Short Wave News

1/3
Vol. 3 No. 5
May, 1948

For Transmitter and Listener

Contents

AN AMALGAMATED SHORT WAVE PRESS PUBLICATION

Short Wave News

Vol 3 No 5 Annual Subscription 16/- May, 1948

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EDITORIAL — S.W.L. Reports

The phone versus c.w. controversy can be guaranteed to produce a sharp exchange of views in any gathering of radio amateurs. Just after the restoration of licences, an old-timer versus three-letter-call complex seemed to be brewing. And now, to judge from our correspondence, a SWL versus transmitting-amateur class warfare seems to be on. Until recently, the writer's sympathies were much with the SWL's. Generally speaking, the SWL is a newcomer to the amateur radio fraternity. He is keen and enthusiastic and he has not developed that superiority complex which seems to overtake so many old-timers with the passage of time. Being young, he deserves, in the writer's opinion, more consideration than the horny older ones who prefer to give the impression that they have nothing further to learn.

However, a recent spell on 7 Mcs. phone, with a rig which despite an input limited to 70 watts, puts an S8 signal into most parts of the British Isles, thanks to a good aerial, has produced such a crop of SWL reports, that one does feel that the complaints of the transmitting fraternity are justified. Being the editor of a journal which is apparently gaining very rapidly in popularity has some disadvantages—the request for one's QSL card from any listener who happens to hear one's signal, being one ! No doubt other 7 mcs. phone stations do not get quite the batch of SWL reports G2UK got after the recent Easter holidays ! But many of the more famous of the DX stations do, and they get them all the year round.

On the other side of the picture are the letters we get from SWL's complaining that in spite of enclosing stamps, International Reply Coupons, etc., such and such a station will not QSL. Well, QSL's do cost money and time seems to be at a premium these days. QSL card filling does consume both money and time.

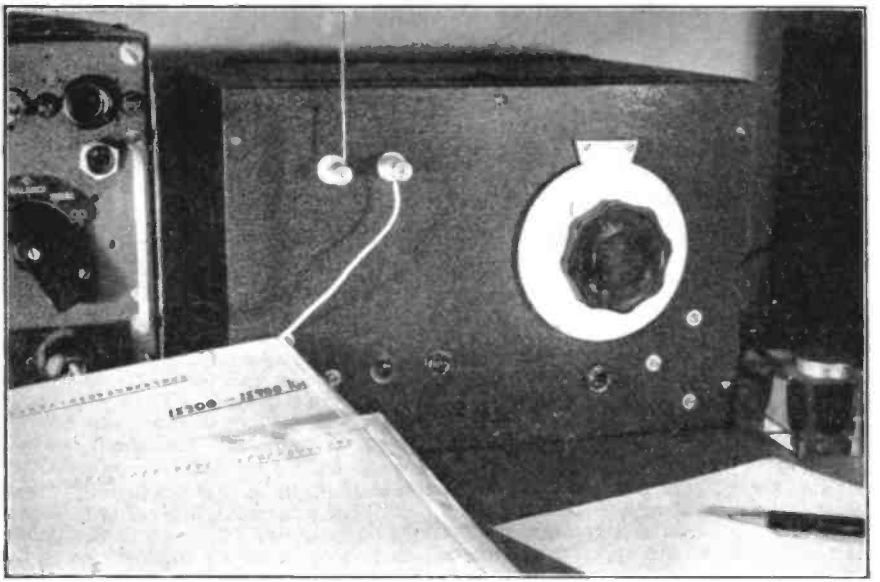
The whole problem revolves around the question of the usefulness or otherwise of SWL reporting. SWL reporting is a good thing in itself because it provides the SWL with an introduction to our hobby, it gives him something interesting to do, it teaches him accuracy and if he reads the QSL's he gets back, he should learn something about typical amateur gear and the capabilities of various input powers and aerials. For these reasons we feel the transmitting amateur should forsake a selfish attitude and QSL to the SWL on the grounds that at least he is giving a helping hand to the beginner. The transmitting amateur can justly claim in many cases, however, that the SWL's report is useless to him and he does not see why he should encourage the sort of chap who has not the sense to realise that his reports are of little value.

It seems to us that a great step towards a better understanding between both sides could be taken by SWL's being a little more intelligent and the transmitting fraternity being a little more tolerant. It is obviously a waste of everyone's time, when a SWL hears an S9 signal on a band like 7 Mcs. and sends that station a report. Such a report will be taken for what it obviously is—an effort to persuade the transmitter to part with yet another QSL card. It is a waste of time from the SWL's point of view, because it is not very difficult to hear S9 signals on 7 Mcs. ; he gains no experience nor adds to his ability by locating and reporting these signals, nor incidently is he likely to get a QSL in return. From the transmitter's point of view, it is a waste of time because he obviously knows where he is putting an S9 signal.

What is of interest to the G transmitter is that his 14 or 7 Mcs. signals are being received in ZL, VK, W6 or LU, at RST 449. The chances are that at this strength, he will not have worked many stations and one or two SWL's reports will encourage him considerably. Similarly the ZL or VK who is RST 349 in this country will probably like to know about it. If he is putting an RST 589 signal in here, he will be working plenty of G stations and he will not want SWL's to tell him what his signals are like. We have published plenty of information on SWL Reporting in these pages and we do suggest that the advice we have given be followed. Do not go reporting the 589 or the S8 BBC quality phone stations. Report on those signals which are obviously not doing so well. And if you are really keen, go for dx on 3.5 or 7 Mcs. and for 50 and 60 Mcs. listening.

To the transmitter we would say, before you dispatch those SWL reports to the waste paper basket, just try and remember the day you tuned your first o-v-l. Try and remember

(*Continued on page* 121)



S.W.N. Frequency Meter

with 100 kcs. Substandard

By G2UK

Introduction

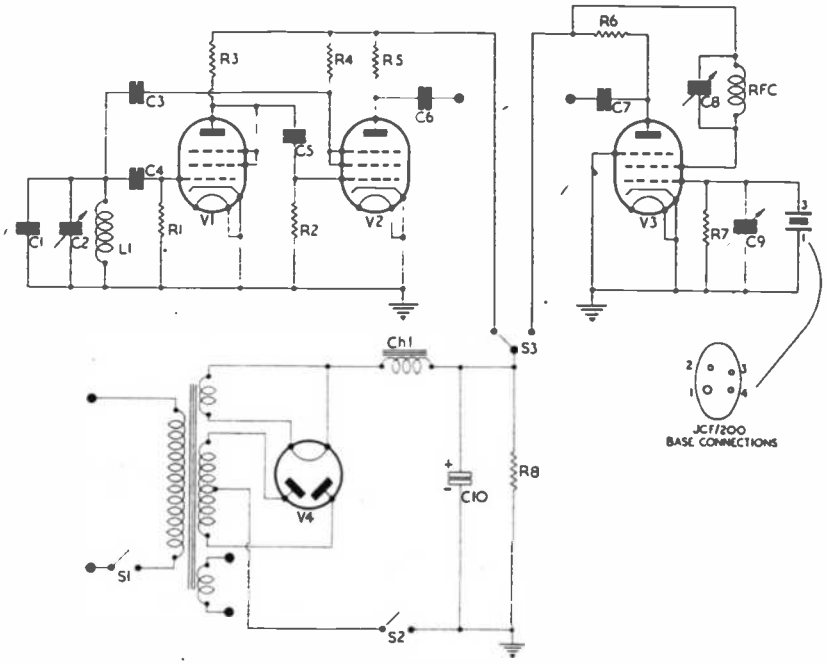
Quite apart from the fact that our transmitting licence requires that if we use a VFO we shall have some means of measuring our frequency to within an accuracy of not less than ± 0.1 per cent. ; a reliable frequency meter can prove to be one of the most useful instruments in the shack—be it the shack of a transmitting amateur or of a SWL. The transmitter need never fear a G.P.O. inspection of his log ; he can work really close to the band edges ; he can measure accurately the frequency of some rare dx for future reference ; or he can put his transmitter " spot-on " a local ragchewing net. The SWL can calibrate every new receiver he builds ; he can identify by frequency an unknown S.W. broadcast station ; he can find a station, given its frequency. These are a few only of the assets a really accurate frequency meter will provide.

The construction of a variable frequency oscillator which will give the accuracy quoted above, and which can be calibrated and made to retain its original calibration despite temperature, mains voltage, and other changes presents difficulties not easily overcome by the average amateur constructor. The type of frequency meter using a 100 or 1,000 kcs. bar and a multivibrator, proves quite satisfactory for calibrating a receiver and checking band edges, etc., but it is not so convenient as a direct reading instrument. The easiest way out of the difficulty is a combination of variable frequency oscillator and 100 kcs. substandard so that the VFO can be calibrated from the 100 kcs. bar, and its calibration checked against the standard before measurements are made so that allowances can be made before each observation for current temperature and voltage fluctuations.

The frequency meter described herewith consists of a Franklin Oscillator and a 100 kcs. quartz crystal oscillator, each built as a separate unit on one chassis and fed from a common power supply. The method of use is as follows.

To start off with, the Franklin is calibrated from the 100 kcs. bar, graphs being drawn for the various ranges required. The 100 kcs. oscillator is switched on and one of its harmonics must be identified, the way to do this being to tune in a known station on the receiver—say Radio Australia on 15,200 kcs. The harmonic beating with the station will obviously be the 15,200 harmonic and the

15,100 and 15,300 harmonics will be found below and above it. Having got zero beat with one or other of these harmonics, switch the 100 kcs. bar off and switch on the Franklin, and tune until its harmonic is picked up and brought to zero beat on the receiver. Read



R1, 2—100KΩ
R3, 4—30KΩ
R5—10KΩ
R6—100KΩ
R7—1MΩ
R8—40KΩ 10 Watt

C1—800 μμF
C2—100 μμF
C3, 4—5 μμF
C5—100 μμF

C6, 7—100 μμF
C8—100 μμF
C9—60 μμF
C10—8 μF

L1—See text

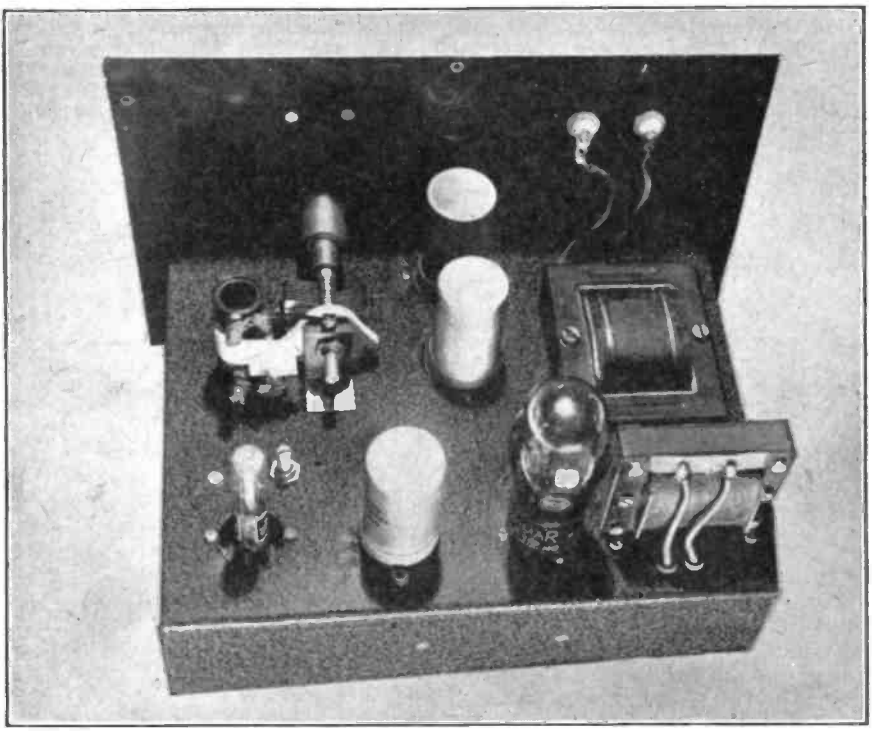
V1, 2, 3—EF50. V4—80

Ch1—10H 60Ma

what we may expect, and the discrepancy is due to the room temperature or the mains voltage, etc., being different from when we made our graphs. As the instrument warms up, the dial reading will change still further, but we need not worry because all we have

off the dial reading and mark on the graph. Repeat for the other 100 kcs. harmonics and then draw a complete graph for the frequency range required.

Now suppose we have drawn one graph for the 7,000 to 7,400 kcs. amateur band. When we next switch on our meter, we locate the 100 kcs. harmonic at the edge of the band on the receiver, get zero beat on the receiver, switch over to the Franklin, tune in the Franklin to give zero beat on the receiver, read the dial and find to our dismay that whereas our graph shows say 36° for 7,000 kcs. our Franklin dial now reads say 37.8°. This is to do is to note the difference between our graph reading for 7,000 kcs. and the actual dial reading—in this case 36° from 37.8°, i.e. 1.8° and this is the "correction" we must make to all subsequent readings we make during that period of operation. If we are going to be really accurate we should check our "correction" quite frequently—before each reading in fact. One must be careful about whether to add or subtract the correction from the dial reading. A little thought makes it easy enough. If our graph says 7,000 kcs. should be 36°, whereas in actual fact the dial reading for 7,000 kcs. if 37.8°, then we must



This is the Frequency Meter out of its case, as seen from the rear. The disposition of the above-chassis components will be clearly seen

ubtract 1.8° from all subsequent dial readings before reading off the frequency on the graph.

The Circuit

One of the best circuits for the VFO section is the Franklin circuit. This circuit was dealt with quite fully in our companion journal, the **Radio Constructor,** Vol. 1, No. 2, in connection with a VFO Transmitter Drive Unit. The circuit used here is the same as that used in the Drive Unit, except that as no output is taken from the oscillator valves, no isolating, doubling, or amplifying stages are required.

V1 and V2 are EF50's, V1 having its anode and grids 2 and 3 strapped together, thus converting it into a triode. V2 has Grid 2 and Grid 3 strapped together to form an anode. The anode proper is used to provide R.F. coupling to a short aerial—about 6 inches of stiff wire, coupled via a 100 μμF capacitor is quite sufficient to give strong harmonics down to 30 Mcs. The values of the various capacitors and resistors are shown in the circuit diagram. L1 consists of 22 turns of 22 SWG cotton covered wire on a $\frac{1}{8}$ inch former. Apart from winding this carefully and tightly and doping well with Denco cement, little comment on construction is needed. The position of the various components on the chassis is well shown in the photos. Construction should be as rigid as possible and a really rigid fixing bracket should be made to support C2, which should be a high class variable capacitor having a stright line characteristic when frequency is plotted against degrees of rotation. The dial shown is a Muirhead Type D-83-A with a reduction drive of 8-1. This is really ideal for this type of instrument. It is calibrated 0-180° in a half circle and has a vernier scale.

Turning now to the 100 kcs. Quartz Bar Oscillator, another EF50 valve is used, with grid 2 connected in a resonant circuit consisting of an RFC and 100 μμF variable capacitor. The 100 kcs. bar used is one of the new G.E.C. vacuum mounted type—Type JCF/200. This can be clearly seen in one of the photos. It has a miniature type deaf aid base, the connections being made as shown in the

small diagram—the larger of the three pins and the one opposite being the contact pin. A small 60 μμF variable is connected across the crystal to adjust its resonance and a 1 megohm grid leak resistor used. Output is taken from the anode via a 100 μμF capacitor.

The power pack circuit is perfectly straight forward, a 250-0-250 volt 60 mA. transformer providing sufficient H.T. This transformer should have a 6.3 v. 1 amp. winding for the three EF50's and a 5 v. 2 amp. winding for the type 80 rectifier valve. A 10 H. smoothing choke and an 8 μF electrolytic capacitor provide sufficient smoothing and a 40,000 ohm 10 watt resistor connected across the output acts as a bleeder resistor.

Construction

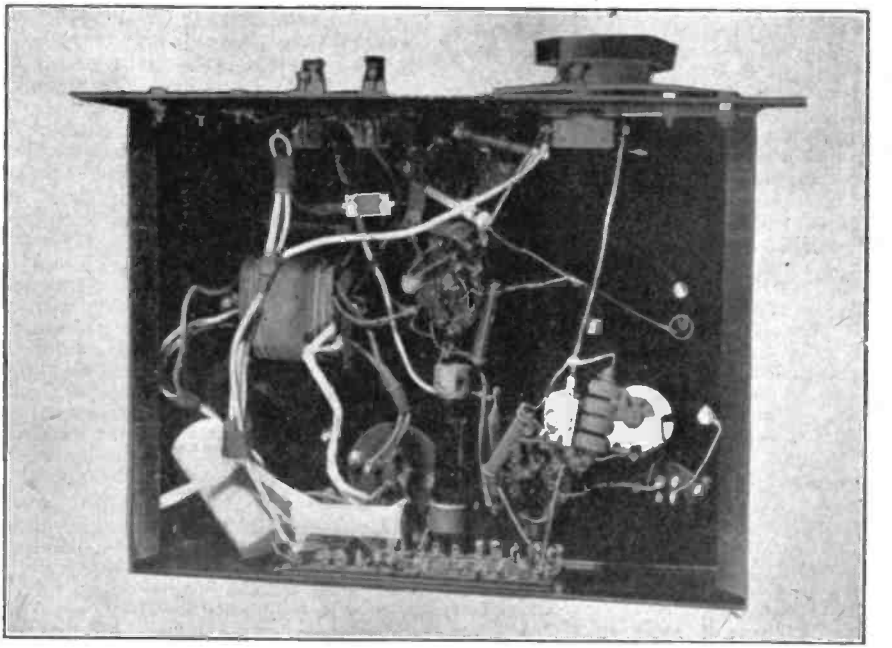
It is worth while putting one's best workmanship into an instrument of this type. The chassis, cabinet and general construction should be as firm as possible. All wiring should be as rigid as possible and it is better to wire resistors in from point to point rather than arranging them parallel to each other, but with long leads. The latter arrangement may look neater but the final construction is not so rigid as the former method.

The cabinet and chassis shown was made for us by Philpotts of Loughborough, and measures : 8″×8″×12″.

The chassis is 11″×8″×2½″ deep, which will accommodate the three EF50's, the type 80 rectifier, the quartz crystal bar, the tuning capacitor C2 and its inductance L1, and a small receiving set type mains transformer and smoothing choke, without difficulty.

The output from the Franklin and from the 100 kcs. oscillator is taken in each case to a small feed-through insulation located on the panel as shown. The Franklin gives sufficient output to produce a strong signal in an average receiver, when only about 6 inches of wire is used as an aerial—as shown. If the higher harmonics are needed from the 100 kcs. oscillator, a length of wire should be taken from its output terminal to the receiver aerial terminal. It may not be necessary to connect the lead directly to the receiver aerial terminal, simply twisting it round the aerial lead-in may suffice.

(Continued on Page 136)



Looking under the chassis of the Frequency Meter. The wiring is perfectly straightforward and should present no difficulties. Rigidity is the order-of-the-day!

Around the Broadcast Bands

Monthly Survey by "MONITOR"

All times are given in G.M.T.

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

A very nice and large mail-bag has come in this month from readers.

J. Beaunoir (Natal) leads in the Honours Roll with 105 Countries Heard, while Arthur Cushen (Invercargill) heads the Verified list with 106 but does not state the number of Countries he has heard. Here is a note to those sending along lists for the Honours Roll. Please state Countries heard, verified number (showing both) on a seperate sheet of paper if you are also sending other news items. Address all items for this column to : Monitor, c/o *S.W.N.*, to reach me by the 5th of the month. Now for the months news :

●Asia.

Philippine Is. R. Dunkley of Portsmouth, a newcomer whom we welcome to this column, sends along a very clearly written log and in it he lists KZRH Manila 9,640 kcs. and heard afternoons at his QRA. Old Timer Sidney Pearce has heard them with R6 signals often at 1530 and announcing as Manila Broadcasting Co. A. Baldwin of Leytonstone logged them also at 2213 with dance records QSA 3 R4.

Arthur Cushen in Invercargill lists "The Voice of America" Manila on 11,890 kcs. at 0900 and also on 15,330 kcs. to 0845. Power 50 kW according to this reader, who also mentions KZBU Cebu 6,100 kcs. with 250 Wts.

Malaya. Singapore. Charles Southall (Philadelphia) send in a very nice and lengthy log and I note he has had good reception of the B.F.E.B.S. on their 6,770 kcs. channel at 1245 with BBC Relay in English.

L/C Eric Tilly DFL.JP Singapore sends your scribe a photo he took of the Cathay Cinema Buildings, Singapore. The Home of "Radio Malaya." We will publish this next month. Pearce has heard Singapore on 15,300 kcs. with R7 signals, on 6,770, 11,835 and 9,690 kcs. R6 at 1545 with re-broadcast of the Grand National Race on March 20th.

China. XGOY Chungking 11,913 kcs. R6 with news from Nanking studios at 1400. On Sats from 1515-1600 acknowledges listeners letters from Australia and New Zealand by playing a record for them in "Symphony Hour," Programme. News from Chungking studios is given at 1600 when signals are often R7-8 (Pearce).

F/Lt. J. A. Jagger (Grays) sends in a nice log and mentions good signals from XGOY at 1400 on 11 mcs. also 7,130 kcs. Closes with Eng. and Mandarin announcements. This reader also lists XGOA Nanking 11,835 kcs. giving news at 1400 with XGOY. Programmes usually in Mandarin.

Indonesia. "Radio Batavia" now gives English transmissions daily over YDC 15,150 kcs., PLE6 17,630 kcs. and PLS2 19,345 kcs. at 1700-1730 (Jagger). Programme to N. America is now given on 8,911 kcs. at 1430 in parallel with 15 mc. channel. The 11,440 kcs. outlet having been dropped. (A. Cushen). PLY 10,060 and PMD 7,997 kcs. heard with dance recording at 2330 (Jagger).

Java YHM "The Voice of Free Indonesia" 11,000 kcs. New schedule is 1700–1830 and 2200–0100 daily (Scribe).

Turkey. L. W. Lowis of St. Leonards-on-Sea sends in some very interesting news from QSLs recently received by him. Firstly we take TAP Ankara 9,465 kcs. QSL has map of Turkey, showing greatly enlarged aerial rising from position of Ankara. QRA Turkish Press Dept., Radio Branch, Ankara. Schedule as follows : 1600–2000 in Persian, Arabic, English, French, Greek, Roumanian, Serbo-Croat, Bulgarian, German and Hungarian as well as Turkish. Gives English session at 1745–1800 also special programme in English on Sundays, Mondays and Thursdays and alternate Tuesdays from 2130–2145.

Syria. "Radio Damash" Damascus 12,000 kcs. has been heard R5–6 QSA3 with news in Arabic at 1750 foll. by Native music (R6–8 QSA4) at 1800. Western type music at 1810. Usually suffers very heavy CW QRM (Scribe). Arthur Cushen states he has received a letter veri. from them. In it mention is made that the station is only temporary, using 500 watts. They are establishing three powerful short wave stations and hope to finish them in the near future. Schedule : 0500–0700, 1200–1300, 1600–2000. QRA : Director General, Syrian Post Telegraphs and Telephones, Damascus.

Ceylon. Colombo "Radio SEAC." Cushen reports them on 17,730 kcs. instead of 17,820 kcs. This new freq. is on loan from BBC because of interference they were causing to GSV when on 17,810 kcs. Radio SEAC also heard on 9,915 kcs. instead of 9,520 kcs. and it looks as if the BBC have loaned them GRU channel also Cushen states.

ZOH Colombo 4,900 kcs. is often good signal from 1630 (Pearce).

One of our younger readers, R. F. Pilkington of Littleport, Cambs., who tells me he is 15 yrs. old and sends along his first report, has logged Radio SEAC on announced freq. of 17,770 kcs. with R6–7 signals from 1230–1615 and also heard them on their 6,075 kcs. channel.

L. W. Lowis has QSL for 15,120 kcs. reception from Wing Commander Smith, Station Director. Has RADIO SEAC in large type and requesting further reports and suggestions.

● **Africa.**

Portuguese Guinea. CQM2 Radio Bissau 7,948 kcs. heard with Portuguese music and announcements after 2200 (Jagger). Fine signal in the USA from 2130–2300 (Southall).

QRA : CMQ Emissora de Guine, Bissau, Portuguese Guinea.

Angola. PWA. CR6RA Luanda has been logged on 9,470 kcs. with QSA4 R6 signals at 2045 giving announcements by male and female as " Radio Clube de Angola." Closes at 2100 with further directions and Portuguese Nat. Anthem. Signals are often subjected to sidesplash from TAP Ankara and also CW QRM. This item comes from A. Baldwin and heard by two listening posts at the Leytonstone Chapter of the ISWL. From March 31st—April 15th the 7–8 mc band will be under observation with five stations of the Chapter. (VFB OMs and we hope to have a bumper log from you for this latter session).

Spanish Morocco. EA9AH Tetuan has been heard consistently on 6,067 kcs. opening at 0730. (Cushen).

Northern Rhodesia. ZQP Luska 9,705 kcs. Heard occasionally around 1630 with BBC recordings and Cape to Cairo News at 1645 (Jagger).

Union of South Africa. ZRK Capetown 5,882 kcs. Power 5 kW.

QSL card shows small map of Africa on left with large Rhomboid aerial and large letters SABC in centre. QRA : SABC P.O. Box 4559 Johannesburg. (Lowis). Johannesburg 4,895 kcs. well heard around 1800, usually in parallel with Cape Town (5,882 kcs.). (Jagger).

Fr. Cameroons. Radio Duala, Duala, 7,950 kcs. heard around 1930–2000 sign off (Southall).

Madascar. Radio Tananarivo, Tananarive, logged with fair signals during afternoons (Bob Iball). Freq. 9,695 kcs.

Heard regularly around 1645 with R5–6 signals by J. A. Jagger who says freq. is 9,645 kcs. This reader says he usually checks freqs. on a BC221 frequency meter which he remarks is uncannily accurate.

Algeria. Algiers 11,835 kcs. uses 10 kW power. New TX in course of construction to use power of 25 kW. Letter veri gives schedule as foll. : French 0630–0800, 1800–2300 (Sats. to 2400, Suns. 0700–1100, 1500–2300). Arabic 1100–1400 (Sats. to 1430, Suns. to 1500).

QRA : Radiodiffusion Francaise, Region de L'Algerie et des Territories du Sud, Alger. (Lowis).

● **Honour Roll.**

Name and Country	*Countries Heard*	*Countries Verified*
J. Beaunoir (Natal)	105	84
J. A. Jagger (Eng.) ...	98	29
C. M. Southall (USA)	67	39
D. O. French (Eng.)	58	28
L. W. Lowis (Eng.) ...	54	28
R. Iball (Eng.) ...	52	10
A. Cushen (New Zealand)	?	106

● **West Indies/Central America.**

Trinidad BWI. VP4RD Port of Spain 9,625 kcs. Power 500 watts. Sends QSL card showing map of Trinidad. Schedule : 1100–1300, 1600–1800, 2000–0300 (Suns. 1100–1800, 2000–0300).

QRA : Radio Trinidad, Broadcasting House, Port of Spain (Lowis).

QSA3 R4 from 2130–2220 with continuous CW QRM on their freq. from 2155–2215 by NINN–NPN. Bob Iball wants to know who these CW stations are. Sorry I can't help you Bob. Any offers anyone ?

Now uses 9 Mc. freq. from 1030–0130 and also new freq. of 6,085 kcs. from 2200–0300 daily (Scribe).

Jamaica. VRR5 Kingston 12,050 kcs. heard at 2140 on March 27th with Commentary on the England v. West Indies Test match. Signals were QSA4 R5. Call at 2145 VRR5 and ZQI Kingston. Still requests reports on reception to Cable and Wireless Ltd., Stoney Hill, Jamaica. (A. V. Wilkinson, Manchester). Pearce also heard them around this time with Test match commentary until close of play at 2230. Often R7 before close down.

Dominican Republic. HI1Z Trujillo City, 6,312 kcs., heard at 2245 with call " Broadcasting National " and 4 bell note signal and mention of CBS. Signals QSA4 R4. Guitar music at 2300 QSA4 R5 with heavy QSB. Has female announcer (Wilkinson).

HI9B 6,390 kcs. is reported by R. Aldridge of Amersham and heard with announcements at 0115 in Eng. foll. by Gospel Service in Spanish. R9. HI1Z also at 2330 QSA3 R7. HI1R 6,430 kcs. at same time QSA3–4 R8. At 2400 was R9. Call " La Voz de Fundacion."

Guatemala. TGWA, Guatemala City, 9,760 kcs. QSA5 R6 from 2315–2345 with Dance music (Iball).

Panama. HOLA Colon 9,505 kcs. sends very attractive QSL card with call in very large letters on one side and on reverse their schedule 1kW RCA TX. Eng. programmes : 1400–1600, 2000–2300, 0200–0300. Radio Atlantico. (Lowis).

● **Europe.**

Greece. C. A. Wharton of Leeds sends along a card he has received from Station SVM in Athens for reception of their signals while wkg WEC and WQV New York. C.A.W. heard them on 9,935 kcs. with R9 plus signals. Have no QSL cards. Operated by Cable and Wireless Ltd. Central Telegraph Office, Athens. (Your card returned to you OM via ISWL QSL Bureau as you did not enclose a SAE for return.)

This reader sends data received on Athens transmissions altho Phone is used only occasionally for News Correspondents stories for recording in New York.

Freqs. : SVD 6,885 kcs., SVM 9,935 kcs., SVP 12,195 kcs., SVQ 13,640 kcs., SVR 13,670 kcs., SVS 13,725 kcs., SVU 19,885 kcs., SVW 15,905 kcs.

Transmitters are Marconi SW88s with SWB10 as F.A. Max input to aerial 7 kW phone 20 kW CW. Aerials are Marconi-Franklin 8 element with 16 reflectors to London and N.Y. For SVQ, SVR, SVS, SVM is bi-directional 6 elements on Cairo/London/N.Y. All aerials are on 3 200 ft. masts. Marconi CR100 and CR150 Diversity Reception.

Roumania. Bucharest "Radio Dacia Romana" 9,255 kcs. gives Eng. programme 1900–1930 also heard in parallel on 6,210 kcs. (QRM from Warsaw) "Radio Romana Libere" (Pearce).

Belgium. ORY Ruysellede heard well on 17,845 kcs. at 1600 with musical programme before and oration in language, probably Flemish, after. (Southall).

Iceland. Reykjavik TFJ 12,235 kcs. R8 signals Suns. 1615–1645. All Icelandic programme. No English. (Pearce).

D. C. Knight (Basingstoke) asks about some of the above-mentioned countries. (I hope this data will be of help to you OM).

● **QSL Section**

Sidney Pearce : VLQ3, VLH3, VLH4, VLG6, VLG10, VLB10, VLC7, Radio Stuttgart, Munich, Frankfurt, PJC2, EAJ43 (Radio Club Tenerife), VUD2, VUD4, VUD7, Berne (11,815 kcs.), D.B.R., OTC2, HI2T, CR7BJ, CR7BV, Radio Belgrad (Belgrade), VP4RD, YV5RY, YV5RU (FB QSL card via Airmail). (Nice work OM). D. Potter : PHI, PCJ, PGD, HER5, HEI5, TAP. (Your scribe has QSL from Moscow OM. Radio centre Moscow is QTH David). R. Aldridge : CR7BJ (card marked CR7BE ! . . . Your scribe had one recently marked CR7 BG ! !) VLQ3, TGWA, 9,760 kcs., Capetown. R. Iball : HI2T (no stamp on the envelope but two IRCs affixed which the GPO kindly let Bob have !) (Looks as if they're useless out there OM as you say. Any gen anyone on non IRC Countries ?) VLC9, VLC4, VLA6. J. A. Jagger: Radio Trinidad, Tangier, OTC2, CR7BJ, TGWA, YV5RU, YV3RN, WRUL, WBOS, WWV, Oslo, TAP Sofia, PCJ, PGD, SBT, SDB2, SBP Rome, SEAC Warsaw 3, Andorra, JCKW Vatican, Algiers, CKNC, FZI, HH2S Tirana, VUM2, Radio Luxembourg, VUD5, VQ7LO, Leipsig. (Good work OM). (Yes, Portuguese, Spanish and French stations do QSL OM). A. Cushen : XGOA (9,730), OAX4J, OAX4V, OAX4W, SEAC (17,840), WEIN (11,785), LRX1 (6,120), PLY, PLA, YDD2, PLO, PLU, OIX2, VLB11, ZL2, ZL3, ZL4, CE1173, CE615, CE1180, Luxembourg (15,350/9,527), Singapore (9,690/21,720). C. M. Southall : ZL3, FZS, FZI, FHE7, PZR, CFCX, CFRX, SEAC, FZF6. (Congrats. on the ZL3 QSL OM). E. Field (Watford) : Radio Andorra (large picture card), EPB, VLC7, VLG10, VUD5 (9,590).

● **In Brief.**

Bert Capelin of Broadway, Worcs., sends along two cuttings from local papers referring to a three minute reply Bert had over the Air from "Radio Australia" recently. He has also received personal thanks from Robin Wood of Radio Australia in a letter which also asked for further period reports from time to time. Bert tells me he uses the "SWN" Report Sheets which he fully fills in in detail. VLA, VLB, VLC and VLG10, QSLs have been received. Bert's name will again be mentioned over the air on Sunday, April 18th at 2100 when further greetings will be conveyed to him ! This reader used to live and work in 1927 on the Dandennong Ranges and at Easter . . . to his surprise Radio Australia described the place, sending greetings to those who had been out to Australia. Bert uses a 33 ft. aerial running E—W.

Yes, OM, detailed reports are always appreciated. Best of luck to you and keep up the good work.

● **Acknowledgments**

Due to shortage of space this month we cannot give a full list of readers who have sent in data for this column. Your scribe thanks those who have kindly sent along logs published and also those readers whose letters are unavoidably held over this month.

Resonant Lines

By Centre Tap

TALK OF THE TOWN.

Editorial Note. It has been argued that this column should consist of talking points and topical comment, but so far Centre Tap has not taken this point of view too literally. However, as a final answer he took a notebook to a recent gathering of hams and duly noted what they talked about. No apology is offered for presenting it—it simply reports, not what they might have profitably discussed, but what in actual fact they did ragchew over.

Up the Poll ! The old-timer who always points out to everyone he meets that the R.S.G.B. Council are elected blindly and cannot be really representative as only a fractional percentage of the members know anything at at all of the people for whom they vote. He now triumphantly points to the case of an ex-Councillor who, after an interval, stood for re-election and despite his past good work, polled the smallest number of votes.

Oxford-St. Accent. The ham, who since he heard a play-back of one of his transmissions, has been training himself to speak like a B.B.C. announcer.

Forward Gain. The prominent beam alleged to have been locally known as the "Windmill" which suddenly "took off" in the recent gales. It is said to have hovered like a helicopter and finally made a perfect landing several gardens away.

Piracy. The enormous number of pirates now operating, particularly on ten, where their signals come, according to the beam, from any direction other than the one of the supposed QRA. Anyway a 10-metre dipole is inconspicuous. Moral—don't plot a ground-wave radiation pattern until you know the reports are genuine !

Complex ! The ham who said he had only met three amateurs whose technical knowledge he respected. Two were G2-plus-threes and the other a G3-plus-three.

Bargain Counter. A certain surplus Store where, before a sale takes place, the customer is asked, "Are you a ham ?" If the answer is in the affirmative a further reduction on the already cheapest-in-the-trade price is made. This so fascinated me that I tried it. I believe I must have an honest expression (a gipsy once told me I had a "lucky fice"). I wasn't asked for proof. Scores of QSLs adorned the walls, including "callers" from overseas.

Identification Signal. Old man G3—, ex-R.S.G.B. Councillor, has a habit of holding his pussy "Amber" to the mike so that her purring can be heard in all quarters of the globe. A local was heard to ask him if the name had any bearing on the cat's morals and added that it sounded to him more like the Metro-Goldwyn lion than anything else.

S. W. L. Slander. A recently published SWL shack photo. Majority of cards displayed seemed to come from stations within a 5 mile radius. Hard words were said against SWLs generally.

The New Look. That at one time it seemed a high percentage of amateurs were either Doctors or Parsons. Nowadays it is thought to be B.B.C. Engineering staff who predominate and they are all alleged to have long hair and wear colourful corduroy trousers.

The gathering then broke up into twos and threes and they all adjourned to the nearest bar.

* * *

Dear Readers,

Humblest apologies to all, especially the wide awake readers who noted the mistake in the answer to PUZZLE CORNER. I cannot pretend it was a "Ronnie Waldman deliberate"—it slipped out with the re-setting of the make-up when Resonant Lines from which it was abstracted was held over to make room for the Basic Superhet Converter.

The simple method of working was correct but the total consumption figure was wrong —the answer being of course 340, 140, 100 and 100 watts respectively.

ISWL G856 proved it three times and then proved how the mistake started, while the reader who asked if my face was red was right in that, too !

Yours fraternally,

CENTRE TAP.

* * *

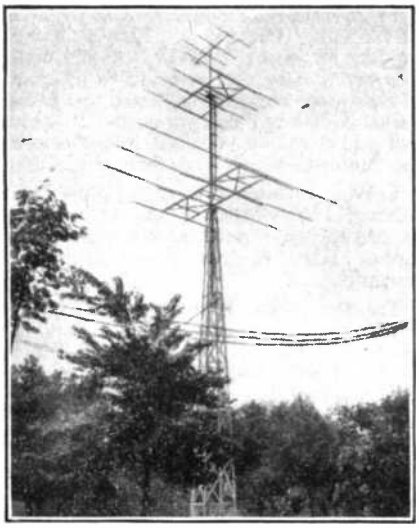
WANTED—A YL !

S.W.L. K. G. Frick of V. Platensg 24, Johkoping, Sweden, would like to know of an English girl who would like to correspond with him. He is 19 years old, interested in films, sports and travelling holidays. He would prefer someone in London. If this comes to the notice of a YL who would care to co-operate, we suggest she makes the contact direct, saying that she made the contact through this magazine.

EDITORIAL—(*Continued from page* 113)

that it would only get that amateur phone station on the other side of the town ! Try if you can, to remember the thrill you got in sorting over your first batch of QSL's—or have the cerebral membranes grown too thick now for those memories to be revived ? A.C.G.

V.H.F. News



The beam aerials at W8RLT

Whither 144 Mcs.

Some of our readers may have noticed that our remarks under this heading have drawn forth a severe reprimand from one of our contemporaries. Least readers think we have retreated, abashed, in the face of this criticism, a few more facts to uphold our views would seem to be indicated.

We are not so ostentatious as to be forever plugging the idea that we and we alone, know all the answers in the field of amateur radio technique, but we do feel justified in maintaining that we keep in touch with the most up-to-date amateur opinion. We do not mind whether our readers are "old timers" or "lids." We are only too pleased to help both classes if we can, and we do try to put some thought into the policy we advocate in the *Short Wave News*. To dismiss, as do our critics, with the comment "What nonsense," our suggestion that a multi-stage transmitter, for 144 Mcs., and a converter and its necessary superhet receiver costs more than a long lines oscillator and a super regen receiver, cannot be regarded as a very carefully considered remark. To rule out this topic as beyond the realms of discussion, shows a sad lack of appreciation of much amateur opinion. The editor of yet another radio journal—which to continue the precedent set by our critics shall remain nameless—recently expressed the opinion to the writer of these notes, that he thought that by using high gain beam aerials on 144 Mcs., it should be possible to get a sufficiently sharp beam so that communication between two fixed locations could take place without a third party being in on the QSO at all. This is just the type of use which we visualised for 144 Mcs. What type of receiving and transmitting gear is used by the participants is surely a matter for mutual agreement.

This subject is by no means as cut and dried as our critics would have us believe. In this connection, the following letter from Evert Kaleveld, PAoXE, is of interest: "We have much the same controversy in Holland, but as a whole, the group propagating the use of SEO and super-regs is strongest, partly because components are not nearly so obtainable as in England. That makes a difference of course. Still I think your policy is best, especially where low power is concerned. Some friends of mine have a nice layout. They use transceivers with CV6 triode oscillator-detectors and EL32 amplifiers. They even include a kind of bell system so they can ring each other, like a regular phone! Input is 5 watts which can be lowered to 1 watt for cross-town work, which is quite sufficient. They use them to QSP to each other the dx on the lower frequency bands, etc. When they enter their shacks, the transceiver is put on and they can either chat or QSP dx, etc. It is extremely handy . . . A write-up for your *Radio Constructor* would be worthwhile, but I expect it would cause a storm if you published such an article! Let them frown! What is the damage that can be done on such a broad band with no dx?"

Fred Hadley, Worcester Park, writes:— . . . I am a little tired of the grandmotherly attitude of . . . (some authorities). Surely the use of SEO's and super-regens on 144 Mcs. would be a local concern, not requiring more than local protests where the apparatus is too primitive. Cannot you publish designs for simple transceivers, with a buffer R.F. amp for receiving on super-regen, please? I am pleased to see SWN striking out on a line of its own . . ."

Returning to our critics, may we quote from the articles they have quoted against us. "It"—the super-regen—"didn't even get much credit for its war service as the heart of the most-produced radar equipment—IFF and beacons—as well as in innumerable "walkie-talkies." And, "as I pointed out then, the great merit of the super-regen is that it gives so much for so little. Most people no doubt realise how much the focus of interest has shifted to the very high frequencies, and may want to explore them, but hesitate to embark on constructing elaborate equipment with very meagre practical information. The super-regen is just the thing." And again, "By no other means is it possible so easily and so cheaply to obtain first-hand knowledge of what is still *terra incognita* to many wireless men." We suggest our readers read these two articles

in their entirety, viz. : *Wireless World*, June, 1946 ; "Super-regenerative Receivers," by "Cathode Ray" and January, 1947, "First Steps in VHF Exploration," by "Cathode Ray." Having done so, they can then judge for themselves whether "one can call such a subject a matter for discussion at all." Is it not time "the experts" realised that the requirements of amateur radio communication are not those of the radio laboratory, interesting though the latter may be. We have already seen one editorial chair swivel in a manner resembling a VHF beam under tropospheric confusion ! Maybe there will be some more gyrating editorial chairs before this question is finally settled.

RECEPTION OF 60 Mcs VU SIGNALS IN HOLLAND

A report is just to hand via G5RF, that VU2TM's 60 Mcs signals were heard by the Dutch listening station NL 595 in July last. Due to VU2TM's movement about India, the report has only just reached him. It tallies with his log and there is no reason to suppose that it is not correct. 2TM was using an 807 p.a. and two element beam on 60 Mcs at the time and he is to be congratulated on putting the first VU 60 Mcs signal into Europe.

Investigation of Anomalous Propagation Phenomena at Malta

From the Air Ministry News Service, comes some information on a series of special investigations to be carried out at Malta on "super-refraction."

Anomalous propagation of radio emissions (or "super-refraction" as it is now termed) is a phenomenon noticed during the war years when the use of ever-shorter wavelengths was being exploited. Ultra short waves normally follow an optical path, but under certain conditions "ducts" are formed in the atmosphere which have the effect of guiding emissions so that they follow the earth's curvature. These effects are known as super-refraction and result in greatly enhanced ranges of emission being obtained.

Although super-refraction conditions are by no means unknown in the British Isles, they are generally much more pronounced in warmer climates. In Malta, for instance, super-refraction conditions exist from about may to September, and at the height of summer, they are almost continuous.

In view of the important application of these effects to R.A.F. communications, a detailed investigation is about to be made in Malta during the onset of super-refraction conditions.

Two R.A.F. Lancaster aircraft together with a party of physicists from the Ministry of Supply Telecommunications Research Establishment, Malvern, have gone to Malta to conduct investigations during April, May and June. Test flights by these aircraft in conjunction with radio transmissions from Malta will enable measurements to be made of the strength of signals at various ranges and heights. Meteorological observations will also be made and it is hoped from the results to ascertain the relationship between the meteorological and propagational properties of the atmosphere.

Recent Sunspot Activity

A number of reports are in of severe ionospheric disturbance on March 15th. G5RF reports that the MUF did not rise above 21 Mcs. on that day and SWL Leslie W. Orton reports that after several days when the MUF was up in the 35 Mcs. region, it fell to 21 Mcs. on the 15th. A sunspot group of considerable activity crossed the face of the sun on March 14th. Several major flares were observed, but there was little solar noise heard nor was there any great disturbance of the earth's magnetic field. Commercial radio stations reported difficulty from fading, however. The sunspot was high up on the face of the sun, which probably accounts for the absence of solar noise.

The Month's Conditions.

On the amateur bands there is little to comment upon. Tropo contacts enabled the regulars to maintain their usual activity, but conditions have not been outstanding enough to warrant comment. Apart from one isolated case, there have been no reports of ionospheric propagation on either 50 or 60 Mcs.

Leslie Orton reports that the best VHF stations—apart from the amateurs—have been those heard from 31—32 Mcs. At 1515 on March 20 he heard a young lady on 31 Mcs. operating a commercial station. At 1612 a mobile police station was heard on 31.75 Mcs. and at 1640 he spent a very interesting time listening to the operators of stations W8XUN and W8XBE chin-wagging together. These must have been harmonics. The conversation from both stations was listened to perfectly for about half an hour when the operators (who were apparently located in the wilds) went to "put the nose bags on" to use their expressions. On March 24 he heard a police report to intercept a certain car with a New York registration number

(*continued on page 134*)

INTERNATIONAL SHORT WAVE LEAGUE

Monthly Notes by G3AKA

Annual Subscription 1/-

The ISWL Representation Scheme

When you join the League, you receive a folder containing details of League services and supplies. Also in this folder, the name and address of the appropriate representative is given, together with an invitation to contact him. Judging by the fact that many members do not take advantage of this offer, it appears that perhaps the whole scheme is not fully understood.

The object of appointing representatives is to enable purely local matters to be dealt with on the spot. The ISWL Representative, on appointment, agrees, amongst other things, to (*a*) lend a helping hand to local members in their hobby, as far as is possible, (*b*) to endeavour to form local Chapters where the membership so justifies and (*c*) to promote the aims and objects of the League.

If the representative does not have the support of a majority of his area membership it is difficult for him to carry out his task. Fortunately, most areas report co-operation but we have a few " backward areas." Therefore, HQ appeals to ALL members to contact their representative and to do all they can to put their county or town to the fore of ISWL activity. Chapters cannot be formed if members do not help—that is obvious. So, think it over, OM's, and if you come to the conclusion that you are not doing all you might, drop a line to, or call on, your nearest representative. Don't let the " select few " do all the donkey work ! Thanks.

This brings us to the question of DX Contests. It is our intention to organise at least two regular annual ISWL DX Contests, one for amateur bands and one for BC bands. The first of these is now under consideration and we hope to give full details in an early issue. Now, here is the point : these contests will be INTER-CHAPTER competitions. Therefore, if you want to see your district in the running, it is up to you all to see that you have a local team to put into the field ! With this preliminary warning of the impending ether-searching, we will pass on, or rather back, to the subject of representatives.

We have four classifications of representatives. Firstly, the County Representative who looks after the county as a whole ; secondly the Town Reps, who cater for their respective towns and who keep in close contact with the CR ; thirdly the District Reps. The latter are appointed in cases where the county can be easily sub-divided. Finally, there are the overseas country representatives. The decision to appoint town reps is in the hands of the CR's. The position at present is that we have around 100 Representatives throughout the world but we still lack CR's for certain British counties, including Wiltshire, Cornwall, Norfolk, Leicestershire, Nottinghamshire and Rutland. We need, also TR's for various locations. Application to HQ for any of the above positions would be greatly appreciated ; though, in the case of TR's, please apply direct to your CR. Come on, OM's, let's hear from some of you hermits !

Recent new appointments are as follows :—

Northumberland (CR) : K. Callow, G1764, 35 Lindisfarne Terrace, North Shields.

Hunts (CR) : G. S. Clarkes, G633, Mereside, Ramsey, Hunts.

Wigan (TR) : R. Iball, 213 Garswood Road, Garswood, Wigan.

Wrexham (TR) : D. Rickers, GW1048, 97 Ruabon Road, Wrexham.

Glos (CR) : D. C. Wright, G724, Claydon Cottages, Ashchurch, near Tewksbury.

North Carolina (State Rep) : L. M. Jones, W4-1152, 3 Rucker Street, Pomona, N.C.

Connecticut (State Rep) : Anson Boice, W1-1796, 28 Eisenhower Drive, New Britain, Conn.

Glasgow (TR) : W. A. Gorman, GM968, 15 Northburn Street, Glasgow, C.4.

Southsea (TR) : T. Scott, G1818, Flat 6, Rostrevor Mansions, St. Helens Parade, Southsea.

N.W. London members please note a new QRA for their Rep. It is J. Lewis, c/o 34 Brook Street, London, W.1 (temporary). We are sorry to lose J. Stankevage as TR for Glasgow owing to pressure of work. Thanks for your past help, OM, and hope to see you active again soon. (See list above for new TR.)

LOCAL NEWS

South-East London (Sec. : W. A. Martin, 21 Brixton Hill, S.W.2).

The main news from the Chapter this month is that the much heralded club receiver is now functioning. The whole club has concentrated on getting the RX finished, and we hear that the main credit should go to the Assistant Sec., Norman Moore, for a really first rate job. We have been so intrigued with the descriptions of the receiver that we have asked for a complete " write-up " for the magazine.

Generally, the meetings have been well attended, though QRM in the form of school exams. has taken its toll. Therefore, the

Chapter would be more than pleased to hear from some of the newer ISWL-ites in the neighbourhood. What say, OM's? The Sec. also asks if any local hams would be willing to give short talks on specialised radio subjects for future meetings.

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

The long-awaited Chapter in West London is about to be launched. The Sec. would appreciate fullest support from all members, and we understand that every member in West London will be sent a circular on the subject. Next month we hope to give definite news on the Chapter but in the meantime, please drop a line to John. Thanks.

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

Meetings still progressing favourably at the Chamber of Commerce, though efforts are being made to secure a club room that will allow for more constructional activity. At the last meeting, Mr. Priscott completed his answers to questions set at the last Amateur Radio Exam., and dealt with queries. Logs for listening periods were checked, the months winner being H. Stockley. Further listening periods were set. It was decided to continue the regular morse practices.

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

The second meeting of the Chapter has been held, with a full attendance. The club has a novel scheme whereby members monitor specific bands, the fortnight following the second meeting being devoted to 9,000–9,600 kcs. with CR6RA (9,470 kcs.) as the " target " station. Each fortnight, one broadcast band will be under survey and the results collated by the Sec., thence via the ISWL QSL Bureau to the stations. Amateur bands will receive attention at a later date.

Portsmouth (Sec. : R. Masters, 61 Battenburg Avenue, North End, Portsmouth).

Not much news in from Pompey these days, except the smug assurance from Reg Masters that the Chapter is one of the best in the country ! ! Good show, lads ! For those interested, meetings are still held every Wednesday at the Sec.'s QRA from 7.30 onwards. The Chapter has a strong DX team and should be well up in the coming DX contests.

Wrexham (TR : D. Rickers, 97 Ruabon Road, Wrexham).

Though only very recently appointed as TR, Denis is pushing ahead with the formation of a Chapter. Members living within easy reach of Wrexham are invited to contact Denis at the above address.

Somerset (CR : G. V. Farrance, 80 Ashleigh Avenue, Bridgwater).

Urgent appeal to Somerset members to get in touch with the CR ! Difficulty is being experienced in obtaining a club-room for the proposed Chapter at Bridgwater and if any member can help out then please write to Gerald as soon as possible. Members in other parts of the county would also oblige by dropping a line to their TR or CR.

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

Monthly report from Southwick mentions that the Chapter is progressing satisfactorily and that all members are pretty well versed in code. The technical instruction has been successful also. Several members have taken a keen interest in 5-metres and many regard 7 mcs. as THE DX band. John's own top band activities are written down by the Chapter as " long wave experiments " !

Scotland (Sec. : J. Thomson, 15 Chambers Street, Peebles, Innerleith).

Attempts to find a club-room in Glasgow have so far been fruitless but efforts are still being made. Any offers here ? Owing to the fact that our Northern Scotland representative is no longer able to take an active part in League affairs, Jack Thomson is temporarily taking over the whole of Scotland. In order to ease the pressure of work, Jack appeals to GM members to come forward to act as County and Town Reps. To date, the following representatives have been appointed : Edinburgh (TR), Glasgow (TR), Lanarkshire (CR), Stirlingshire (CR). Others are urgently needed, so what say chaps ?

ISWL LAPEL BADGES

We are continually receiving enquiries concerning the ISWL Badges and would like to inform members that these were ordered last December. As we were warned that delivery would take anything up to six months, we should not have much longer to wait.

HAM BANDS—continued from page 129

the QSL scores for (*a*) Countries, (*b*) Zones, (*c*) States of America. Here are some details we have to hand to start the ball rolling.

Names	*Countries*	*States*	*Zones*
A. H. Onslow	94	47	—
A. E. Lincoln	43	—	22
A. J. Slater	91	45	—
D. L. McLean	—	47	—

Will the above-mentioned please complete the data ? Also, any others interested in the QSL racket please send along your scores with your next DX news and we will include you in the ladder.

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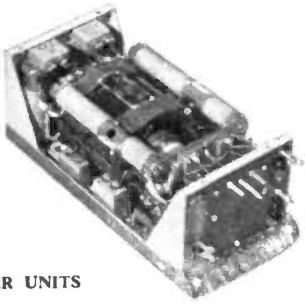

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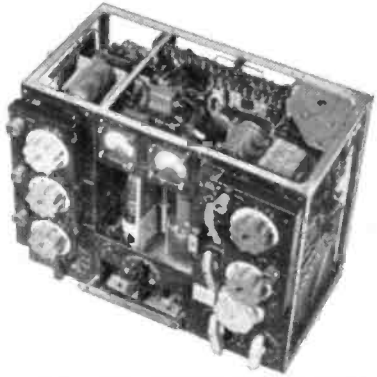

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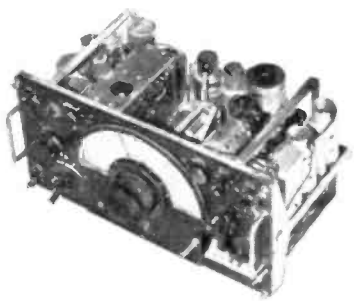

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On the Ham Bands

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—G2BQC

● **Preamble**

By the flood of reports for this month, my first effort does not appear to have upset the splendid work of Norman, G3AKA. I hope that all the " regulars " will continue to send their best DX news along. Unfortunately, " DX QSL's " have had to be held over again this month, but it will be returning next time.

The BERU contest did not seem to produce much in the way of Empire DX. Conditions in the Senior Contest were fair and a good time was had by all, " spivs " included. ZS2A was contacted by your scribe on 14 mcs. with a score of 501 QSO's ! ! VK, VE and South Africa produced some very fine signals during the contest. Early Saturday morning (0600–0700) April 3rd, VP4to, VP5am, VQ3hjp, VS9an, ZB1q and VQ4kth were worked by this station, their average report being S7. This seems to be the time for DX ! And now, on with the show. . . .

● **Readers News**

Bert Endersby, GW703, obliges with a very fb log once again. Congrats. and thanks for the way you have laid out your log OM. Starting with 14 mcs. CW we find KL7cz, VK3ja (32 watts), 3kb, 3xo, 4ab, 4ul, 5fl, 5rl, ZL2gh and 4aw. The phone stations seem to take the plums, though, with KA1AD, KH6RX, OA4AI, OQ5BH, VE8OL, VK2AGU, 3KX, 4UD, 6DD ; VP6LN, XE1HB, XU1AQ and ZL3BV. 28 Mcs. has as usual produced some real DX :—HP5b, FU8aa (very fb !), UH8aa, VS6ac. On phone AP2D (?), C1BC, W2WMU/C9, CR9AG, HL1AE (Korea), HZ1AB, J2AMA, 9AA1 ; KG6AD, M13ZJ, PK2RK, ST2CH, KG6AW/VK9, VQ3HGE, 5PBD ; VS7AC, ZD2KC, ZS1EO, ZL1AF, 2BM, 3FG and 4CN. A really fb log this.

R. Brooks, G1710 (Shoreham-by-sea), using a Philips PCR receiver, pulled in AR8AB, EL5A, ET3AE, KG6A1, KA1AD, KH6BG, 6BM, 6CE, 6DS, 6GF, 6IJ (fb !) ; KP4BG, ST2CH, UB5KAG, VE6AW, 8BC, 8MB, 8PA ; VP2DC, 2KS, 4TAX, 6AT 9F ; VR9AA (Ellice Island. Good catch this one OM), VS2BU, ZD3B, ZE2JG, ZL2AD, 2BT ; ZS3D, all on 14 Mcs., which is a very excellent effort.

A. J. Slater, G1650 (Southwick) turns up again. He now has his TRF going on 58-60 Mcs. and is looking for GDX on this band. His best on 14 mcs. this month are ZC1AF, VS9AF, ZS3F and VR9AA, with M13ZJ on 28 mcs. Now you have your RX going, we are looking forward to a real bumper DX report next time OM.

Don Robertson, GM1051 (Wick), has been tuning his RX up to the tune of KP4CI, VK5AE, VS7AC, MI6ZJ, VP6LN, VU2BG, VQ4NSH, 4ERR ; HC2OA, W2EUU/PK3, PZ1M, VQ5PBD, CE3AB and J9ANA. All these were logged on 28 Mcs. with an O-v-2 receiver. Your new aerial seems to be OK !

R. W. Ainge, G219 (Crewe) gives us ZD1BD, UI8AA, KU4AD (all new countries for the op), W6WCN/KG6, W6TRW/KH6, KH6RJ, 6BM, 6GS, 6KQ ; ST2FU (only 8 watts), TI2OA, VK2AGU, 2PL, 2AJX, 3BA, 3TS, 3LO, 4VD ; VP2GB, 2AD ; VS2BU, YS3PL, ZC1AL, 1AF ; ZL2BT, 4GX ; ZS1AN. All on 14 Mcs. with an O-v-2. With the same RX on 28 Mcs. we have AR8AB, CX1BD, CO2IW, EL3A, HK3AB, LU3DN, SV1WE, 1RX ; UI8AA, VP4TK, 5AL, 6JC ; VU2AF, 2LJ ; ZD2KC, 4AL, 4AD. This now brings the countries heard to 122. Good show.

H. Rowley, G1084 (Stourbridge), whose time is limited to short sessions, has heard CO8MP, HK1FQ, OX3BD, 3BC ; PY1ACQ, 1KZ, 1IK, 7AY ; VO2BN, 4Q ; ZB2A, ZC1AL, 6ND and 6JM. We have no definite gen on the DA's, except that they are *not* licensed. Some are QSL'ing though !

D. L. McLean (Yeovil) sends us his usual good DX list. New countries for him during the month were UB5KAG, ZS3F, ZD3B, GD6IA, ET3AD, PK2RK. The general DX is CT2AB, EA7MB, 8EDZ, 9A1 ; EK1AD, EL5A, ET3AE, 11AYN (Sardinia), KG6AI, KH6GS, VE8MB (Cornwallis Is.), VK2AHJ, 2BT, 2VP, 3BZ, 3HG, 4JU, 4VB, 5YQ, 6DD ; VQ4ASC, VO6AD, VP2AB, VS9AF, VU2LU, ZD1BD and ZP8AC on 14 Mcs. using an AR88LF receiver. Ten produced HH1HB, KZ5DJ, OA4AK, TI2WR, VP3DCH, 3TR, 4TU, 5AL, 5AS, 6CDI. Also lots of rare W's. Nice work.

H. M. Norden (London, N.W.11) who informs me he is a junior op and uses a 7 valve super with pre amplifier, heard MC2KJ, SM1MM (data ?), TG9AD, VE8MI, 8MU ; XE1AC, ZB2A. All on 14 Mcs.

A. Baldwin G193 (London, E.11), heard CT3ab (first post-war CT3, I believe), EKlaa, KH6iv, KL7ba, KP4ap, PK2rk, UA/øf, VK4da, 5do, 6nw ; VS4ae, YI2fdf (see " gossip " column), and on phone—C7QY, CE4BP, CO7CX, TG9AD, VE8MU, VP2GB. 7 Mcs. produced KL7it, PY2afx, UC2bb, UB5kbi, UQ2ad, VE2ta, ZL1ca, 2bd, 2mm and numerous W's.

A. Levi, GI38 (Belfast), heard AP2D, AR8AB, CR7AD, HC2KJ, KG6AW/VK9, VP2KS, TI2FG on ten and logged CM9AA,

CO8MP, CT2AB, ET3AF, TI2OA, UB5KAG, VP3LS and ZP8AC on 14 Mcs. Receiver is a " 504."

R. Winters, G1708 (Melton Mowbray), who uses an ex-Army 68T set, which unfortunately only covers the 3.5 Mcs. band, has heard 16 countries on this band, viz : G3ASC, GM3AJC, GI5SY, GW4CC, D2JC, PAøCT, LA3G, F9JH, EI7M, HB9BB, OZ5F, ON4TB LIALX, LX1JW, SM6JO and GC8ME.

P. Castle, G866 (Hitchin), using a " Hambander " pulled in CE2CC, 3AE, CN8AW, CR1OJI (CR-ten-JI), CX2CO, HK1FG, VP2GE, YV5AB and VO1AC.

G748, of Enfield (sorry, OM, seem to have lost your name !) sent in a very nice log for 28 and 14 Mcs. Using an O-v-O, with a 3-watt amplifier, he logged on ten metres C1CS, CR9AG, J2AGA, 2AMA, 8ANF, 9ACD ; KG6AF, KH6LT, KP4EN, MI3ZJ, ST2CH, VP4TAX VQ3HGE, 5DES ; PZ1M, ZD2KC. On 14 Mcs. a commercial BC set is used and MF2AA, VE5CA, VK6DD, VO4Q, VP2GB, ZM6AF (very fine indeed) and VR2AB were sorted out from the QRM.

● **Gossip**

This month we have three interesting letters from overseas hams. Firstly S/Ldr Harry Pain, c/o RAF Mingaladon, Burma, writes to say that he hopes to be operating from VS7 in the near future. Harry will be well remembered for his fb signals whilst operating ZB2A and XZ2HP. His G call is 3ATH. The rig in XZ2-land consisted of a 6L6/807 line-up, with a half wave doublet, running 24 watts on CW. On 28 Mcs. phone a 75-100 watt rig was used and a 3-element beam. Hope to hear you signing G3ATH again soon, Harry.

Reuben Sokolovsky, ZC6AA, sent us a very nice letter with details of his gear—a one tube RX and a 28 watt TX using 6L6/807. The aerial is a half-wave doublet. Reuben has worked 70 countries on CW. He hopes to have an S40 receiver and a VFO in operation in the near future and is going to have a smack at setting up a DX record. Well, here's hoping—ZC6 is still a rarish country on our DX bands so I should say you stand a good chance !

S/Sgt Whiting, otherwise VQ4RAW, Box 1013, Nanyuki, Kenya, gives some interesting gen on the ham fraternity and conditions in VQ4. All Kenya stations are licensed under the same regulations as in the UK and they must produce exempting qualifications or sit the City & Guilds Exam. George says this caused quite a stir ! They are not licensed for 3.5 Mcs. as this is used for tropical broadcasting. George's best DX has been VR5PL, VS4VR, YI2AM, HS1SS, all of which make my ears twitch and my eyes turn to the RX, but I guess I must finish off this article first !

Arthur Simons, G5BB (Mablethorpe), reports working VQ5jcw and KS4ai on 7 Mcs., which goes to show you cannot keep a good man down.

Peter Gambles, G4GI (Woodhall Spa), still cannot convince me that CZ2AC is genuine in Monaco. We will see !

YI2FDF and YI2AM would appreciate it very much if everyone would send their cards via QSL Bureaux and NOT direct, since some very awkward moments have been experienced by both stations in convincing the authorities that they are not operating ham stations ! So, please, play the game, chaps. YI2FDF says he intends to QSL every contact, by the way.

Frank Pardy is now in Malaya and has been licensed as VS2BT. He will be looking for G QSO's and has an AR88 to pull 'em in.

The SP's should be on again soon

The SP's should be on again soon, we hear . . . UAøKAA is active on 3.5 Mcs.—a snip for anyone ! . . .MD5KW as an S9 sign on 3.5 during the ARRL contest . . . How about KH6LX/VR1 on Makin Atoll ? On 14 Mcs. PX1B has turned up from Andora. . . .

● **Query Corner**

Patricia V. Wright (second op at G3CCA), gives us a beating for saying that PX1C is phoney. Pat says that PX1C is not actually licensed but to those stations worked the op sends details of the broadcasting station at Andora in lieu of a QSL card. The op at PX1C is therefore someone on the station staff, who operates a ham station in his spare time. Cards should go via Box 66, Andorra and NOT via any QSL Bureau. So now we know. Tnx Pat.

Anticipating future queries here is the gen on the Australian Research Expedition Ship " HMAS Wyatt Earp " which has just come to hand. The station is using the rather unusual call-sign of VK1AA on 7 Mcs. phone. The expedition has arrived at Macguarli

FLASH !

NEW PAKISTAN CALL AREAS

Through the courtesy of AP5TM and G5RF we are able to publish the new Pakistan Call Areas herewith:-

AP2—Sind. (Karachi)
AP3—Baluchistan. (Quetta)
AP4—N.W. Frontier.
AP5—W. Punjab. (Rawalpindi)
AP6—Lyallpur. Multan. Bhagalpur.
AP7—Assam Border Zone.
AP8—Bengal. (Dacca and Sylhet)

Ten Metre Review

Mid March - Mid April

By C. Ranft, G5RF

The equinox has brought improved conditions, as was hoped. However, as is usual at this time, there has been a greater tendency to disturbance. Such a disturbance—a very severe one—occurred on March 15th. when the MUF never rose above 21 Mcs., as observed at G5RF, all day ; 28 Mcs. of course being dead.

Condx on April 3/4 (first week-end of BERU) were not too good, with plenty of QRM. All paths have been workable with resonable consistency throughout the period. VE7UU says " CQ " reports that next year will be better than this—we hope they are right.

Europe. Mixture as before—no " Sporadic E " yet.

Asia. VS7PS still " leading them in " around 0700, though the HL's, ZL's, AR8AB and PK2RK beat him to it once or twice. Southern and Western Asia lasting much longer now—occasionally till early evening.

Africa. Middle Africa very consistent. ZS peak 1600—1700. First signals are from Africa in the mornings only when conditions are disturbed. Listen to ZS2A on cw for some really snappy operating.

N. America. Opening later and closing later (up to 2100). West Coast good on many days. Pretty shaky midday, except southern part, W4, VP6, etc., VE7 and even VE8 good signals though not so frequently as W6/W7.

S. America. From 1100 onwards. Better on " poor W days." Lasting till 2300 on good days, e.g., April 9th.

Oceania. Better. Early morning ZL's breaking through 0645 on good days. ZL's workable March 25, 26, 30, 31, April 2, 5, 6, 7, April 5 being the best day. S9 reports being frequent. ZL1 and ZL2 predominate. VK fair during mornings up to 1300. At this time signals much stronger G—VK than VK—G. Long route open for first time this year 2100—2200 April 8, 9, 10, with VK3YP, VK2GW, VK3ZB, VK3ZT, VK2YC and ZL3JA on cw and others on phone.

Crafty Corner

AP is prefix for Pakistan, HL for Korea (pukka gen), KG6 QSL Bureau is APO 234 c/o Postmaster, San Francisco. EQ1RX Abadan, Iran ; 28050 approx. fone. VE8MH 28280 fone ; lost him in QRM before QTH copied—as I was his first European on 28 mcs. can anyone please supply QTH ?

HAM BANDS—continued from page 127

Island and two amateur transmitters are now in operation, call-signs VK7AE and VK7PK. Both these stations have been heard on 14 and 28 Mcs., not by your scribe unfortunately ! This news is official from the Australian Government.

EZ7CW admits he is a pirate and cannot give any address.

B. Coles, G687, queries ZM9HM on 7 Mcs. and we don't blame him, hi. The station was in QSO with SM7HC. Any gen ? G3BEX heard CR7vo RST 576 on 7 Mcs. and called him several times but came to the conclusion he had no RX ! Dave Potter, G1552, wants the gen on PX1E (we can give a guess at this one !) HU1AH, SMøAB and FL7AY. All on 7 Mcs. phone. A. Baldwin, and many others, cannot make up their minds about the enigmatical CZ2AC. Can anyone supply definite data on this one, please ?

G748 sends some info that may be of help in chasing up the Gatti Expedition call sign business. The operators on the station are WøLHS and W6PVB. In Kenya the call of the expedition station is VQ4EHG, when in Uganda VQ5HEG and in Tanganyika VQ3HGE. That info will answer several queries we have had on the topic. Thanks for the gen OM.

Regarding the DA's, they appear to be operating from the American Zone only. They are not officially licensed but seem to be tolerated by the authorities. They may be QSL'd to Box 575, Stuttgart.

The prefix AP has been allocated to Pakistan.

MONITOR SESSIONS

Report on Sessions 3 and 4 :

We do pick 'em ! When we started these sessions we warned that they would be tough nuts to crack and our predictions have come true with a vengeance. No. 3 (March 27th, 0730–0900, Australia and Pacific area on 14 Mcs.) proved the best for DX, though several readers reported a blank. Denis Rickers says that only W4 and W6 were heard and that QRN was mighty hefty. P. Chambers had a bout of local electrical QRM which blotted out most signals and J. Lewis managed a few W6/7 etc., but no Aussies. Undoubtedly the best log was that of Bert Endersby who really DID hear the stuff, and to whom we are indebted for a very nicely detailed report of the session. Here is the story :

Bert Endersby, GW703 (RX—?) : VK3LN, 3XP, 6DD ; VK3ja, 3kb, 3xo, 4ap, 4ul, 5fl ; ZL1ih, 2gh, 3ge, 4aw. Bert reports severe QRN.

Derek Sellen, G1450 (RX : O-v-O) : VK3kr, ZL2gh, ZL3ja.

Michael Dransfield, G1731 (RX : MCR1) : VK2AQ, VK2CM, VK3OG.

John Clarke, G10 (RX : 1-v-1) : VK3ja, wa, 5fl ; ZL1ih, 2qh, 2gh, 4bg.

TOPICAL DX QRA's

AP2D: via RSGB (station at Lahore).
C1BC: Box 409, Shanghai, China.
C6HH: via ARRL.
EQ2L: c/o U.S. Embassy, Teheran, Iran.
ET3AE: Box 145, Addis Ababa, Ethiopia.
ET3AF: Box 858, Addis Ababa, Ethiopia.
FM8AC: R. Martinon, Box 260, Fort-de-France, Martinique.
HL1AR: APO 901, Postmaster, San Francisco.
KH6HF: Box 458, Wahiawa, Oahu, Hawaii.
KG6BF/J9: APO 86, c/o Postmaster, San Francisco.
KX6AF: M/Sgt. W. C. Gustafson, AACA DET 775-11, Navy 824, San Francisco.
KA1ABT: G. Trinidad, 50 Park Avenue, Manila, Phillipines.
MD2B: F/Lt. B. White, Station Signals, RAF, Castel Benito MEFI.
MD2H: F/Sgt. T. Baron, Station Signals, RAF, Castel Benito, MEFI.
MD2I: Bdr. J. Murphy, 71 RHA Regt., Giallo Barracks.
MT2A: P. W. J. Joubert, Del Menari Hotel, Tripoli.
MT2C: F. W. Unstead, Flat 10, 58 via Milano, Tripoli.
MT2D: K. L. Williams, 4 via Capranica, Tripoli.
MT2E: H. J. Orrell, 48 LUNG, Badoglio.
MT2F: A. E. Gower, 48 LUNG, Badoglio.
PZ1RF: Box 108, Paramaribo, Surinam.
J2AAO: Box 119, APO 925, c/o PM, San Francisco.
J2AMA: APO 328, c/o PM, San Francisco.
VE8OL: via VE3QB, Lanark, Ontario.
VE8MU: A. S. Harman, RCS Radio Station, Norman Wells, N.W.T.
VP6CDI: F. J. North, Little Kent, Christchurch, Barbados.
VQ4EHG: Gatti-Halicrafters Expedition, Private Bag, Nairobi.
VQ5PBD: Box 289, Kampala, Uganda.
VS2BT: 3205167 AC1 Pardy, Signal Section, RAF Butterworth, GPO, Panang, Malaya.
VU2AG: 34 Allenby Road, Calcutta, India.
W7ANN/C1: Navy 3930, Box 16, c/o FPO, San Francisco.
ZE2JV: Amateur Station ZE2JV, Plumtree, Southern Rhodesia.

(Many thanks to GI38 and G748 for several of those listed).

We are proud to present the QSL from the famous station GO2HEL. The operator, "Unohoo," comments that he regrets we did not QSO but perhaps we will accept as compensation the only QSL card ever issued by his station!

The 7 Mcs. session (April 3rd, 2030–2200) did not produce much outside Europe. Logs to hand are :

A. Baldwin, G193 : MD5kw, ST2Im, UB5kaf, 5kbi ; W2fr, ZBiq. G193 mentions the prevailing short skip and it will be noted that three of the stations listed are in fact IN Europe.

B. Cole, G687 : (RX : R11) : MC1a, MD5kw, OX3me.

J. Clarke, G10 (RX : 1-v-1) : MD5kw, YI2am, UI8ab, PY1agb.

The next sessions are as under :

Monitor Session 5

Date : May 29th : Time 2030–2130 GMT. Band 3.5 Mcs.

Target : Stations outside of the British Isles.

Deadline for logs : This office, first post, June 12th.

Monitor Session 6

Date : June 6th : Time 1100–1300 GMT. Band 14 Mcs.

Target : Stations outside Europe.

Deadline for logs : This office, first post, June 12th.

Monitor Session 7

Date : June 20th : Time 1500–1630 GMT. Band 28 Mcs.

Target : Any station heard, excluding Europe, W1-4, W8, 9 and VE1-3.

Deadline for logs : This office, first post, July 12th.

Monitor Session 8

Date : June 26th : Time 2030–2200 GMT. Band 14 Mcs.

Target : Stations on the South American mainland.

Deadline for logs : This office, first post, July 12th.

There we are, OM's, and we hope the old cans will rattle during the sessions. It will be noticed that Sessions 5, 7 and 8 are easier than usual. We are feeling generous these days ! By the way, what happens to the "regulars," like Reg Masters, Bert Onslow, Al Slater, Don Robertson, D. L. McLean and Martin Harrison during these sessions ? Let's hear from you next time, OM's, Tnx !

QSL LADDER

In these days of sensitive receivers and prolific DX, it is a comparatively easy matter to rattle up a score of a century of countries heard or to hear all Zones. Getting the QSL's, though, is a different story. Thus, we launch our QSL Ladder, which will record

(Continued on page 125)

A 144 Mcs. Oscillator

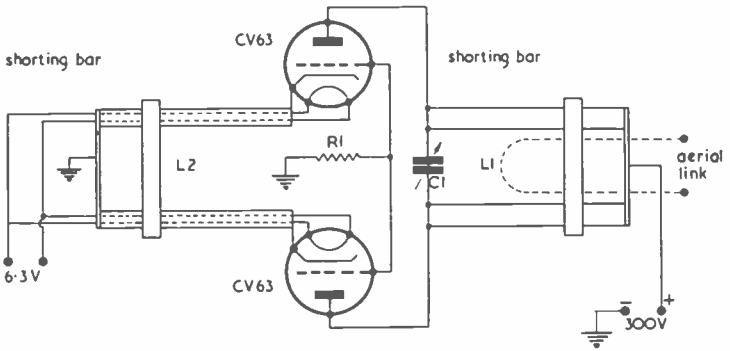
A cheaply constructed drive unit for 144 Mcs. constructed and described by

James Bramhill, G2BMI

Introduction

IN anticipation of the day when the 144 Mcs. band will be released for amateur use, it was decided that this station would be ready to " have a go " on the new band when that day finally arrived.

Something simple and cheap would have to do as a start, until the band finally settled down, so plans went ahead to construct something that would be stable as well as rigid in construction.



R1—7500 ohms 3 watt C1—see text
L1—Anode line 9/16 in. O.D. copper tubing, 12 in. long, spaced diam. of tube
L2—Cathode line 5/16 in. copper tube, 10 in. long, spaced 9/16 in.

Photographs 1 and 2 and the accompanying diagram show a low powered push-pull oscillator using a linear tank circuit of the "tuned-plate tuned-cathode " variety, which gives good stability and efficiency on 144 Mcs. Using CV 63 type valves, the unit is capable of about 5 watts output at 144 Mcs.

Construction

The transmitter is built on a 3"×5"×15" chassis bent from sheet Aluminium. The valve-holders are oriented so that the valve anodes face along the length of the chassis.

The top view shows the valves mounted closely together at the left with the tuned plate line extending to the right. A home-made capacitor across the valve end of the anode lines permits slight adjustment of frequency. The grids, which should be nearly as possible at zero RF potential, are tied together and grounded to the chassis through the grid leak.

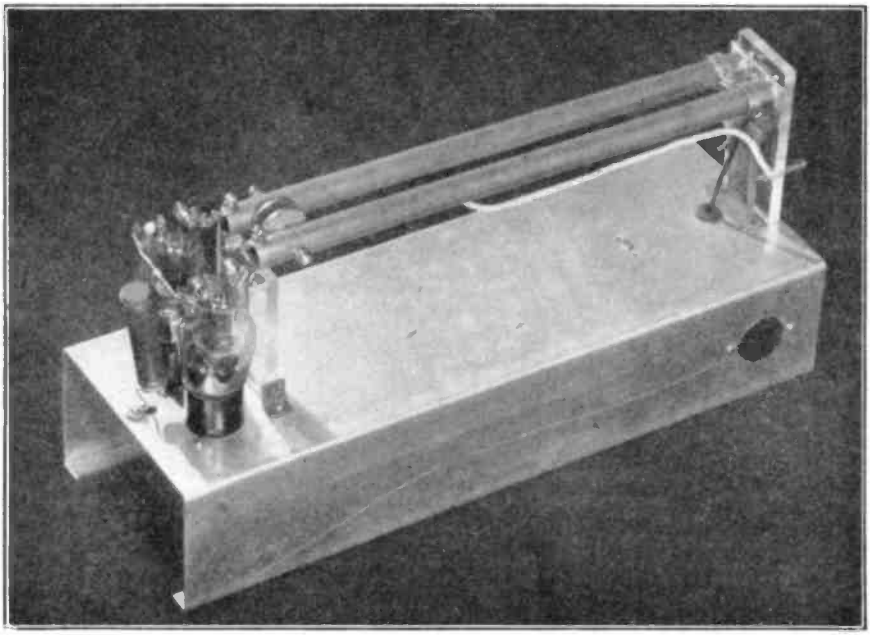
The anode lines are soldered rigidly together by a copper strip at the shorted end, and supported in a strip of " perspex." The aerial link is also mounted on the same piece of " perspex." " Perspex " is again used to support the tubes at the high potential end of the anode lines.

The cathode lines are mounted underneath the chassis. At one end they are connected directly to the cathode terminals of the valve-holders, the other ends being soldered together by a copper strip and supported by a small ceramic pillar. The heater leads, polythene covered wire, ex Woolworth, go through these lines as shown in circuit diagram.

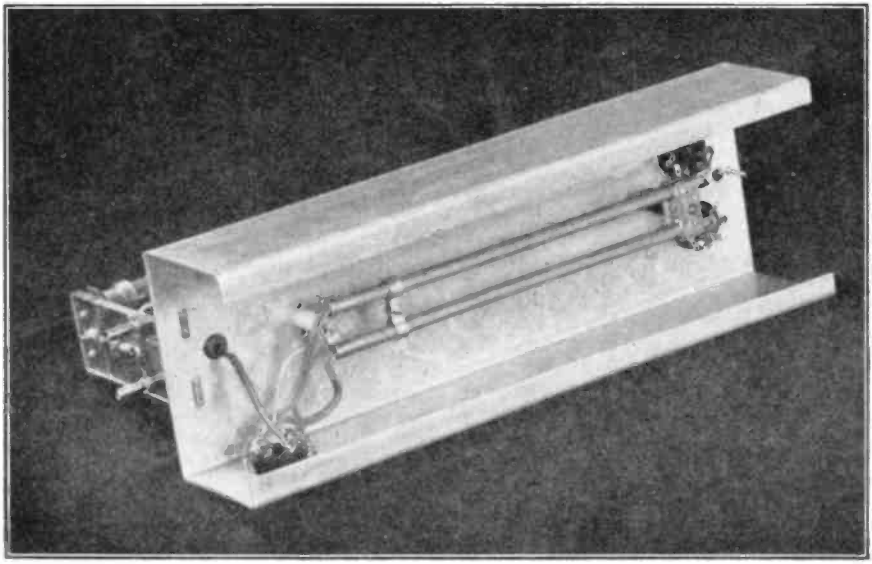
The cathode line is equipped with a sliding clamp type shorting bar, while another similar bar is installed on the anode line. These are made of copper strip, bent round the parallel rods. Machine screws and nuts hold the clamps firmly in place.

The anode tuning capacitor is made from two 1 inch diameter discs, to each of which is soldered a machine screw. The anode lines

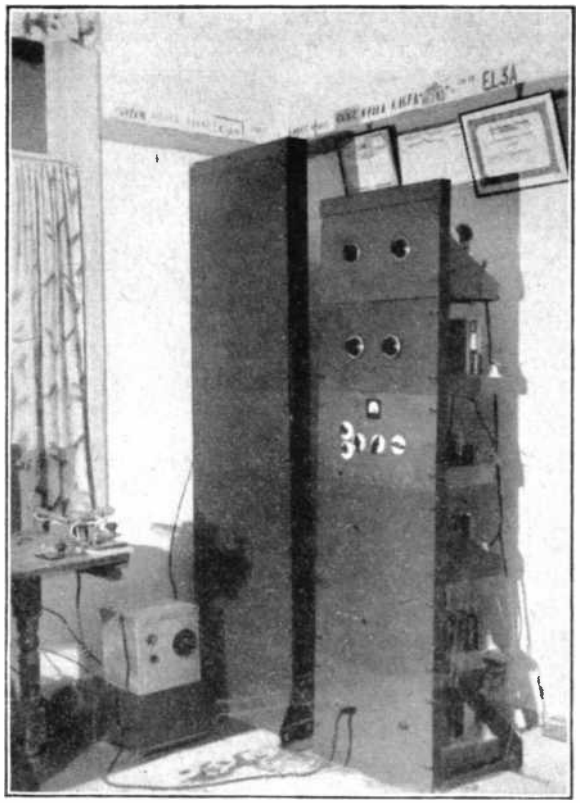
(continued on page 136)



Top view of the 5 watt 144 Mcs. oscillator. Note the anode tuning capacitator strapped between the anode lines, close to the valves



Underchassis view of the oscillator, showing the mounting of the cathode lines



Around The Shacks

No. 16

G5VQ

Westcliff-on-Sea

Essex

IN these post-war days, especially when an amateur has a few pounds to spare, and the Ministry of Supply has surplus receiving and transmitting gear for disposal at favourable prices, it is indeed a change to hear of an amateur station whose entire equipment is home built. Such is the case, however, of Eric Taylor, G5VQ of Westcliff-on-Sea, Essex ; whose signals must certainly be very well known on the 14 Mcs. band in particular. At the age of 14 he became interested in the amateur game, and in 1931 was the proud possessor of the call BRS520, after a short time on probation with an Artificial Aerial Licence he applied for a full call, and at 16 obtained his Radiating Licence, and the call G5VQ ; a call which has been heard pretty often ever since, apart of course during the War. Upon obtaining his call, Eric built a convention Tuned Plate Tuned Grid oscillator, and after several weeks endeavouring to get his signal out of the town, he eventually succeeded, and worked quite a few DX contacts with this simple transmitter. From the time of obtaining his licence until about two years before the outbreak of War, the only means of power was from the DC mains, and not dismayed, a crystal controlled rig was built using CO, FD and Goyder Locked TPTG, with an input of 10 watts, and despite this power both WBE and WAC Certificates were quickly obtained, using also a four valve straight receiver.

Upon the resumption of licences, a more ambitious rig was contemplated, and to-day the gear at this station is worthy of mention. Here again the receiver is a "straight" comprising conventional RF, Det. and two stages of LF, using either headphones or speaker, and although this receiver is a simple circuit compared with present day receiving standards, the DX worked is indeed amazing, and very little appears to be missed by the operator. The transmitter line up is as follows :—6v6 ECO link coupled to another 6v6 as doubler, into a further 6v6 doubler, which in turn is link coupled to an 807, with two PT15's as push pull final, with 1,000 volts on the anodes. The input is usually between 100 to 150 watts.

G5VQ has spent a considerable time experimenting with various aerial systems, and most

(Continued on page 136)

A Survey of World Broadcasting

PART II—AFRICA AND THE AMERICAS

By M. Preston (*ISWL Translation Service*)

The Continent of Africa consists in the main of colonies belonging to Britain, France, Portugal, Spain, and Belgium and these provide a diversity of broadcasting from many localities. The emissions of Brazzaville in French Equatorial Africa are the most powerful and consistent, and provide programmes of a high order. Numerous news bulletins are provided in French, English, Arabic, Dutch and Portuguese, in addition to Swahili and other local native tongues. FZI on 25.06 metres is the main channel from whence comes special programmes of news and dance music for the British Isles. Other French colonies are Morocco with a transmitter at Rabat and programmes in French and Arabic ; Madagascar which has a station at Antaranarivo, and the Cameroons, the station here being at Dovala. The Portuguese colony of Angola provides a good entertainment from Benguela and Luanda, but the best transmissions come from Mozambique on the East coast under the auspices of the Radio Club, this station verifies with a very attractive QSL card, languages used are Portuguese and French. Leopoldville transmitters of the Belgian Congo rival those of Brazzaville for power and broadcast consistently good programmes to Europe and North America, chief languages in use are Flemish, French, English and Dutch.

Britain's many colonies provide varying entertainment, mostly local in character. Kenya is a consistent station on 60 metres and is best heard around 1600 G.M.T. Accra on the Gold Coast is also on 60 metres, programmes being mostly in Arabic and Hansa, and Yoruba for local entertainment. The Sudan transmits a weekly programme from Omdurman on 22 metres in English and Arabic. South Africa has several wavelengths in use, mainly from Johannesburg, Capetown and Kliphenol, and Durban. However, they are not directed and are sometimes difficult to receive.

Afrikaans—a form of Dutch and English, together with Swahili, are the predominating language used. Ethiopia, a Christian native state, has a transmitter at Addis Ababa and broadcasts test transmissions, programmes being in French, Amharic, Arabic and Galla.

Special mention must be made of the station at Tangier which broadcasts commercial programmes and uses Spanish, English, French and Arabic. The small Portuguese owned island of the Azores also has a station operating on 60 metres from 2200 G.M.T., recognition can be made as the programme opens with the deep toned striking of the studio clock.

North America is more than well served in SW stations, especially by the great networks of World Wide Radio, General Electric, Columbia, Mutual and others. The stations of WRUL in Boston transmit in 24 foreign languages, they specialise in religious broadcasts of the Christian Science denomination. Several transmitters have been placed at the disposal of UNO and speeches and news topics from Lake Success are assured of a very wide audience. In the main, most of the East Coast transmitters of the U.S.A., beam special programmes of news and music to Europe. On the West Coast at Los Angeles and San Francisco programmes go to Australasia and the Far East in Chinese, Japanese, Malay, Dutch, Urdu and Tagalog. Signals from West Coast Americans are usually best heard from 0700 to 1100 G.M.T. The best signals however, emanate from the Canadian stations at Sackville, where beam aerials carry programmes in French, English, Dutch, Swedish, Norwegian, Danish, German and Czech to the countries of Europe. Newfoundland has a station at St. Johns operating on 50 metres, the majority of programmes being sponsored.

Further South, Bahamas transmits programmes from Nassau for the people of the Caribbean, signals are not very consistent in this country, however, due to low power.

Central America abounds in SW stations from Guatemala, Cuba, Dominica, Salvador, Nicaragua, Mexico and Honduras. These stations very rarely announce in any other language but Spanish and identification may present some difficulty. A feature of their programmes is the excellent Marimba and string music. Haiti and Martinique, both French speaking, are frequently receivable, stations being located at Port au Prince and Fort de France respectively.

South America has scores of SW stations and again identification is difficult unless the listener has a knowledge of Spanish. Venezuela operates a large number of stations mostly in the 60 metre band from Caracas and Maracaibo. The Argentine and Uruguay use many SW outlets, most of the programmes also being radiated locally on the medium wave channels. Brazil, the only Portuguese speaking country of South America, possesses powerful stations at Fortaleza, Rio de Janeiro, Pernambuco and Bahia Blanca, musical programmes are a feature and signals are well heard in this country. Georgetown, capital of British Guiana, broadcasts on 50 metres, most programmes being sponsored by local com-

(*Continued on page 136*)

Radio Melange

A pot-pourri of current topics

DEARER RADIOS IN MALAYA

Tan Bin Hussain

(SWN Far East Correspondent)

People in the Malayan Union will have to pay more for their music now as a result of the increased import duties on radio receivers, musical instruments and records. Wireless receiving sets, valves, parts and accessories have 5 per cent. duty added. Musical instruments, radio transmitting sets and parts, have a duty of 30 per cent. Electric batteries and parts for torches or handlamps have a duty of 25 per cent. Our correspondent remarks that it costs something now to be musically inclined !

COIN OPERATED RADIO

Grove Calkins

(SWN U.S.A. Correspondent)

A high quality RCA coin operated radio for use in hotel and hospital rooms, taverns, etc., was shown for the first time at the recent Chicago Coin Machine Show. The receiver consists of a 6 valve superhet covering two bands, with a 5 inch speaker, and built in loop aerial. It plays for two hours for 1s.

B.B.C. LEADS WORLD WITH EXTERNAL BROADCASTS

By broadcasting nearly 750 hours per week of programme material to other countries, the B.B.C. tops the list of " exporters " of the spoken word ! America is second with just over 350 hours a week and Russia is third with under 300.

SAMOA ON THE AIR

Arthur Cushen

(SWN New Zealand Correspondent)

Station ZM2AP at Apia, Samoa, is now officially opened. Using 2000 watts on the medium wave 1420 kcs., this station is also on the short waves on 7700 kcs. The station was built by the New Zealand Broadcasting Service. The programmes are relayed by land line to a special radio link and thence to the transmitters, thus saving work in clearing a line through the jungle. The transmitters are located at Aframalu in the hills behind Apia. Each village in Samoa is supplied with a battery set for communal listening and all the sets are pre-tuned to ZM2AP. The station broadcasts Monday, Wednesday, Friday and Saturday, from 0155—0800 G.M.T.

GERMAN SWL " HAMFEST " AT BIELEFELD

The Allgemeiner Radio Bund Deutschlands e V., which is the SWL organisation in Germany recently held a week-end " get together " at Bielefeld. About 500 radio enthusiasts attended from all zones of Germany except the Russian and included representatives from the Dutch Broadcasting Listeners' Organisation.

The programme for the week-end included the installation of Dr. Anna Siemsen as President of the ARBD e.V., a lecture illustrated by photos and diagrams given by Dr. Nestel, chief engineer of the North West German Broadcasting Station at Hamburg on broadcast transmitter and receiver developments and an exhibition. This exhibition attracted over 4,000 visitors, and included home-made receivers, a special exhibit under the banner " Shortwaves, the bridge to the World," at which QSL cards from all over the world including 15 confirming 60 Mcs. reception (five of these were from USA) were shown, an exhibition of photographs of famous broadcasting stations and an exhibition of current radio periodicals which included *CQ, QST, RSGB Bulletin, Short Wave News, Radio Constructor, Radio News, These You Can Hear, SWL Annual, Electronics, Radio ZS-Bulletin, BBC Year Book*, etc., etc. The exhibition was such a success that it is to be shown in other cities of Germany.

The ARBD e V., represents both S.W. and other broadcast listeners' interests. A special feature of their activities is to encourage and help their members to send technical reports to S.W. broadcast stations. At the same time, amateur work is also to be encouraged, particularly on the receiving side and a new amateur certificate—HAE—Heard All Europe —is to be issued. It is hoped that eventually they may be able to issue this certificate to amateurs abroad as well as to those in Germany who can produce the necessary QSL's. A readers' circle has been formed, both German and foreign technical and amateur journals being circulated, and at the moment, 50 members are in the " English magazine " circle.

* * *

V.H.F. NEWS—*(continued from Page 123)*

and on other occasions he has heard police cars in America being directed to places which were about to be raided. As he says, " if your receiver operates below 10 metres, I strongly advise you to do a little searching upon the higher frequencies. You won't regret it."

My Favourite Receiver No. 17

By I. T. Evans, ISWL/G316

AS will be seen from the circuit diagram, the receiver is a four wave-band set, using switched coils, covering from 9.7 to 208 metres. There is little unorthodox about the circuit as a whole except perhaps for the output stage and the filter between the detector and audio stages. The receiver is sometimes used in conjunction with a four-valve amplifier and when this is so, the switch S4 is in the "open" position so that R3 becomes the H.T. feed for V2. It will be seen that when the amplifier is not in use, S4 is closed and R3 is shorted out.

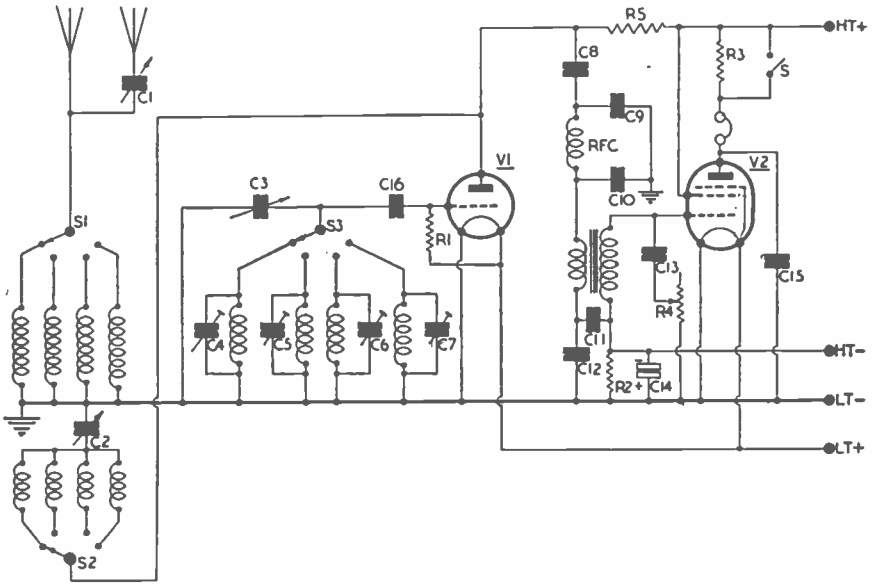
C1 is the aerial trimmer and is taken to the selector contact of the aerial coil section. The capacitors shown in series with the grid windings are padders built into the unit (manufactured by *Amateur Radio Products*) and are very useful when it comes to calibrating the dial. The detector valve is an HL2 and reaction is obtained in the usual manner by the variation of C2. Capacitors C9—C12 are for by-pass purposes and their addition is well worth while. The inclusion gave a great improvement in the overall performance of the receiver.

Automatic bias is provided for the output valve (a KT2 tetrode), by the combination of R2/C14. The components R4 and C13 comprise the tone control. It was found that by using the grid circuit of V2 for the tone control, a far greater bass response was obtained than by using the more usual anode circuit arrangement. The inter-valve transformer, being used in a parallel-fed arrangement, can be of small dimensions since no H.T. passes through the windings.

Bandspread tuning is not used on the receiver, since it was found that the slow motion control on C3 was sufficient to enable accurate tuning to be accomplished. The on/off switch is ganged to the potentiometer R4.

Interested readers may contact the author at 83, Walsall Road, Four Oaks, Sutton Coldfield, Birmingham.

(*Editorial Note.—Though the author has stated* C9/C10 *as being* 0.001 μF *we would have chosen* 100 μμF.)



COMPONENT LIST

C1	3-30 μμF.	C10	0.001 μF.	R1	3 MΩ.	Intervalve transformer.
C2	100 μμF.	C11	300 μμF.	R2	500Ω.	"Utility" slow motion drive.
C3	160 μμF.	C12	0.01 μF.	R3	5,000Ω.	Epicyclic drive.
C4-7	Trimmers on coil unit. (3-30 μμF).	C13	0.1 μF.	R4	50,000Ω.	R.F. Choke.
		C14	50 μF, 50 V. wkg.	Coil Unit (Amateur Radio Products).		V1 : HL2, V2 : KT2.
C8	0.1 μF.	C15	0.1 μF.			
C9	0.001 μF.	C16	200 μμF.			

WORLD BROADCASTING—

(*Continued from page* 133)

mercial firms. The countries of Chile, Paraguay, Bolivia, Peru, Surinam (a Dutch colony) and Colombia are all heard on the air, signals from Paraguay and Surinam are exceedingly hard to receive because of low power. Ecuador operates several stations from Quito and Quajaquil, in particular HCJB from Quito which carries programmes in French, Dutch, Russian, Italian, Czech, Arabic, Swedish, Yiddish, German, Greek, Portuguese, Spanish, English, and Omechira, the native language. This station operates under the auspices of a missionary society and presents religious programmes of high merit. It is easily located, being on 25 metres with a particularly strong signal and at 2300 it is usually the strongest signal emanating from South America. A great aid in identifying South and Central America is a knowledge of their slogans with which they usually preface announcements. The Short Wave Listeners Annual prints a comprehensive list which is extremely useful in this respect.

* * *

AROUND THE SHACKS—

(*Continued from page* 132)

of the well known types have been tried from time to time, the most successful perhaps, being the one in use at the present time, which is a single wire 66 ft. link coupled to the final, with a 33 ft. counterpoise, and this works extremely well on 14 Mcs. Upon occasional excursions on 7 Mcs. the aerial in use is a half wave dipole. By a simple change-over switch the transmitting aerial is used for receiving. Up to the time of writing nearly 120 countries have been contacted, including pre-war and post-war QSO's, and since the return of licences about 85 countries have been worked, including numerous KP6, KL7, KH and KM.

The main interest of this station is without doubt that of 14 Mcs. DX, and although 5VQ has been on the air for many years, he says that he still gets a kick out of it. He also QSL's 100 per cent., and always appreciates SWL reports from overseas. His pet aversions are telephony signals, especially those in the CW portion of the band, and long CQ's. He is always pleased to help any other ham with tests over the air, and enjoys a good " natter."

The transmitter rack rises to a height of 6 ft., and is finished in Battleship grey, and certainly looks very efficient. Needless to say all wiring is reasonably neat, as G5VQ is a G.P.O. engineer ! The rack was built from pieces of scrap metal, and it is certainly a credit to see the difficulties that have been overcome to make this station so efficient without the use of any commercial equipment.

G2SO.

144 MCS. TX—(*Continued from page* 130)

are drilled and tapped so that one plate can be mounted in each line.

All heater leads and high tension leads are soldered directly to an octal valve-holder mounted on the side of the chassis.

Operation

In preliminary adjustment for 144 Mcs. operation, the cathode bar is set near the end of the line most distant from the valves. The anode bar is set at the shorted end of the line and the anode capacitor at minimum capacity.

A 0—100 or equivalent milliameter is placed in series with the high voltage lead. With power applied, check for oscillation as indicated by an increase in anode current when one of the anode lines is touched with an insulated screw-driver or a neon lamp. If no oscillation is apparent, the effective length of the cathode line should be extended by moving the sliding bar towards the valve end.

The frequency of the oscillation may be adjusted to 144 Mcs. using Lecher wires or equivalent measuring means, by moving the bar on the anode line towards the valves until the desired operating frequency is reached. Rotating the anode capacitor also has some effect on the frequency and was included in the original model to increase the capacity of the anode line to enable it to be tuned more accurately into the 144 Mcs. band.

The oscillating anode current is approximately 20 mA, rising when the dummy aerial is coupled, to about 50 mA.

Valve Type C.V.3.

This valve uses a standard International octal valveholder. Fins 2 and 7 are the heaters and pin 8 is the cathode. Both grid and anode are brought out at the top of the valve. Heater volts is 6.3 and maximum anode volts 300.

* * *

FREQUENCY METER—

(*Continued from page* 117)

The RFC in the 100 kcs. oscillator is a normal short wave type and can be tuned by a small preset type 100 μμF capacitor (C8) wired across it as shown in the under-chassis photo. C9 is a small 60 μμF max. variable capacitor which can be mounted on the chassis, so that its spindle extends up through the chassis, as shown in the top chassis photo. Adjustments to ensure stable operation of the crystal can then be easily made.

Three switches are provided : S1 is a normal mains toggle switch, S2 cuts the H.T. neg. lead and S3 is a two-way switch so that the H.T. supply can be diverted from VFO to 100 kcs. oscillator and vice versa. The actual position of the components is not critical and the general layout and construction can be well seen in the photographs.

Component Review

and Trade Notes

●

Aerialite Ltd., manufacturers of " Ashton " cables, " Aerialite " automobile cable, radio and television equipment, announce that they have taken over the business of Victor H. Iddon Ltd., of Wythenshawe, Manchester (manufacturers of the well-known " Nettle " switches, lampholders and electrical accessories).

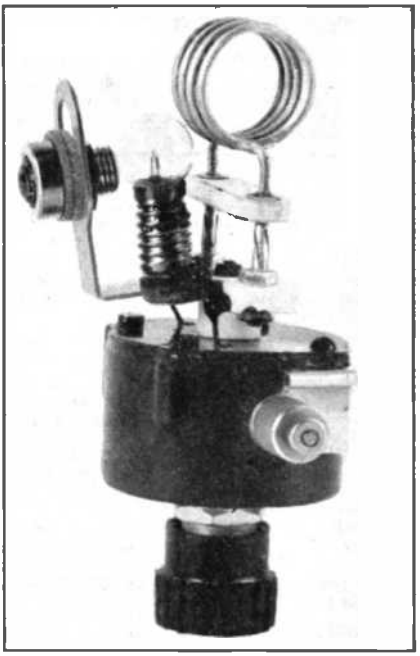
Henry's, radio component factors, have sent us their latest retail price list. Apart from the normal run of radio components, we note that kit sets for AC/DC midget receivers, midget coil packs and a comprehensive range of valves are offered. The list may be had on application to Henry's, 5 Harrow Road, London, W.2.

Mail Order Supply Co., of 24, New Road, London, E.1, have inaugurated a novel service for their mail order clients. It is a monthly news-sheet which contains not only details of surplus gear offered but an editorial, " feature " columns and so forth. A " Readers' Forum " is scheduled to commence with the May edition. The M.O.S. Newsletter has four pages, and is obtainable from the publishers on request.

Taylor Electrical Instruments, Ltd., announce that in future their products will be sold under the name of " Windsor," instead of " Taylor." Each instrument will bear a plate stating that it is manufactured by Taylor Electrical Instruments, Ltd.

This change is being made to enable the firm to enter certain export markets which hitherto have been closed because their products were conflicting with those of the Taylor Instrument Co. of America, with whom there is no connection.

Incidentally, Easter week marked the 10th year of trading by the English company.



Miniature Absorption Wavemeter. United Electronics Ltd., 655, Fulham Road, London, S.W.6.

This Miniature Wavemeter uses the new Eddystone plug-in coils. It covers the range 200—3.5 Mcs. from standard coils but lower frequencies may be obtained to special order. The knob is calibrated and the case contains a 40 μF tuning capacitor. Two terminals are provided so that the wavemeter may be coupled between an aerial and transmitter or connected to apparatus under test.

From medium power transmitters good indications may be obtained up to several feet away from the transmitter. Minimum useful illumination from standard bulbs at 100 Mcs. is 3 watts but low current rating bulbs are available for low RF power indication.

Price complete with any one coil to cover one Amateur Band, 17s. 6d.
Additional coils, 2s. each.

INGENUITY

Some people have brain-waves ! Miss Patricia Wright, ISWL/G339, second op at G3CCA had one recently. A fancy dress ball was being held at Leicester and Pat had no idea what to go as, until the bright idea came of being " Short Wave News." A big cover of the " News " was drawn up and stitched on Pat's dance dress and a large star with volume number and so on fixed to her hair ! Though there were 150 entrants, Pat won first prize. Congrats on a fine idea, Pat.

CQ ZL!

David Mitchell, GW6AA, left this country at the end of April for New Zealand, where he is settling and hoping to commence a radio business. He will be getting a ZL call upon arrival with which he hopes to contact many of his old friends in this country.

In the meanwhile, 6AA would like to hear from any British amateurs who have definitely decided to settle in New Zealand. His address is:—c/o Bank of New Zealand, Queen Street, Auckland, New Zealand.

SMALL ADVERTISEMENTS

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

PRIVATE

AMATEUR selling up. Valves, Transformers, etc. S.A.E. for list.—62 Barnfield Avenue, Kingston, Surrey.

SALE. Modified 1155 with power pack. Guaranteed in first-class working order and good condition. Highest offer over £9.—"Verdon," Tytton Lane East, Boston, Lincs.

HALLICRAFTERS SX24. 8—450 metres, Crystal, Bandspread, S. Meter, etc. : £35. RAF1116A Rx., 15—2,000 metres : £6. TRF, 9—180 metres, 8 Eddystone Coils, 5 valves, rack built with Power Pack and Speaker : £12. Carriage extra. Stamp Enquiries. ISWL/G206, 34, Lethbridge Road, EXETER.

SALE.—Short Wave (Hull) 1 (tuned)-V-2 receiver, less batteries and speaker, assembled by manufacturers, cost £15, accept £9—Pithouse, 5, Queen Street, Swindon, Wilts.

SALE.—Model 339 Cossor Double Beam Oscilloscope. Accept £40 or nearest offer.—Croft, 8, Hillside Road, Hale, Cheshire.

SALE: M.C.R.I.. power pack, phones, £8. Dransfield, 39 Cliff End, Purley, Surrey.

TRADE

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

VALVES. Send us your enquiries for any British or American types. (S.A.E. please). Dale Electric Co., 105, Bolsover Street, London, W.1.

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

METAL WORK: Gear built to your requirements at "ready-made" prices. For address of nearest agent and further particulars, write: E. J. Philpott's Metal Works Ltd., Chapman Street, Loughborough, Leics.

REPORT PADS: Send a report that will really be appreciated by the recipient by using "Short Wave News" report forms. Each pad contains 50 printed forms and complete instructions. Price 3/-, post-paid—see below.

RECORD CARDS: Keep your station list really up-to-date by using these "Short Wave News" BC station file cards. Printed ready for filling in all necessary details. Can be filed either alphabetically or in order of frequency. Price 4/- per 100. post-paid—see below.

DATA BOOKLET: A re-print of the popular articles by "Centre Tap", in booklet form, of the Basic Superhet describing the construction of the basic receiver, BFO, RF stage, Preselector, etc. Full details of coils and valve equivalents, etc. Price 1/2, post-paid: Amalgamated Short Wave Press Ltd., 57 Maida Vale, Paddington, London, W.9.

London : Printed in Gt. Britain by the London Counties Press, 161, Tottenham Lane, N. 8, for the Proprietors, Amalgamated Short Wave Press Ltd., and published at 57 Maida Vale, Paddington, London, W.9.—May, 1948