. Military Attache, American Embassy, Bangkok, Siam.
- JZCAL: APO 500, c/o PM, San Francisco.
- JL2DN: Weather Station, APO 226, c/o PM, S.F.
- JZJQC: 504 Sig. Service Bttm., APO 503, c/o PM, S.F.
- JZVFW: HQ ASAP, APO 500, c/o PM, S.F.
- J3WGF: IAAB, APO 660, c/o PM, S.F.
- J9ANG: Navy 1175, San Francisco, Calif.
- L1ZJC: R.A.F. El Adem, Libya.
- MDSAA: R. Lansley, 7 HQ Signal Regt., M.E.L.F.
- MDSDC: No. 2, FBU, Kabrit, Egypt.
- NY4AC: Box 12, Div 2, Navy 115, c/o FPO, New York.
- OQ5BW: American Presbyterian Congo Mission, Moma, Tar Luisa, Belgian Congo.
- OQ5CA: Robert Jerome, Nizi, Belgian Congo.
- OQ5CE: Capt. H. McCrory, Pan American World Airways, Inc., Leopoldville.
- OX3GD: USGC Lorán Radio Station, Frederiksdal, c/o FPO, New York.
- PZ1AL: Box 226, Paramaribo, Surinam.
- PZ1WK: Box 346, Paramaribo, Surinam.
- SKK2: P.O. Box 3048, Gothenburg, Sweden.
- ST2KA: Box 300, Khartoum, Sudan.
- VPZLA: APO 867, c/o P.M., Miami, Florida.
- VP4TU: 155 AACs Squadron, APO 869, c/o P.M., Miami, Fla.
- VR1AA: Radio station VR6AA, Pitcairn Island, S. Pacific.
- VQ5PBD: P.O. Box 289, Kampala, Uganda.
- VR5NC: Radio VR5NC, c/o Post Office, Norfolk Island.
- VS7GR: P.O. Box 517, Colombo, Ceylon.
- VU2KP: c/o F. K. Leach, 65, London Road, Chelmsford, Essex.
- YN7HB: Box 272, Managua, Nicaragua.
- ZC6CX: c/o P.O. Box 360, Cairo, Egypt.
- ZC8DD: APO 66, Airborne Div., M.E.L.F.
- ZASQ: Box 138, Tirana, Albania.
- ZE1JS: P.O. Box 700, Bulawayo, S. Rhodesia.
- ZE2JA: P.O. Box 596, Salisbury, S. Rhodesia.
- ZD3B: c/o B.O.A.C., Bathurst, Gambia.

● DX QSL's Received

- Al Slater: LU3DH, PY6AG, PY9AT, T1NS, TR1P, VE6HB, VQ2AG, VQ4JBC, VQ5JTW, VK2AML, VS7ES, VS7MB, W5CNK, W5LRE, W5SMA, ZL4AO.
- A. H. Onslow: 3.5 Mcs.: W2ENZ, 4CPG; KP4CE. 14 and 28 Mcs.: KH6AQ, 6HO; KP4AJ, LI2BO, PY6AG, NY4AC, T1NS, TR1P, VK6KW, VQ5JTW, VU2AF, W5AOH, W6FDO, W7JGS, ZL1JV, ZL1KJ, ZL3BV, ZL4FO.

DX PREDICTION FOR
MID-JULY TO MID-AUGUST

(14 Mcs. through courtesy of Geoff. Hutson, G6GH. 28 and 60 Mcs. with acknowledgement to Denis Heightman, G6DH. See note on page 136 of "S.W.N." Vol. 2. No. 5).

14 Mcs. Conditions

- 0400—W6, W7, VE6, VE7.
- 0500—W6, W7, VE6, VE7.
- 0600—As above, also VK, ZL.
- 0700—VK, ZL.
- 1400—J, VK, VU, PK.
- 1500—As above, also VS1, KA.
- 1600—W6, W7.
- 1800—KA, KG, J.
- 1900—KA, KG, J.
- 2000—CX, KP4.
- 2100—W5, W6, LU, PY, CX.
- 2200—As above, also VP2, VP4.
- 2300—W5, OA, CE, PY, LU.
- 2400—As above.

28 Mcs. Conditions

Conditions for DX will be similar to those of last month. Best signals will come in from S.W. of a line drawn through the Red Sea. The early evening should be the best period with signals from S. Africa and S. America proving the most reliable. There may be occasional openings to the Far East. N. American signals will be almost non-existent. European short skip signals are likely from 0700—2200 GMT during this period.

60 Mcs. Conditions

Sporadic E propagation is now at its height and signals from an ever increasing number of European countries are being received. These conditions should continue during the coming month.

- M. C. Pavely: J9AGT, VE8AS, VP4TE, VQ4ERR, VK2AGU, W6OCA/J3, CO8MP, LU1JC, W8SIR/VP9, VS1BV.
- J. Bowes-Taylor: CR9AG, OQ5AV, PY6AG, T1NS, VQ4JBC, VQ5JTW, YV3AL, ZC1AL.
- W. H. Harris: CX2AX, CX3C, LU7FW, ZS6U.

Component Review

STRATTON & CO. LTD.



Type 594

The illustrations herewith show two of the range of slow-motion dials and drives now offered by Eddystone Type 594 is fitted with a $3\frac{1}{2}$ inch diameter dial, and a vernier scale by means of which readings can be taken to a tenth of a division, or one/thousandth part of the scale. The slow motion drive incorporated gives a reduction ratio of 10-1, which in conjunction with the large fluted knob is adequate for most purposes. This drive is of the epicyclic type, and is evidently of sturdy design, judging by the massive brass housing. The "output" is a short length of $\frac{1}{4}$ inch spindle which takes a standard coupler. The scale is engraved white on a matt black background,

and the whole is a "comfortable" movement for the price of 17s. 6d.

Type 597 is of similar construction but has a smaller dial, and in place of the vernier device has a simple index strip. The dial itself is of 2 inch diameter, and can be obtained in two alternative finishes—matt black or matt silver with a contrasting scale. Both this drive—which costs 13s. 6d.—and the 594 have the same method of mounting, which requires the cutting-out of a hole roughly $\frac{1}{4}$ inch in diameter, two 4BA holes for the fixing screws, and 6BA holes for the indicator.



Type 597

Broadcasting Station List

Modifications to List appearing in the "Annual"

Channels discontinued (delete)

3075 kcs., JZC; 3220, Kumamoto; 4510, Kharborovsk; 4760, XUSA; 6050, Moscow; 6150, CKRO; 6720, PLT; 7255, Hanoi; 9624, XGCA; 11906, Hanoi; 12364, Pnompenh; 13190, RV64; 15140, JLW6; 15230, Komsolomsk; 15960, PLG; 21220, Moscow; 6090/8920, XRRR. ✓

Frequency Changes

Saigon, from 4810 kcs. to 6190 kcs.; XUPA from 9695-9680 kcs.; OAX4P, 5985-5870; XGOY, 9635-9665; ZBW3 9570-9515; Singapore, 4775-4820; WNRX, 21610-21730. ✓

Call-sign change

6050 kcs., XGOW to XLRA.

New Channels and Stations

6305	...	OAX4M	Miraflores, Peru	La Voz de la Democracia	
6359	...	HCJB	Quito, Ecuador	The Voice of the Andes	10000
6390	...	XPRA	Kumming, China		
7301	...	—	Pnompenh,		
			Indo China	Radio Cambode	
7495	...	XNCR	Yenan, China		
9660	...	VUD	Delhi, India	All India Radio	100000
9750	...	XMRA	Lanchow, China		1000
11870	...	—	Munich, Germany	A.F.N.	5000
12500	...	XLRA	Hankow, China		1000
17880	...	WGEX	Schenectady, U.S.A.		100000
21440	...	ORY	Ruysedele, Belgium	Radiodiffusion National Belge	5000
			New York, U.S.A.		50000
21500	...	WOOW	New York, U.S.A.		50000
21610	...	WNRA	New York, U.S.A.		50000



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A new purchase of these famous ex-R.A.F. G.P. communications receivers enables us to offer these at the very keen price of **£15 15 0** (Carriage and packing 10/-).

We can supply from stock for the "Short Wave News Power Pack No. 1" as described in this issue, the voltage regulator valve type VR150-30. Price 15/- each Plus postage.

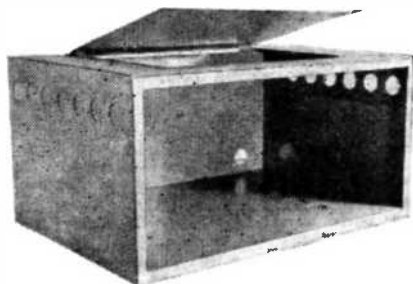
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(E. J. PHILPOTT)

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DIALS—This new dial is a beautiful job, ratio 10:1 and is supplied for individual calibration, the ivory dial plate being marked 0-100 with three other scales for the user to mark in his own calibrations. Size: 6in. long x 4in. wide **19/9**. Full range of other Eddystone components in stock.

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THE WIRELESS WORLD VALVE DATA, 2s., postage 2d.

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SALE. Tritet CO pp 807 100 watt TX—£10; 1.7 Mca. transceiver with 12 volt rotary converter—£10; also valves, components, etc. S.A.E. for list. Box 1021.

SALE: AR88 as new, best offer over £45; Microphone, Amplion MCR, as new £3; Transmitter, "Harvey" UEX10, model 963 with 6V6 (ECO or Xtal), 6L6 PA 6J5/6N7 modulator. MCW. CW. Perfect £20. G4BY, Tankerton, Kent.

WANTED: ex-R.A.F. R1116/A receiver. Good price paid. Cleveland Villa, Cleveland Terrace, Whitby, Yorks.

1-V-2 Batt. Rx, 9-180 metres band spread. Phone jack, black crackle steel cabinet, as new, £10, or nearest. Stanger, 53 Wether Riggs Rd., Workington, Cumberland.

T.R.F.3. Battery, S.W.L.-constructed Steel Cabinet £6 10s. or offers. R. W. Collett, 47 Lindsforth Road, King's Norton, Birmingham, 30.

M.C.R.L. For sale. Complete with phones, power pack, batteries, 4 coils, aerial, £7 15s., or nearest offer. Houseman, Rivers View, Leighs Brow, Barnton, Northwich, Ches.

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11-25 metre coils	8/3 per pair
20-45 "	"	"	8/3 "
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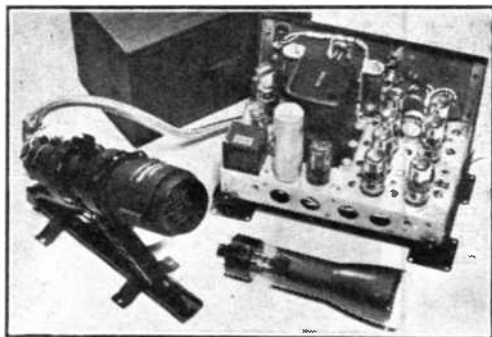
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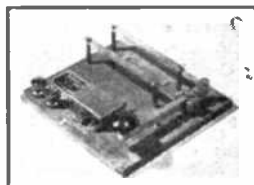
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