SHORT WAVE NEWS

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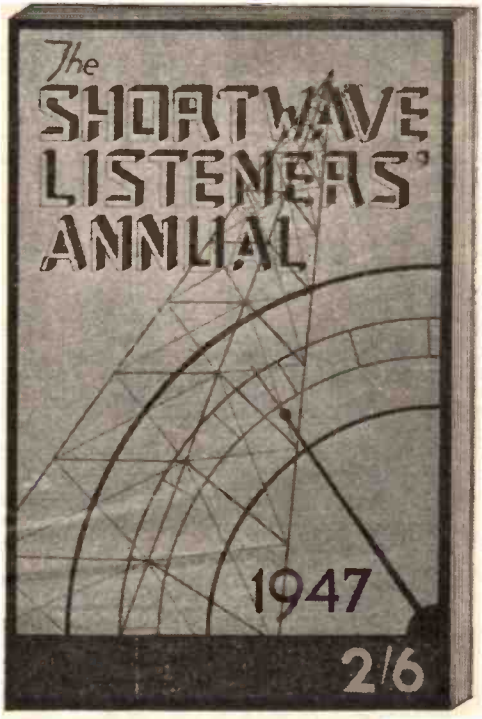
In this issue

Also



OUR NEW ANNUAL

AN AMALGAMATED
SHORT WAVE PRESS
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Short Wave News

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Editor : ARTHUR C. GEE, G2UK Asst. Editor : W. NORMAN STEVENS, G3AKA

Advertisement & Business Manager : C. W. C. OVERLAND, G2ATV

EDITORIAL

What ON PIRATES

WE feel the time is ripe for some straight-from-the-shoulder comments on this subject. Following our usual practice, we will be candid and to the point—with no beating-about-the-bush and evasions.

We read that the authorities are greatly concerned with the number of illegal stations operating on the amateur bands. Is this anxiety justified? The answer is a positive "yes". Gather together, at random, a mixed group of enthusiasts, and the chances of finding at least one pirate present is quite high. We know—we have met them!

Why

Why are there so many pirates? Here are our findings, based on a sort of small, private "Gallup Poll". The reasons given fall into the following categories:—(a) Those who haven't the patience to wait for the Examinations, (b) Those who think the Examination "Too much bother", (c) Those who say they can build up gear but are rather shaky on the theory side, (d) Those who contend that as the ex-AA fraternity "got away" with it, "why should I have to take a test?", (e) Those who "know the ropes" but always seem to fail examinations, due to the wrong temperament, (f) Those who would willingly take an AA licence but feel disinclined to go ahead with a technical examination owing to lack of experience, and (g) The group who offer no reasons at all.

It will be fairly obvious that many of the "reasons" are merely excuses. It is also obvious that some of the statements are reasonable and bear investigation. There is a definite tendency to pivot opinions on the question of the AA licence. Many are bitter that some ex-AA stations now on the air could never have passed the recent papers.

There is also a general tendency to argue that the practical side, being as important as the theoretical side, is not being given enough consideration in the shaping of licencing conditions.

Discounting the fair percentage of irresponsible persons who are buying surplus Services gear and using it on the air, there appears to be some hope of reaching a decision on how to whittle down the number of illegal stations.

Then

Were there pirates before the war? Naturally—but with a difference! The greater percentage of pre-war pirates were AA boys tempted to "use the spout" whilst waiting for full tickets to come through. We believe the authorities realised this and to a certain extent turned a blind eye. It was an understandable situation since within a few weeks full radiating licences would be in their hands.

Now

Why all the fuss today, The answer is easy. Today, the pirate has one thing in mind—to get on the air as quickly as possible, licence or no licence. Consequently, his operating is often poor and his quality of transmission worse. And what is more, his intentions of getting a licence are often remote. Perhaps he eventually "takes the plunge" and sits an examination, but, not having the opportunity of the pre-war AA licence, he certainly won't stay off the air until he gets his licence.

How

Having read so far, it will be clear what steps we consider should be taken to curb the present trend to wholesale pirating! The restoration of the AA licence would see the proportion of illegal operators drop to something like the pre-war level.

★ — *Seasons Greetings* ★

The Staff of "Short Wave News" and Contributors join in wishing all our readers a Merry Christmas and a successful New Year, with lots of DX, FB QSO's and no dry joints!

V.H.F NEWS

The Month's News

The "regulars" continue to be as active as ever, and several new calls have been heard on the 60 Mcs. band. The level of activity can be judged from the following brief log extracts:—

G2XC (Portsmouth) has had a total of 180 contacts during the past month, with 37 different stations. New stations worked by him were:—G3IS (Rugby), 3FD (Southgate), 4MT (High Wycombe), 4DN (Battersea), 4AJ (Basingstoke), 4CG (Wimbledon), 5LJ (Sutton Coldfield), 5UM (St. Albans), 6RA (Regent St.), 6VA (Warlingham), 6FO (Penn), 8JV (Nottingham), 8TS (Farnborough), 8LY (Basingstoke).

G3IS (Rugby) had 59 contacts, 14 with new stations, his best contacts being:—6YQ, 5MQ, 4OS, 3BY, 3PW, 2YL, 2MV and 2XC.

Amongst G5BY's (Devon) contacts, 36 have been over distances in excess of 150 miles.

G6DH's (Clacton) best contacts have been 2XC, 6OT, 4IG, 6LK, 2MR, 2WS, 5MA, 6FO, 5BD (120 miles) and 5IG.

G6YU (Coventry) had 134 contacts with 24 different stations and 14 new contacts viz:—G2YL, 3OO, 3PW, 3BY, 4OS, 4GB, 4AJ, 4DN, 5IG, 5RD, 6OH, 6FO, 6VA and 8TV.

G8JV's (Nottingham) 72 contacts were mostly on skedule with 5BD and 5LL.

G2XC remarks that, "the period which ended October 18th, when the anti-cyclone drifted away was one of the most consistent so far. Activity appeared to be on a high level and many new calls were heard. The Midland stations, 2AK, 5LJ and 6YU were remarkable, S8 to S9 phone signals night after night".

G6DH has been hearing some American signals between 40-50 Mcs. On October 25th, he heard WGTR (Boston) at R9 from 1345 onwards, on 44.3 Mcs. and also two American FM stations on 51 and 53 Mcs. respectively. WGTR was heard again on November 14th and 15th. He has also heard LSN (Argentina) and SUS (Egypt) around 40 Mcs. 6DH has arranged a sked with W1HDQ on 29.1 Mcs. for the exchange of information on the higher frequencies. When conditions appear suitable for F_2 refraction, 6DH will request W1HDQ to change to 50 Mcs., in the hope of making at least a "one-way" VHF "Atlantic crossing". 6DH remarks that our present VHF band of 58.5-60 Mcs. would appear to be out of the question for trans-Atlantic QSO's at present. W1HDQ is arranging for American stations to be operating on 50 Mcs. C.W. at peak times (i.e., between 1345 and 1600 G.M.T.)

The Month's Conditions

Tropospheric Propagation. Generally speaking, conditions have remained good. The best days were:—

2XC:—Good to Oct. 18th (13th, 14th, very good), Oct. 22nd-24th, Oct. 29th-31st, Nov. 3rd-7th, Nov. 10th.

3IS:—Oct. 15th - 16th - 26th - 28th - 29th, Nov. 4 (very good), 5th-10th.

5BY:—Oct. 15th-16th, Nov. 3rd-4th-5th (outstanding), 6th-11th-13th-15th.

6DH:—Oct. 11th-18th, Nov. 4th-5th.

8JV:—Oct. 16th-19th, Nov. 5th-6th.

2XC writes of the tropospheric data for this period:—"Up to mid-day on October 18th, the 'winter type' anti-cyclone condition of a sharp drop in humidity at about 3,000 to 5,000 ft., accompanied by a temperature inversion, persisted. The inversion was occasionally of the order of 15 degrees F. Further north this condition continued for a further day or two. From the 18th to the but a marked humidity gradient at about 7,000 ft. was recorded on the morning of the 23rd, and continuing into the 24th and 25th. Suitable gradients, with inversions were also present on October 29th, 30th, 31st (up to mid-day), and from November 4th to 7th, particularly on the mornings of the 6th and 7th, when the dielectric discontinuity was below 3,000 ft."

Ionospheric Propagation. Once again, there have been no reports of Ionospheric Propagation.

"Skeds"

Quite a number of "skeds" are being kept on 60 Mcs. and we publish particulars of those of which we have knowledge, as we feel it may help those on the look-out for any particular station.

2XC:—0700 G6YU, 0730 G6DH, 1730 G6KB, 1830 G6DH, 2145 G6DH. Subject to alteration at week ends.

3IS:—G5BD. 2230 Saturdays and Sundays.

6DH:—G2XC 0730, 1830, 2145 or 2215 daily. To be continued until December 31st at least in connection with weather tests.

8JV:—G5BD and G5LL 2200.

We should be particularly interested to hear details of any other "skeds" being kept on this band.

Comment

Enlarging somewhat on his remarks last month re the effect of humidity on the propagation of VHF signals, 6DH com-

ments:—"Very low ground temperatures (i.e. less than 40 degrees F.) provide poor conditions, due to the reduction in the specific humidity, with reduction in temperature. Best conditions occur when signals have to travel from a layer of high specific humidity to a layer of low specific humidity. This latter layer generally occurs around 3,000-6,000 ft. Reflections and refraction occur due to the change in dielectric constant brought about by the change in the humidity of the air".

8JV comments that it has been noted at his QRA (Nottingham) that good conditions for Mablethorpe (70 miles) do not necessarily mean the same for London (120 miles). He also remarks that it is most unusual to hear any Southern stations before 2130-2200. "Is this conditions", he asks, "or is it that they are not on"? He also wonders why the following stations are heard so consistently in Nottingham:—6VX, 5MA, 2MR, 2MV. Any suggestions?

3IS has been experimenting with a new RF stage in his converter, using an EF50 strapped as a triode with grounded grid, aerial attached to cathode and anode tuning. The other valves in the converter are an SP41 changer and 6J5 oscillator. His aerial system is an interesting one, the antenna being matched with a bazooka balancer to a coaxial transmission line.

Midland Area Monitor Station Report

N. White, G3IS, 59 Eastlands Road, Rugby, reports: "Covering a period of from October 10th to November 10th, the general inference from Midland Stations is to the effect that conditions for inter-G working have been reasonably good on the average, with some good contacts had by all. G6YU (Coventry), remarked in his general report that it is noted that during periods of anti-cyclonic weather conditions have turned out good, whereas with rainy periods signal strengths are low and fewer stations get through to be heard in the Midlands. 6YU has been working some early morning skeds with 2XC at 0700 when this station has been heard at S8 and phone worked. Other regular skeds include one with 5MA at 2215. G8UZ, remarks on the conditions on October 13th, when things were really excellent. He worked 12 different stations that night, five were new contacts as follows: 2YL, 2BY, 2WS, 6FO and 6LK. November opened promisingly for this station with 5BY being heard on Sunday 3rd and on Tuesday 5th and Wednesday 6th, QSO's were made with 5BY at 2030. However, no other signals were heard, possibly owing to lack of activity as conditions were OK.

A new station now active is Sutton-in-Ashfield's G3APY with a four element rotary array, driven by an electric motor, has a very interesting electric direction indicator, As the beam rotates, it turns a slider on a potentiometer, which has a battery and voltmeter in circuit, this latter has been recalibrated in compass points, so that without leaving the operating position, 3APY can tell at a glance which way the beam is facing, an excellent idea for visual indication of the rotating beam. Stations worked by 8UZ during the period under observation are as follows:—2XC, 2WS, 2YL, 3BY, 3IS, 3APY, 4OS, 5BD, 5LL, 5BY, 5JU, 6LK, 6YU, 6VX, 8JV. 3PW and 6DP have been heard.

BRS 8897, writes from Wednesbury reporting reception of 5TH, 5WH, 2NV, 5BY, 4OS, 3PD and 2XC. He remarks that as he hears stations that other Birmingham transmitters do not hear and then these transmitters work stations he cannot hear, altogether he finds 5 metre somewhat puzzling. He hopes to be on the air soon, having passed his Morse test, and is now awaiting his ticket.

G3IS (Rugby) worked the following new stations during the month:—2MR, 2XC, 2YL, 2FT, 2MV, 3BY, 3PW, 4OS, 5MQ, 6YQ, 6LK, 6VA, 8GX and 8JV, a satisfactory month viewed from inter-G working.

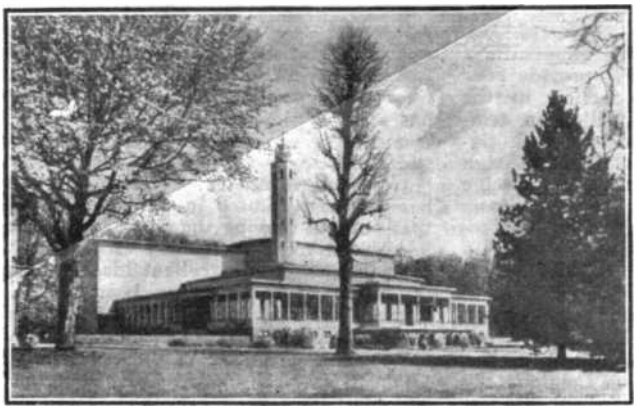
Flash !

50 Mcs BRIDGES ATLANTIC

G6DH'S Skedule with W1HDQ successful

News is just to hand that on November 24th, the skedule which G6DH is running with W1HDQ was successful. G6DH heard W1HDQ's 50 Mcs. signals and a cross-band contact was made with 6DH on 29.1 Mcs. Sensing conditions to be suitable, 6DH instructed W1HDQ to send every 15 minutes beginning at 1300 G.M.T. Nothing was heard until 1617 G.M.T. when a weak signal was detected which rapidly increased in strength until at 1621, 6DH contacted W1HDQ on 29.1 Mcs. and the first 50/28 Mcs. Trans-Atlantic QSO followed, both phone and CW being used.

G6DH reports that American FM stations were audible during the day on 44 Mcs. He remarks that the limit for Trans-Atlantic work appeared to be about 51 Mcs.



A view of the PCJ studios

Around the Broadcast Bands

Monthly Survey by "MONITOR"

All times are given in G.M.T.

FIRSTLY your scribe would like to convey greetings to all our many readers at home and abroad for the Festive Season. A Merry Xmas and a very prosperous New Year and good DX to you all. Many thanks for your support through the past year, which we hope will continue. For the benefit of new readers the address for all news for this column is: "Monitor" c/o S.W.N. and please mark your envelopes in the left-hand corner "Broadcast Band News" to arrive not later than the 10th of each month.

Now for the month's news.

Europe

Andorra. J. Hughes states that "Radio Andorra" operates on 5980 kcs. with a power of 25kW. Hours of transmission are 1200-1430 and 1900-0100 according to a letter veri received recently. Reports may be sent to:—Freemantle Overseas Radio Ltd., 18 Park Street, Park Lane, London, W.1. Letter also states that they are unable to send cards at the moment owing to a consignment being lost. They hope to send QSL cards later.

Germany. Leipsig 9730 kcs. Excellent signal 1000-2300.

Italy. Rome broadcasts programme in English and French from 1820-1900 with news bulletin at 1850. Freq. 9630 kcs. and 11810 kcs. (Pearce).

Greece. A. W. Gilbert sends in schedules received from the Assistant Engineer of Cable and Wireless at Pallini, Attica.

SVR	13670 kcs.	SVD2	7295 kcs.
SVM	9935 kcs.	SVC	4945 kcs.
SVD	6885 kcs.		

QRA: National Broadcasting Institute, Righillis 4, Athens, Greece.

SVD2 carries daily transmissions at 2015-2030 in English on behalf of the Greek MOI.

Austria. KOFA 7220 kcs. R5 daily at 1815 with American type programmes. Announces as "The American station KOFA Salzburg and Linz (Williamson).

Pacific

Western Samoa. ZMB6 operates on 7700 kcs. and heard in New York by Roger Legge at 0505-0605 with test transmission.

Philippines. P. W. Muxlow logged KZRH "The Voice of the Philippines" on 9640 kcs. R6 signals at 1445-1600. Heard at 1530-1600 with dance music session (T. Wilson). R6 Q3 with QRM from XGOY at 1410 with news in English and time given at 1419 as "now 19 minutes past 10 Manila time". (Williamson).

Asia

Iraq. YI5KG Baghdad 7085 kcs. heard at 1835 with Eastern music. Signals were R7 Q4. (Williamson). Is this HNF?

Java. PLP Batavia 11005 kcs. R8 at 1500 with call "Radio Republic Indonesia". News and announcements in Hindustani. (Williamson). T. Wilson reports them at 1600.

Turkey. B. Field sends in schedules of "Radio Ankara". The following are times taken from the schedule of English transmissions: Station TAP 9465 kcs. News at 1745 daily. Postbag at 2130 Sundays. Special programme to England at 2130 on Mondays and Thursdays. Special programme for U.S.A. at 2155 fortnightly on Tuesdays. Power 20 kW. with Omni-Directional aerial. Also reported by L. Singer.

Iran. Roger Legge reports EPB Teheran on 15100 kcs. at 1100-1215 with news in English at 1115.

Burma. Radio SEAC Rangoon now operates on 9545 kcs. according to P. W. Muxlow.

Heard at 1430 on 9545 kcs. with R6 Q4 signals with dance music followed by Forces

Educational Broadcast. Announcements in English. No call sign but mentions Burma Broadcasting Service. (Williamson).

Ceylon. Radio SEAC Colombo heard at 1830 on 15120 kcs. with R9 signals and R8 on its new channel of 7185 kcs. giving Sunday transmission to listeners in Great Britain. (Williamson).

China. XGOY Chungking heard on 9630 kcs. and 9640 kcs. (at times) 1410. News in English. R7 Q4. Announces as "Voice of China."

XTPA Canton 11650 kcs. from 1315-1415 with Eastern music. All announcements in Chinese usually by female. Repeated call at 1350 as X-T-P-A slowly. Signals R6 Q4 with CW QRM from FYR. (Williamson).

T. Wilson reports XGOY on 9640 kcs. also on 11900 kcs.

India. VUD7 Delhi 6190 kcs. R7 Q4 at 1550 with English news, VUD4 9670 kcs. R7 at 1425. Native music. (Williamson).

Central America

Panama. HOXA Panama City 15100 kcs. heard R6 at 2150 and HOXB 11810 kcs. at 0305 with R8 signals with English programme. Both are channels of "Radio America Central". HP5G "Radio Panamericana" R6 at 0315 on 11780 kcs. HP5A "Cadena Panamerica de Radiodifusion" 11695 kcs. R5 signals at 0325. (Williamson).

El Salvador. Roger Legge reports YSF "Radio Vanguardia" San Salvador on 9250 kcs. being a new station and heard at 0000-0300.

T. B. Williamson gives YSR "La Voz de El Salvador" 6270 kcs. R7 Q4 at 0430.

Guatemala. TGWB "La Voz de Guatemala" Guatemala City R7 at 0350 on 6540 kcs. (Williamson).

Mexico. XEHH Mexico City 11880 kcs. heard R5 at 0300 with commentary on Pelota game. XEBT heard R8 at 0035 on 9625 kcs. (Williamson).

Nicaragua. YNBH "Radio Panamericana" Managua 6545 kcs. R5 at 0355 with programme of latin music. Poor voice modulation. (Williamson).

Africa

Tetuan? "Radio Africa" heard with recordings at 2030 on about 14350 kcs. Bad W Ham QRM at times ! Signals R9. Announces in Spanish. Male and female announcers. Heard by your scribe.

Belgian Congo. J. Hughes reports news in English from B.N.B.S. at 0115 beamed to N. America. Freq. 10100 kcs. approx. Signals were R4-6 QSA4. *(Is this OPM on 10140 kcs?—Ed.)*

Egypt. SUP2 Cairo 6820 kcs. R9 at 1420 with Eastern music and news in local language. (Williamson).

BROADCAST STATION COUNTRY PANEL

No. 8: ARGENTINE

LRA-1: Buenos Aires. "Radio del Estado." 9690 kcs. 5000 watts.
LRA-5: Buenos Aires. "Radio del Estado." 17720 kcs. 5000 watts.
LRM: Mendoza. "Radio Aconcagua." 6180 kcs. 10000 watts.
LRR: Rosario. "Radio Ovidios Lagos." 11925 and 11880 kcs. 10000 watts.
LRS: Buenos Aires. "Radio Splendid." 9315 and 3430 kcs. 5000 watts.
LRS-1:† Buenos Aires. "Radio Splendid." 5990 kcs. 5000 watts.
LRU:* Buenos Aires. "Radio el Mundo." 15290 kcs. 5000 watts.
LRX: Buenos Aires. "Radio el Mundo." 9660 kcs. 6000 watts.
LRX-1: Buenos Aires. "Radio el Mundo." 6120 kcs. 6000 watts.
LRY:** Buenos Aires. "Radio Belgrano." 9455 kcs. 5000 watts.
LRY-1: Buenos Aires. "Radio Belgrano." 6090 kcs. 25000 watts.
LQA5: Buenos Aires. 10350 kcs. 10000 watts.

† *Also has channel on 6065 kcs., but not in use at present.*
* *Not in use at present.*
** *Has alternative channels on 9690 and 9640 kcs.*

Sudan. "Radio Omdurman" Khartoum R6 Q4 at 1730 on 13320 kcs. with CW QRM on times. Heard by your scribe at 1900 with R9 signals Q4. Native programme.

Kenya Colony. Latest schedule from Cable and Wireless is as follows: 1000-1100, 1600-1900 daily on 60.61m. channel (Sundays 1530-1830), 1330-1430 on 49.50m. Tuesdays and Thursdays.

QRA for reports: P.O. Box 777, Nairobi, Kenya Colony. (Gilbert).

North America

U.S.A. P. W. Muxlow reports KNBA San Francisco on 11790 kcs. with fair signals at 1330.

Cuba. T. B. Williamson sends in the following data on Cuban stations heard by him recently: COCY 11740 kcs. with R6 signals at 2130. Gives call as "R-H-C Cadena Azul". COBL "Radio Cadena Suariti" R6 at 0015 on 9830 kcs. COHI Key station of R-H-C Cadena Azul network heard at 0405. R8 signals on 6450 kcs.

COCW 6320 kcs. R7 at 0000 with clock chimes and call "CMW y COCW".

Dominican Republic. HI1R "La Voz de Fundacion" puts in terrific signal at 0200 on frequency 6420 kcs. HI2A "La Voz de Re-eleccion" 6785 kcs. heard at 2330. Signals were R6. (Williamson).

South America

Chile. CE1174 Santiago 11740 kcs. heard R8 at 2315 with dance music and call "Emisora Nueva Mundo". (Williamson).

Ecuador. A. Levi reports HCJB "La Voz de los Andes" Quito. Now gives English transmissions from 2200-2300 on their 15, 12 and 10 Mc. channels. A second English session is also given at 0200 on same frequencies. Signals R6-7. L. A. Moreton has heard them on 12455 kcs. announcing that programmes beamed to Brit. Is. commenced on November 4th 1930-2100 on Monday to Friday. Requests reports QRA: Station HCJB "The Voice of the Andes" Quito Ecuador. (Yes O.M. we appreciate any news you can send in).

British Guiana. ZFY Georgetown heard at 0000 on 6003 kcs .with Indian Music and English announcements at 0030 mentioning "This is station ZFY the voice of Guiana". (Williamson).

Australia

Latest schedules received from "Radio Australia" effective as from September 29th are as follows:

Shepparton VLA/VLB Stations (100 kW.)

	kcs.	m.		kcs.	m.
VLA	7280	41.21	VLB	9540	31.45
VLA3	9680	30.99	VLB2	96	30.99
VLA4	11770	25.49	VLB3	1177[illegible]	25.49
VLA6	15200	19.74	VLB6	1520[illegible]	19.74
VLA7	17800	16.85	VLB7	17800	16.85
VLA8	11760	25.51	VLB8	21600	13.89
VLA9	21600	13.89	VLB9	9615	31.20

Shepparton VLC Stations (50 kW.):

	kcs.	m.		kcs.	m.
VLC2	9680	30.99	VLC8	7280	41.21
VLC4	15320	19.59	VLC9	17840	16.82
VLC5	9540	31.45	VLC10	21680	13.84
VLC6	9615	31.20	VLC11	15210	19.72
VLC7	11840	25.35			

Lyndhurst Stations VLG (10 kW.):

	kcs.	m.		kcs.	m.
VLG	9580	31.32	VLG6	15230	19.69
VLG3	11710	25.62	VLG7	15160	19.79
VLG4	11840	25.35	VLG9	11900	25.21
VLG5	11880	25.25	VLG10	11760	25.51

Transmissions to the Brit. Is. at time of going to press are as follows: 0700-0815 over VLA9 (to 0800. Not Sats.) and VLB3. 1500-1600 over VLA8 (to 1530), VLB2, VLC6, and VLG9 (to 1545). (VLB9 and VLC4 now replace VLB2 and VLC6 in latter transmission.)

The ABC control a number of internal short wave transmissions. VLA4 has been heard by your scribe with terrific signals in its 2030-2330 transmission to Brit. Is., although some evenings it has not been received at all due to very erratic conditions. Ole man Sol again!

VLA4 has been strongest between 2100-2130. Suffers bad flutter QSB afterwards and heavy CW QRM from 2030-2115.

VLB9 has also been heard at R9 Q5 with transmission to Brit. Is. at 1500. VLC4 R8 Q3 and VLA8 R9 Q4 both at 1430 with programme to Forces in Pacific Area and SWL's in India.

Our old friend T. B. Williamson reports VLB3 and VLA9 with BC to Britain, VLA8 with news in English at 1430. Signals R6. VLA R8 at 2145. He states that these are the most reliable stations at his QRA.

QSL's Received

Your scribe from HOXA (card depicts photos of transmitter and buildings) VLG10 and VLC7. P. W. Muxlow from VLA6, PCJ and FZI. (Hasn't anyone else received any QSL's lately?)

Congrats.

My very best wishes to our old friend T. B. Williamson BSWL 1635 on passing his exam. for MD. May I take this opportunity of wishing you every success Doc!

His QRA is now: Dr. T. B. Williamson, M.O.Q., Hill End Hospital, St. Albans, Herts.

In Brief

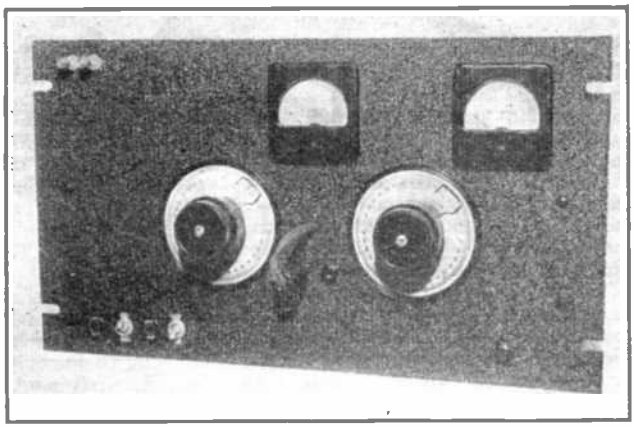
B. S. Scott heard a New York station calling the "Queen Elizabeth" outward bound on her maiden voyage to New York. She was being contacted by the news room of the station and he heard quite a few notabilities on board ship. Re verification O.M., I do not know the QRA for reception reports but maybe our readers can help? This reader would like to correspond with another SWL to swop ideas. His QRA is ISWL/G69, 11 Paradise Place, Goole, Yorks. What say somebody?

P. W. Muxlow would like to log Singapore, Hong Kong and Belize. Listen for first two between 1200 and 1500 O.M. Belize around 0200. Have not had any reports on the latter recently. Good luck in your hunting O.M.

Acknowledgements

Roger Legge (New York, U.S.A.), Sidney Pearce BSWL 336 (Berkhampstead), L. Singer BSWL 2360 (London, N.3.), M. Levi BSWL 2364 (Belfast, N.I.), A. W. Gilbert (Fordingbridge), P. W. Muxlow (Grantham), Barry Field (London, N.W.11.), L. A. Moreton (Evesham), B. S. Scott (Goole).

The S.W. News "80-160" Transmitter



A 20-watt transmitter for the L.F. bands, ideal for both the Newcomer and the Old-Timer

THE transmitter about to be described has been built some time, and during the past four months or so has given a very good account of itself on the air, despite a very poor location and inefficient aerial. As readers will have judged for themselves by now, it is not our policy to rush into print with a "News" constructional feature just for the sake of filling up space, and before we are thoroughly satisfied that the gear in question can be satisfactorily tackled by readers without running into unnecessary snags. Where the supply position permits, we have used the latest type of components, though in some cases we have used pre-war design components when the efficiency will not thereby be impaired and there will also be some saving in cost.

The transmitter was first designed primarily for operation on the 1.7 Mcs. band, with an input of ten watts. However, it will function quite satisfactorily on the 3.5 Mcs. band also, with an input of up to 20 watts. It is, in short, a design admirably suited to the newcomer as well as the older hand. Both transmitter and power supply are built on to the same chassis, and a standard size panel is used, so that the complete rig can be mounted either in a rack or in a cabinet small enough to stand on the operating table alongside the receiver.

THE CIRCUIT

As will be seen from the circuit diagram, a straightforward line-up is used, consisting of two stages. The first is a crystal oscillator employing a 6F6G or 6V6G valve —both have been tried and been found suitable. The second stage is a power amplifier using a **Standard Telephones** 4033a triode. The latter is a very nice little valve, small physically, needing little drive, and one which neutralises easily. The heater voltage is 6, but we are advised by the makers that it will run nicely off the usual 6.3v. winding, and our specimen has certainly done well so far.

The crystal oscillator circuit is conventional, but a refinement has been added in the shape of two potentiometers R2 and R3, which supply the C.O. screening grid and anode voltages respectively. R2 allows critical adjustment of the screen voltage so that the 6F6 or 6V6 can be run at maximum efficiency, and R3 allows easy adjustment of the anode voltage so that the amount of drive to the P.A. can, if desired, be varied over a wide range. This voltage divider type of circuit has the added advantage of helping the "regulation" of the power supply when the transmitter is keyed, i.e., it helps to keep the H.T. voltage steady, thus tending to prevent "chirp." Fixed resistors are frequently specified for such potentiometers, but readers will find the variable type far more convenient.

The transmitter is keyed by breaking the cathode circuit of the C.O., and the latter will therefore oscillate only when the key is down, thus permitting "break-in" operation.

The C.O. stage is capacitively coupled to the P.A. by C4. The P.A. stage is again conventional, but from the practical angle employs a very nice coil unit now being marketed by **Amateur Radio Products.**

This is a centre-tapped job with a continuously variable link coupler for connection to the aerial tuning unit. It is sufficiently compact, in spite of the fact that it is wound spaced one diameter, to be mounted on the panel right next to the tuning capacitor C6, so that leads can be kept really short. The one coil will cover both the 1.7 Mcs. and 3.5 Mcs. bands when tuned with a 300 pF. variable capacitor, which is a distinct advantage.

The power supply is quite as important an item as the transmitter itself. If reliable components are not used there will be endless trouble from poor regulation, low output, etc. Cheap mains transformers lack electrical strength and their regulation is likely to be poor, that is, when the key is pressed and the valves pass current, the voltage will drop badly, and this in turn will give a chirpy, anaemic sort of note which will not encourage other folk to answer your CQ's. The **Partridge** transformer which we have used is a hefty job. well designed and built, with good "regulation," and one which can be installed with complete confidence. This transformer, apart from H.T. also provides the 6.3 volts for the C.O. and P.A., and 5 volts for the type "80" rectifier. The smoothing filter circuit consists of two 8μF. electrolytic capacitors and a 20 Hy choke, the latter also a Partridge product. It is good practice to fit a filter in the primary circuit of the mains transformer, as this helps materially to prevent key clicks in BCL receivers in other parts of the house or the immediate vicinity. We have incorporated one such in this design with good results, but there may be difficulty in obtaining the chokes. However, these are easily made, consisting merely of some 200 turns, pile wound, of 24 swg D.C.C. wire for each winding. Suitable wire can be obtained from advertisers in these pages.

CONSTRUCTION.

The arrangement of the components and the general layout can be readily seen from photographs and illustrations accompanying this article. On the front of the panel, the left-hand **Utility** drive controls the P.A. capacitor, the right-hand one the C.O. The centrally placed meter is wired up to the plug beneath, which can be jacked into either the C.O. or P.A. anode circuits. This meter is an **M.I.P.** 2½ inch square instrument, with a full-scale reading of 100 mA. The right-hand meter is a similar instrument, but with a full scale deflection of 10 mA., and is wired permanently in the P.A. grid circuit, where it is most useful for checking the drive to the 4033a, and for checking neutralising.

Along the bottom of the panel, the mains fuseholder and on-off switch are on the extreme left, next the H.T. fuseholder—in the negative lead—followed by a switch in the H.T. supply to the P.A. valve. On the extreme right is the key jack. The two **Denco** feed-through insulators at the top left-hand corner of the panel are wired to the P.A. link coil.

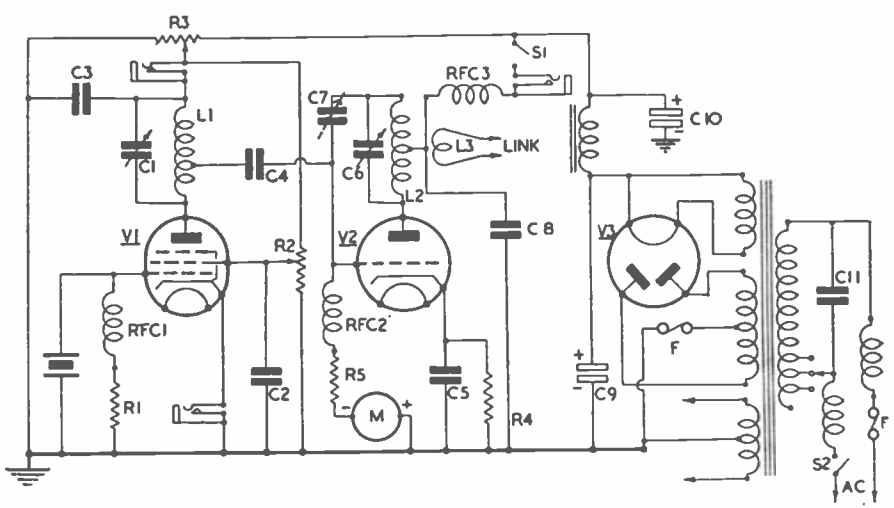
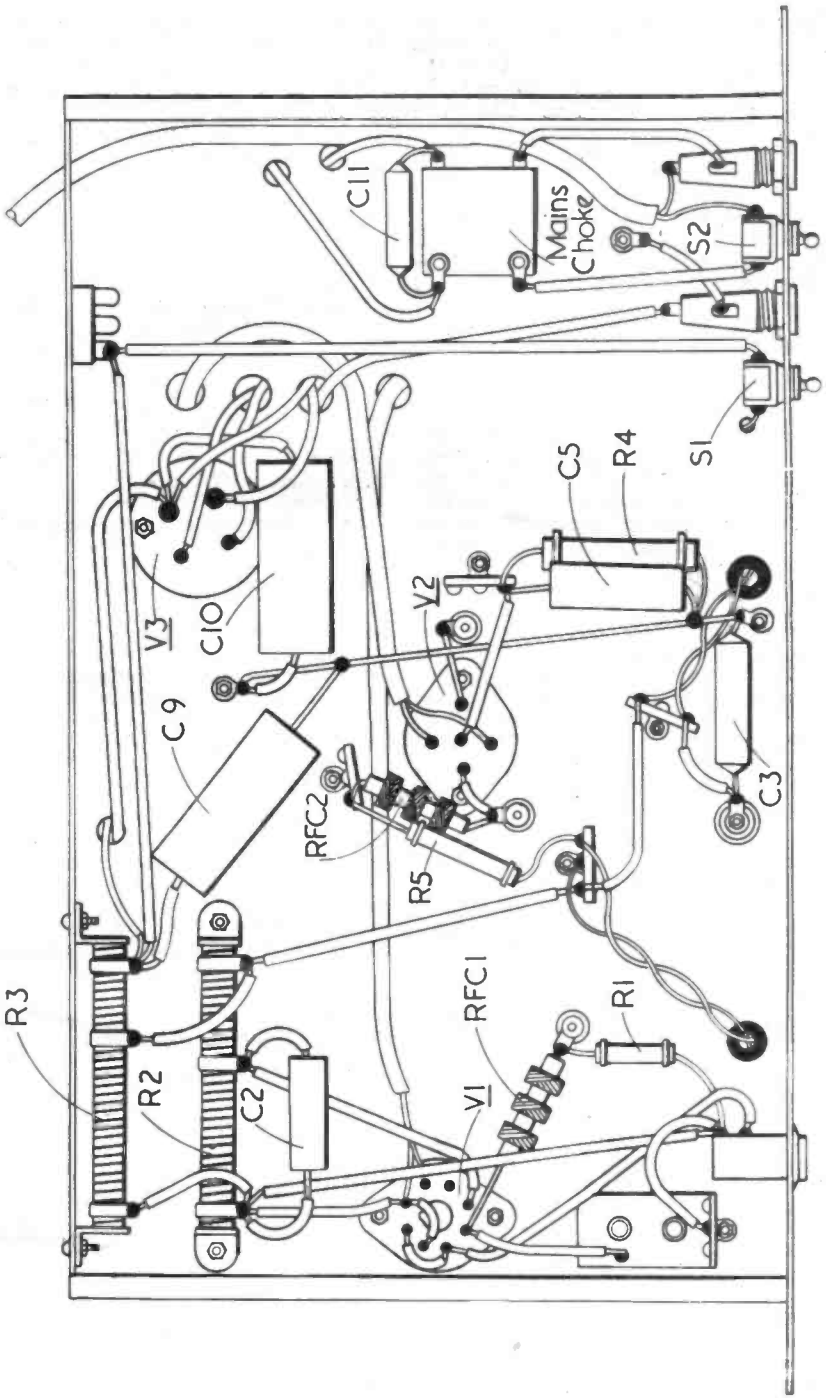


Fig. 1.—Theoretical circuit



Sub-chassis layout

The second photograph shows the top-deck assembly. At the rear, the mains transformer is on the right, with the smoothing choke in the centre and the rectifying valve between them. The valve on the extreme left, close to the panel, is the C.O. valve, and the crystal is mounted on the chassis between it and the panel. The horizontal coil is the C.O. anode coil, and this, too, will cover both bands when tuned with a 300 pF. capacitor. This coil is home-wound, and full details will be found in the components lists at the end o fthe article. The P.A. valve can be seen just behind the smoothing choke, with next to it the P.A. anode tank capacitor. Behind the mains transformer can be seen the P.A. tank coil and link. This is a complete assembly, which is easily mounted, by four 6BA screws, to the panel. The small knob at the top is on the end of the shaft which controls the position of the link; it is hardly necessary to have this control on the front of the panel, as our experience shows that, once set, it is unnecessary to alter it.

Construction is quite straight-forward. The position of those components not already mentioned is clearly shown in the sub-chassis diagrams. The chassis and panel, by the way, are standard rack-and-panel sizes, the height of panel being 10½ inches, and they can be obtained from several of our advertisers.

OPERATION.

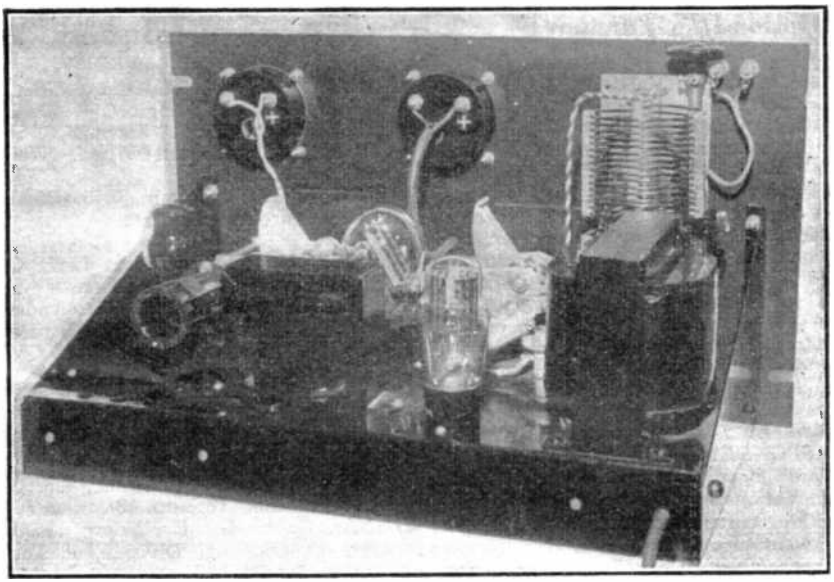
First remove all valves, and check for "shorts" between H.T.+ and H.T.—. There should be, between these two points, a reading of some 12,000 ohms when the tap on R3 is set at the H.T.+ end. Next insert the rectifier valve, switch on, and check the H.T. voltage between either side of the smoothing choke and the chassis. The voltage will not rise unduly with the other valves absent, as the load formed by R2 and R3 will be sufficient to keep it down, and there will be no risk of damaging the electrolytics. The reading obtained should be around 420 volts. If all is OK, it is now safe to insert the two other valves and the crystal. Put the switch in the P.A. anode circuit to the "off" position, and rotate the C.O. drive until a tuning loop held over the C.O. inductor glows, or until there is a dip in the C.O. anode current. This dip should be quite pronounced, and the grid current meter should give a good reading.

The next step is to neutralise the P.A. Turn the neutralising capacitor to the minimum position, and, with the anode switch still "off," rotate the P.A. anode tuning capacitor. A flicker will be noticed in the grid meter reading as this capacitor is tuned through resonance. Increase the capacity of the neutralising capacitor a little, and repeat the "tuning through." Eventually a position of the neutralising capacitor will be found at which there will be no variation of the grid meter reading when the P.A. capacitor is passed through resonance. The P.A. stage is now, in theory, neutralised, but in practice it will probably be found that further adjustment is necessary when the aerial tuning unit is coupled.

The H.T. switch should now be put in the "on" position, and the P.A. anode circuit tuned to resonance, indicated by a dip in anode current. It is worth while mentioning here that for 160 metres the tuning capacitors will both be towards maximum, and for 80 metres both towards minimum capacitance. There now only remains the aerial coupling. Connect up to the aerial tuning unit, and set the latter to resonance, indicated by maximum rise in the P.A. anode meter reading. For this adjustment, the link at the transmitter end should be coupled as loosely as possible, and the link at the aerial unit adjusted for maximum reading. Now tighten the link coupling at the transmitter until the required anode reading is obtained, i.e., up to 10 watts on 160 metres and up to 20 watts on 80 metres. Finally, don't forget to re-check the neutralising at this point!

REFLECTIONS

At this juncture, several points occur to us which have not so far been mentioned, but to which we feel some space should be devoted. First, the question of input to the final stage. This transmitter has been designed primarily for the newly-licensed amateur, who is limited to a maximum of 25 watts on "80." On both the bands, however, it will be found that the drive from the C.O. stage is more than enough to give the required input. R2 and R3 have been incorporated for just this reason. The tapping on R3 should be adjusted so that the C.O. operates with as low an H.T. voltage as possible, in order to minimise chances of frequency drift. The screen voltage will then be found fairly critical, which is the reason for having a variable tap on R2. The anode voltage should not be reduced so far, however, that the crystal becomes "uncertain," and it may be found that at the necessary setting of R3 there is still much more than enough drive. This means that the C.O. will have to be "backed off" quite a bit, that is—detuned, but this has an advantage in that stability is much better.



Rear view of the TX

TEST READINGS.

Below we give some of the readings obtained, which may be useful for comparison purposes.

C.O. stage, using 6V6 valve.

Off resonance. Anode volts 180, screen volts 100, anode current 32 mA.

At resonance. Anode volts 240, screen volts 130, anode current 9 mA.

P.A. stage, using 4033a valve.

At resonance, with drive. Anode volts 400, anode current 17 mA. Grid current 9 mA.

At resonance, with drive and with aerial tuned. Anode volts 360, anode current 60 mA. Grid current 5 mA. Cathode volts to chassis 36. Total bias, 86 volts.

THE COMPONENTS WE USED

R1—50,000 ohms, Erie, 1 watt. R2—30,000 ohms, Bulgin type P.R.15. R3—20,000 ohms, Bulgin type P.R.13. R4—600 ohms, Erie, 2 watt. R5—10,000 ohms, Erie, 2 watt, C1 & C6—300 pF. Cyldon. C2, C3, C5, C8, C11—0.1 μF, T.C.C. C4—100 pF, T.C.C. type Man K. C7—14 pF, Eddystone type S.580. C9, C10—8 μF, T.C.C. R.F. Chokes 1 & 2—Denco type RFC 5. Feed-through Bushes—Denco type F.T.I.—2. Stand-off Insulators—Denco type S.O.I.—1. Panel Fuses—Belling & Lee. Switches—Bulgin type S-259. Insulated Couplers—Eddystone type 1009. Jacks—Igranic. Insulated Brackets—Eddystone type 1007. Chassis & Panel—see text. Slow-motion Drives—Utility S.M.U. Meters—Measuring Instruments (Pullin) Ltd. 0-10 mA., 0-100 mA. Crystals—Brookes, Hamrad (See S.W.N.—June, 1946).

Valves: V.1—6F6 or 6V6. V.2.—S.T.C. 4033a. V.3.—80.

Coils: L.1—Standard 1½in. former, plug-in type, wound with 25 turns 26 swg enamelled, close spaced, and tapped 8 turns from anode end. L.2, 3.—Amateur Radio Products unit.

Mains Transformer.—Partridge 350-0-350v. 120mA. 6.3v. 4A. 5v. 2A.

Smoothing Choke—Partridge 20 Hy.

Mains Chokes—see text.

CORRIGENDA

TRF3: Page 286, November issue. V3 (Output) should read KL/35 and not KF/35.

Reports Wanted: Page 228, September issue. G3ABG should read G3AAN.

I.S.W.L. Notes

Subscription 1/- per annum

H.Q.: 57 Maida Vale Paddington London W.9

IT was our original intention to publish a list of members each issue, but on reflection decided against this, subject to the reactions of the members. Our point is that membership lists are only of interest where particular members are interested in getting in touch with local or other members. Regarding the former, we advise members anxious for contacts to get in touch with their County Representative who is kept posted on the members in his county. We send each CR a batch of file index cards, each one with the name and address of a member in his area, so that he has a complete record available. To members who want contacts other than local, we refer them to the I.S.W.L. CORRESPONDENCE BUREAU, details of which are given elsewhere on this page. This innovation should be a boon to those who enjoy correspondence! However, if you all want membership lists, then please let us know about it, O.M's! And now for our first list of Representatives . . .

I.S.W.L. COUNTY REPRESENTATIVES

BERKSHIRE: E. R. Phillips, G74, 115 Mayfield Drive, Caversham, Reading.

CO. DURHAM: M. Harrison, G54, 34 Southend Avenue, Darlington.

DERBYSHIRE: G. H. Morgan, G252, 60 Chadwick Avenue, Allerton.

DEVON: E. R. Hexter, G49, Middle Gooseford, Whiddon Down.

DORSET: D. H. Tonks, G267, "Armagh," Shottsford Road, Oakdale, Poole.

ESSEX: K. R. Goodley, G239, 34 Blenheim Avenue, Ilford.

GLAMORGANSHIRE: G. Whitby, GW125, 267 Crogan Hill, Barry.

GLOUCESTERSHIRE: F. L. Leach, G226, "Prospect House," Gainscross Road, Stroud.

HAMPSHIRE: O. Knapton, G253, Greenhaven House, Shaldon Green, Alton.

HERTFORDSHIRE: R. W. Halsey, G283, 7 North Approach, Watford.

KENT: J. P. Barnes, G96, 18 Grange Road, Ramsgate.

LANCASHIRE: J. E. Whittle, G31, 2 Church Terrace, Darwen.

LONDON (N.): R. Boughton, G200, 10 Tottenham Lane, Hornsey, N.8.

LONDON (S.E.): W. A. Martin, G70, 61 Silvester Road, East Dulwich, S.E.22.

LONDON (S.W.): F. A. Mawby, G81, 56 Cautley Avenue, South Side, Clapham, S.W.4.

LONDON (W.): J. Wollacott, G33, 499 Harrow Road, Paddington, W.10.

SHROPSHIRE: T. L. Stevens, "Sunny Cottage," Donnington Wood, Wellington.

YORKSHIRE: P. Lumb, G46, 25 Pearl Street, Starbeck, Harrogate.

NORTHERN IRELAND: A. Levi, G138, 33 Old Cavehill Road, Belfast.

SCOTLAND (North): A. G. Anderson, GM165, 87 Braemar Place, Aberdeen.

SCOTLAND (S.E.): J. Thompson, GM249, 15 Chambers Street, Innerleithen.

AUSTRALIA: R. Gillett, VK264, 170 Churchill Road, Dudley Park, South Australia.

CANADA: J. R. B. Hawkins, VE290, 86 Lyall Avenue, Toronto 13.

CHINA: Capt. G. E. Moore, UNRRA Assistant Director, Division of Administrative Services, Shanghai.

CZECHOSLOVAKIA: O. Halas, OK222, Post Box 34, Bratislava 9.

NEW ZEALAND: K. Moffatt, ZL265, P.O. Box 18, Hinuera.

Next month we will give our first list of Town Representatives. Applications are invited for counties and countries not already represented.

I.S.W.L. CORRESPONDENCE BUREAU

Many members have requested a medium for making pen-pals. In view of this, we have organised an ideal arrangement which will enable members to contact just the type of pen-pal he, or she, needs. Briefly the Bureau will work in the following manner. A register will be kept at the Bureau of members requiring correspondence, and all relevant data. On receipt of a request for a pen pal, the Bureau will send a list of suitable names and addresses. So there you are. To be placed on the Register please submit the following data:

Name, address, age, principal interests, what part of the country or world correspondence is wanted from. Also mention any special items or preferences.

Just one point, and that is, please enclose a supply (two or three should be sufficient) of S.A.E's for future replies. These will be used for replies when suitable pen-pals have been found. Overseas members need not send any S.A.E's. Finally, the QRA of the Bureau is: W. Davies, G256, "The Bungalow," Kingsley Fields, Nantwich, Cheshire. (Cont. on p. 330)

Broadcasting Station List

Part 10 : 4830 kcs—2085 kcs.

This list has been compiled by the Short Wave News Monitoring Department, and contains only stations that are operating on regular or irregular broadcasting schedules. Stations not in use at the time of going to press, and stations under construction, are not included.

Frequency	*Call-sign*	*Location*	*Slogan*	*Power (watts)*
4830 ...	YV2RN	San Cristobal, Venezuela	La Voz de la Tachira	2000
4825 ...	——	Stalingrad, U.S.S.R.		
	HJED	Cali, Colombia	La Voz del Valle	1000
	PRJ4	Parnaiba, Brazil	Radio Educadora do Parnaiba	500
4820 ...	——	Singapore, Malaya	Red Network	25000
	XEJG	Guadalajara, Mexico		200
4815 ...	HJBB	Cucuta, Colombia	La Voz de Cucuta	750
4810 ...	YV1RL	Maracaibo, Venezuela	Radio Popular	480
	——	Saigon, Indo China	Radio Saigon	12000
4805 ...	HJDU	Medellin, Colombia	Emisora Cultural	750
	——	St. Denis, Reunion Island		80
4800 ...	YV1RX	Maracaibo, Venezuela	Ondas del Lago	800
4795 ...	EQD	Teheran, Iran	Radio Teheran	2000
	HUB	San Salvador, El Salvador	Alma Cuscatleca	300
	HJDX	Medellin, Colombia	Ecos de la Montana	750
4790 ...	YV6RU	Bolivar City, Venezuela	Ecos del Orinoco	1000
4785 ...	HJAB	Barranquilla, Colombia	La Voz de Barranquilla	1000
4780 ...	YV4RO	Valencia, Venezuela	La Voz de Carabobo	300
4775 ...	——	Singapore, Malaya	Blue Network	25000
	HJGB	Bucaramanga, Colombia	Radio Santander	1500
4770 ...	YV1RY	Coro, Venezuela	Radio Coro	300
4765 ...	YV5RV	La Guaira, Venezuela	Emisora Vargas	1000
4760 ...	XUSA	Chungking, China		
4750 ...	YV1RV	Maracaibo, Venezuela	Ecos del Zulia	300
4715 ...	HC2ET	Guayaquil, Ecuador	Radio El Telegrafo	300
4700 ...	ZQI	Kingston, Jamaica		200
4665 ...	HHCA	Port-au-Prince, Haiti		75
4650 ...	HC2AK	Guayaquil, Ecuador	Compania Radiodifusora de Ecuador	1000
4550 ...	——	Moscow, U.S.S.R.	Radio Centre, Moscow	
4510 ...	——	Bahrein, Bahrein Island		
	——	Khabarovsk, U.S.S.R.		
4385 ...	——	Matsuyama, Japan		300
4375 ...	——	Johannesburg, South Africa		200
4300 ...	FIQA	Tananarive, Madagascar	Radio Tananarive	300
4110 ...	HCJB	Quito, Ecuador	La Voz de los Andes	1000
4045 ...	CSX2	Ponte Delgada, Azores	Emissora Regional Azores	1000
4020 ...	HC1IM	Ibarra, Ecuador	La Voz de Ibarra	300
3990 ...	——	Niigata, Japan		
3965 ...	——	Hiroshima, Japan		300

Frequency	*Call-sign*	*Location*	*Slogan*	*Power (watts)*
3930 ...	HC5EH	Cuenca City, Ecuador	La Voz de Tomebamba	500
3925 ...	——	Fukuoka, Japan		300
3900 ...	ZQP	Lusaka, N. Rhodesia		
3830 ...	——	Magadan, U.S.S.R.		
3800 ...	ZEB	Bulawayo, S. Rhodesia		
3790 ...	——	Tokio, Japan		300
3760 ...	——	Moscow, U.S.S.R.		
3658 ...	ZEA	Salisbury, S. Rhodesia		
3600 ...	——	Port Stanley, Falklands		
3590 ...	——	Osaka, Japan		300
3580 ...	YV3RS	Barquisimeto, Venezuela	Radiodifusora Occidental	4000
3570 ...	YV5RD	Caracas, Venezuela	Radio Cultura	1000
3515 ...	YV6RC	Barcelona, Venezuela	Emisoras Unidas	1000
3505 ...	YV5RX	Caracas, Venezuela	La Voz de la Patria	1500
3495 ...	VUD2	Delhi, India	All India Radio	10000
	——	Nagoya, Japan		300
3490 ...	CR7AB	Lourenco Marques Mozambique	Radio Club de Mozambique	600
3480 ...	YV4RQ	Puerto Cabello, Venezuela	Radio Puerto Cabello	900
3475 ...	——	Sendai, Japan		300
3470 ...	YV7RB	Cumana, Venezuela	Radio Cumana	1000
3460 ...	YV4RP	Valencia, Venezuela	Radio Valencia	1000
3450 ...	——	Johannesburg, S. Africa	Johannesburg 3	5000
3440 ...	YV1RU	Maracaibo, Venezuela	Radio Maracaibo	1000
3430 ...	LRS	Buenos Aires, Argentine	Radio Splendid	
3420 ...	YV2RC	Merida, Venezuela	La Voz de la Sierra	600
3410 ...	——	Budapest, Hungary		
3400 ...	YV5RW	Caracas, Venezuela	Radio Tropical	1100
	——	Umtali, S. Rhodesia		
3395 ...	——	Colombo, Ceylon	Radio S.E.A.C.	800
3390 ...	YV4RK	Maracay, Venezuela	Radio Maracay	500
3380 ...	YV5RY	Cacacas, Venezuela	Radio Continento	2000
3370 ...	——	Soerakarta, Java	Radio Indonesia	
	YV1RT	Maracaibo, Venezuela	La Voz de la Fe	1000
3335 ...	VUD3	Delhi, India	All India Radio	5000
3310 ...	YV1RO	Trujillo, Venezuela	Radio Trujillo	2000
3260 ...	——	Soerabaya, Java		
3230 ...	——	Sappero, Japan		300
3225 ...	HDZ	Rio Bamba, Ecuador	La Voz del Chimborazo	250
3220 ...	——	Kumamoto, Japan		300
3075 ...	——	Tokio, Japan	Armed Forces Radio	
3015 ...	——	Bandoeng, Java		
3010 ...	WLXJ	Shanghai, China		
2600 ...	——	Batavia, Java	Radio Indonesia	
2510 ...	JODK	Seoul, Corea		10000
2505 ...	——	Semarang, Java		
2390 ...	——	Quarry Heights, Canal Zone	Armed Forces Radio	400
2380 ...	——	Bandoeng, Java	Radio Indonesia	
2235 ...	——	Batavia, Java	Radio Indonesia	
2085 ...	——	Djokjakarta, Java	Radio Indonesia	

CONCLUSION

Still going strong

Editorial Note: We apologise for the following article which we were surprised to find with our contributor's monthly letter. We take no responsibility for it and can only assume that the Festive Spirit (or the Dumb Blond) caused this lapse ! !

IT is nine years this Christmas since I last told of the exploits of Ambrose Fandermere, and it is pleasant to know that his ingenious receiver, the Biscuit Box Special, still lives in the memories of old timers. Before he could get this masterpiece in multi-purpose receivers to his complete satisfaction, the War intervened. A most annoying setback as Ambrose felt he was on the brink of success with one of its trickier stages, the Automatic Translator, which was to be incorporated. This device would, if he had had the opportunity to perfect it, have revolutionised radio reception.

It was to be wired into the L.F. stage and would translate all foreign transmissions into King's English as received before passing them on to the headphones or loud-speaker.

Many an inventor would have been content to have aimed at this as a final objective, but Ambrose had greater ambitions. His Translator was to include a B.L.S. system working on a similar principle to the normal A.V.C. circuit. I should perhaps explain for the benefit of the uninitiated that B.L.S. is an abbreviation for "Bad Language Suppressor"—a refinement he considered necessary after he heard a Trawler Skipper lapse, when on the air describing the size of his catch, as his hand came in contact with the H.T. supply.

On National Service

At the outbreak of War, Ambrose turned his talents to more immediate needs and as a result the Fandermere Collapsible Collarstud was born. As its name suggests it was, like the Biscuit Box Special, telescopic. In demonstrating it before a Committee of Experts from the War Office, Ambrose pointed out that quite apart from the advantages it conferred in its normal use, it would, if closed before transport, save much valuable shipping space when sent to our troops serving overseas.

One General, a peppery old boy who had served in Poona, pointed out rather testily that studs were not an issue to "other ranks" as they didn't wear 'em. To this Ambrose quickly retorted "But they could do if they were issued with them, and the brass top can be specially polished by the men both as a part of military discipline and also for ceremonial parades!

A Set-back

It seems that the General was highly impressed with this logic but at that moment the stud, which had been lying neatly folded before them, for some inexplicable reason, released its own spring and flipping up from the table came forcibly into contact with the General's rather prominent right eye. He glared as fiercely as his dimmed vision permitted, while his moustache fairly bristled. "Dammit, Sir" he thundered "we can't have these bally things poppin' off all over the place like this, what?"

To Ambrose's mortification this regretable occurence prejudiced any chance of his collapsible stud being adopted for Service wear, and, as the Ministry of Production would not release material for civilian studs, no more than the few dozen prototypes made were ever produced.

Incidentally it should be placed on record that the Army expression to take a "dim view" of anything, originated from this incident. This however, is of little satisfaction to Ambrose as he would prefer his immortality to rest on something he feels more worthy of his genius.

Unfortunate misunderstanding

Later, he joined the Back Room Boys, feeling that here, at least, his talents would be appreciated and be of the greatest value to the War effort, and in his modest way he told them of his inventive capacity. In due course he was accordingly found a bench in the section where they were devising new sorts of chokes.

Through a most unfortunate misunderstanding Ambrose didn't quite get the idea. He thought they wanted him to think up some new sorts of jokes. He had never tried his hand at that sort of thing before, but taking it as a compliment to his great versatility, he entered into the spirit of the thing. As he pointed out to the Dumb Blonde "Somebody has got to do it. After all they must have something to keep the morale of the troops up, so I may as well have a bash!"

For some months he did bash, well and truly, although with but little success. It happened, one day, that the Minister of Production himself was conducting a Russian Delegation (who had come to study our War Effort) round the Factories and they came to the particular Back Room

where Ambrose was seated, concentrating as hard as he could on joke production.

"Well, well" said the Minister affably, slapping Ambrose on the back "What sort of progress are you making?" "To tell the truth, Sir" started Ambrose apologetically "I have only thought of one. It's about an A.T.S. girl who was——"

"Ahem, 'hem" spluttered the Minister drowning the rest of the sentence, and he hustled the Delegation to the next bench.

* * * *

After they had passed Ambrose pointed out that anyone might easily have made the same mistake and he was quite certain that his instructions had sounded far more like "jokes," but if it REALLY was chokes they were after he would get cracking straight away. However, they didn't give him the chance. He was transferred to an Infantry Regiment where he spent his very limited spare time designing what he called the "Soldier's Friend." This was a machine useful for spud-bashing, button polishing, slapping on blanco Khaki Green No. 3, and when inverted could be used as a portable radio and for beezing up boot eyelets. When not in use it folded away and could be used as a footrest or for standing one's boots on while polishing. There was also a small ledge underneath where a pair of Anklets, Web, could be stowed safely away when not in use.

As things turned out, the War ended before Ambrose finished this most useful contrivance, but happily all his patient work was not in vain. He feels that many of its uses will cover civilian needs so he is re-christening it "The Ham's Valet" as he says that all Hams are invariably badly groomed.

Plagiarism

Whilst in the Forces, Ambrose saw many types of sectional rod aerials. Although they were all assembled fishing rod fashion, he feels they were based on his telescopic stud or even on his Biscuit Box Special, and that some acknowledgement is due to him for the idea.

As for the collapsible studs, he still has most of those that were made and he is holding on to them in case Amateurs are ever allotted a band in the centimetrical spectrum. Converted to half-wave aerials for centimeter work he reckons they will sell like hot-cakes!

Vincent Yap

From our Mailbag

The Editors do not necessarily endorse the opinions expressed by their correspondents.

HAM LICENCES

Sir,

In reply to G3APA, he claims that the RSGB represents the majority of British Hams. How does he know that those licensed and potential hams outside the the society are in the minority? To get back to my original opinion I consider that prospective licencees have been given a raw deal under the new regulations.

In closing I disagree with the remarks about experiment by G3APA and would suggest to him that a far better definition of a radio amateur is to be found in the RSBG and ARRL handbooks than in any dictionary. I trust he will not object in being put wise to this.

Yours faithfully,

A. W. Mann ISWL/G126 (Middlesborough)

(This correspondence is now closed—Ed.)

BC v. HAM DX

Dear O.M's

I appear to be becoming a prolific writer of letters to you, but I was prompted to write again by some misguided words of G3APA in your last issue.

He decries the BC listeners on account of their "so called" DX stations using "umpteen kilowatts beamed to England". His remarks surely reveal his ignorance of the subject. By the same token it is only fair to assume that Mr. Kendall calls local G hams "real DX". The comparison is exact!

From many years experience in both BC and ham DX listening I can state quite definitely that DX BC listening is much more difficult than ham DX. Regarding power it will be agreed that many hams these days use powers in excess of 150 watts—many of them up to 1,000 watts. Most of these QRO hams use beam aerials. The DX broadcaster (particularly the Latin Americans) very often uses less than 150 watts, most of them anyway running well under 500 watts. These stations are primarily for local reception only and therefore mainly use omnidirectional aerials. Frequency comes into the picture also, as most of the Latins operate on such bands as the 80, 60 and 49 metres ranges. The main ham DX bands are of higher frequencies.

Add to this the comparative ease with which a ham station is identified compared

(Cont. on p. 327)

STATION DESCRIPTION No. 7

For the first time in this series, we take our readers for a visit to South America—to Station ZFY, Georgetown, British Guiana.

This station, the only English-speaking commercial broadcasting station in the Carribean area, and the Carribean relay point for the B.B.C., is on the air daily from 1045-1245, 1445-1645 and 1945-0045 G.M.T. On Sundays the schedule is 1045-1645 and 1945-0045 G.M.T. Frequency is 6000 kcs. and the power 1000 watts.

History

"The Voice of Guiana" was one of the pioneer SW broadcasters. It originally operated on about 7100 kcs. under the call of VP3MR. It occasionally operated on 6000 kcs. Another station in Georgetown, VP3BG, was also operating on the 6 Mcs. band. The station ZFY is the result of a merger between the original "twins" 3MR and 3BG, which took place in 1936.

Coverage

ZFY radiates "sponsored programmes." The primary reception area is over 400 miles, and the secondary area (British West Indies, Surinam) doubles the normal service area. The number of receivers in British Guiana itself is 5,000, and there are also 30,000 receivers in the secondary area capable of picking up the ZFY programmes. During daylight hours, when long-distance short wave reception is difficult, regular reception is reported from all over the West Indies.

Programmes

Besides the sponsored programmes, ZFY radiates recorded programmes from the A.F.R.S., the U.S. Office of Information and the B.B.C. ZFY also originates a number of local shows. The news bulletins are mainly rebroadcasts of B.B.C. Bulletins.

Listening Habits

People in the tropics rise and retire early, so that the peak time for commercial broadcasting is during the daylight hours. With this in view, ZFY comes on the air at 0700 and signs off at 2100, local time.

Technical Facilities

The latest Western Electric studio sound amplification system is used, with modern recording units and allied equipment. A medium wave transmitter will shortly be installed to cover the broadcast band, this will more than double the Georgetown and district audience.

Reports

Reception reports of a constructive nature are always appreciated from distant listeners, and are promptly verified. Reports should be addressed to: The British Guiana United Broadcasting Co., Ltd., P.O. Box 272, Georgetown.

Illustration

The illustration at the heading of this article shows the temporary headquarters of the B.G.U.B. Co., Ltd., in Georgetown. Note three of ZFY's staff on the verandah, outside No. 1 studio.

ON THE HAM BANDS

Conducted by "CQ"

● Top Band

TESTS are about to be carried out by three hams who have secured small balloons for lifting aerials when working on this band. We await results with great interest!

Apart from D2uf (Osnabruck) with his 10 watts and 262 foot (!) aerial, and EI8j, very little has been heard outside of G, GM and GW. Have you heard G8gi (Sleaford)? He puts a very fine signal into London during daylight. Well, his aerial system embraces 470 ft. of wire. There you have the secret. Long aerials and good earths are the chief essentials for DX work on top band!

We are to lose two of the top band fraternity, as G2pq (Dollis Hill) is off to China and G3acz is soon to depart for Australia. G6mu (Tooting) has constructed an automatic coder and was heard testing this with much success during a QSO with G2nj of Harrow.

● 3.5 Mcs.

DX is still to be heard on "80" in the "wee small hours". Often, though, the W's are to be heard around midnight. D. L. McLean (Yeovil) reports hearing W1CTA, W1ZE, W4DCQ and W4GJS between 0330 and 0355.

● 7 Mcs.

An unusual call was heard working G2pq on this band, i.e., GLWX. Guess 2pq had quite a thrill when he learned that it was a "Lancaster" over The Hague, the op. being a ham!

The band seems to be well open for DX these days, though it is surprising that very few reports are received. The W's are coming in from around 2100 and are often very strong. In the early mornings until about 0900, W's and VE's are often at good strength.

John Clarke (Brentford) reports hearing HH2jb, HH5b, SU1ar, and many VE's, CM's and so on. The prize catches were ZC1ar and HC1fg.

● 14 Mcs.

D. L. McLean sends in his usual fine 'phone log. He reports EK1AD, 1MD; EL4A (2305); J2ABC (0700, 14350 kcs., Tokio); 9AAB (0840, Okinawa); 9ABF (0830, 14200 kcs.); KA1CB (1650); KH6CT (0920); PZ1G, 1GB, 1J, 1UD and 1W (P.O. Box 679, Paramaribo); UA1KBA (0750 Leningrad, 14275 kcs.); VE2SZ/VO6 (c/o Trans Canada Airlines, Goose Bay, Labrador); VP3LF (14370 kcs.); VP4TB (c/o Pan American Airways, Port-au-Spain, Trinidad); VP2MY (2330); 2GE; W9BMB/KL7 (0740, Aleutians); 9WBP/C1 (0900, Nanking); VS9AR (1820, 14250 kcs.); XABG (Graz, Austria. QSL to c/o 244 Wing, R.A.F., C.M.F.); XE1AC, CQ, LE; XU1YY (0915); YN1LB (2230, 14360 kcs.); ZB1AB, 1E, 1L, 2A; ZD4AB (2330); ZS2BJ, 6GV (2330).

Mr. McLean says that LU1ZX is the yacht "Gaucho", and was heard when in Las Palmas harbour, Canary Isles. QSL's should go via the Radio Club of Argentine, Buenos Aires. Other news from this reader includes the fact that SV1GY says all SV's are unlicenced, that VP4TE is ex-VP3BG (Major L. Kerr, Chief Signals Officer, British Army, Trinidad), and that W2MMO/Marine was recently heard when 300 miles West of Gibraltar. Thanks for all the fine data O.M.

J. Bowes-Taylor, ISWL/G65 (Birmingham) sends in a good CW log. He heard EK1ar (14010 kcs., Avanzi Richard, Tangier); HH2g (14080 kcs., Box 94, Port-au-Prince); HH3I (14000 kcs., Box A153, Port-au-Prince); HI8x (1400 kcs., 2100); XU2yr (14070 kcs., 1550); YV3af (14100 kcs., 2220); ZD8a (14050 kcs., 1915) and on 'phone VE8MF (14335 kcs., 2100. Clyde River, Baffin Island, N.W.T.) and VP9L (14290 kcs., 2045).

From Signalman A. R. **Poulston** (B.A.O.R.) comes another good CW and 'phone log. The best are J4aab (578 at 1250); OQ5ce (468, 1955); UA9dp (469, 1730); VQ3hjw (467, 2050); VQ4kth (579, 1810); VS8aa (458, 1455); VS9an (356, 1825); W0mcf/C1 (469, 1500); W6vib/C7 (579, 1730); W5kgi/C7 (589, 1240). On 'phone KA1CB (Q5 R7, 1420); KA1AW (46, 1410); VO6K (57, 2030); VQ6GH (23, 1830); W7ELJ/KL7 (46, 1740); ZD4AB (46, 0650). The QRA's of W6VIB/C7 and W5KGI/C7 are respectively Lt. B. D. Lott, Peiping HQ, APO 912, c/o Postmaster, San Fransisco and Lt. G. Simpson, APO 912, c/o PM, San Fransisco.

Martin Harrison reports hearing EL5B, PJ3X (43 at 2200); PZ1FM (2220); 1J, 1W (2215); UA1KBA (57, 0830, Leningrad, YL op); VP4TE (57, 2225); VP6PC (53, 2215); XZ4AR (55, 1930), YN1LB

(53, 2210); YV6AO, ZD4AB, ZS6GV (53, 1540) and VE8AG (53, 0830).

W. H. Harris, ISWL/G42 (East Suffolk) reports FT4AI, OX1AF, WB, 2K, 2MJ, VO4P, N, 6K, 6H, VK6KW, W1MMU/XZ, and many Latins, etc. The QRA's for XE1AC and XE1CQ are Box 9581, Mexico City.

● **28 Mcs.**

D. L. McLean reports KP4AJ (c/o Base Signal Office, Borinquen Field), 4BP, 4CM; PY2QK (1515); VE6RH (1700); 7AJN (1830); VK2DI (1040); VO2M, 2RM; VP6MR, 9F, 9R; VS9AB (1300); W2IEV (portable on S.S. Sea Nymph, 300 miles East of Florida); XZ2YT (1415); ZS1AX, 1P, 1T (0950). Also many W6, 7, 0, XA, etc.

Geoff. Johnson, G2BJY, remarks on the very good conditions prevailing around the end of October, when VK and ZL were coming in between 0800-1200, and the band opened up for W6/7 after dusk. One morning between 0915-1015 Geoff. heard VK5ko, VK2ra, VK5dx, VK2kz, VK2yw, VK2agd, VK5nr, VK3kx, VK3yp and ZL3lb.

During November 2BJY remarks on the general deterioration of conditions, though the DX was still there. The VK's and ZL's disappeared, though ZL3LB reappeared on 'phone and was quite a good signal. After a few more weeks of moderate conditions things improved and at the time of going to press the DX is coming in quite nicely again.

Finally, here are a few QRG's for the DX hunters—HH2bl, 28120, KP4aj 28100, VP5RS 28180, VP5EM 28060, TI2RC 28200 VP4TR 28050, VP3LF 28300, PY6AG 28040, YV5ABX 28120 and PJ3x 28000.

● **Query Corner**

Firstly, here is some more data on last month's queries. J. Bowes-Taylor says that QSL's for YP1AA should be sent to Minerva Club, 28a Brunswick Square, London, W.C.1. Thanks O.M. The same reader says he sent a card to OX1BC (APO 55, etc.) and had it returned "unknown". Any offers?

Regarding YI1CX, H. E. Edinboro says his QRA is 6FBU, Basra, Iraq. Mr. Edinboro mentions that ZB1AB is the new call of ZB1A. He has been a SWL since 1928. Can any readers beat that? He also asks for details of FA8DX.

K. W. Bedford writes an interesting letter about our old friend PR1AB. We quote—"According to my log, I have the following information to offer on a station PR1AA (which may relate to 1AB). On January 6th, at 1345, I heard a CW station calling CQ and signing PR1AA. The next time I heard of this station was in March when YV5ABY was in 'phone contact with him. I couldn't hear PR1AA but YV5ABY was heard to confirm IAA's QRA as in the Balkans, and later as the American Radio Journal in Zurich. This dope is very confusing, a Brazilian call-sign, from Switzerland, in the Balkans! Take it or leave it"!! Quite!

When we suggested, last month, that LH2A was LA2a misread, we dropped a brick! Roy Twidale and Martin Harrison write to say that LH2A is a genuine call. Apparently he is the only LH call on the air, the prefix LH being issued on account of the station being licenced for both amateur and broadcast bands. It is the experimental station at Oslo University.

Now for this month's teasers. True to tradition Martin Harrison comes forward with his usual quota! The first is PK1VHN

Two fine examples of QSL'S supplied by local authorities to radio clubs. Such cards are standard designs with individual calls and QRA'S overprinted.

heard at 0850 at Q4 R5. The second is GFGB heard working hams on the 1.8 Mcs. band. Question—is he a commercial having a little relaxation or just a plain pirate. We think he is the former!

A. R. Poulston heard another strange one ET1jj on 14 mcs. He was 466 at 2000. Any data, please? Can anyone supply the call of the station with this QRA:—Frank Gray, Box 1270, Fairbanks, Alaska! He is not in the Call Book, O.M.

Arthur Cushen (New Zealand) says he has a QSL from ZK1AA for 80 metres. He uses 70 watts on 3957 kcs. and his QRA is: S. G. Kingan, Raratonga, Cook Islands. Well, Arthur, YOUR station is obviously OK, but regarding the one on 14 Mcs. we still say there is ZK1AA AND ZK1AA!

● JASR

Quite a few readers have asked for details of the above station, mostly suggesting that, in view of the strange call, it was a "phoney". We assure our readers that it is definitely a bona-fide station! The station is used to test Mobile Radio Installations, which are being produced in Edinburgh, the stations QRA. These Units, when tested, are used by the Army in various parts of the world. Quite a number have been in use since D Day and have given very good service. Those now being produced are for use in tropical countries and will be a new issue for the Army. The idea of the tests conducted at JASR is to ascertain exactly what the equipment is capable of doing under all types of weather conditions. This information comes from Mr. G. S. Rowbottom, senior operator at JASR, who is a regular reader of the "News".

● VS7ES

We have a nice letter from VS7ES. He says that "officially, the position of VS7 hams is pretty awful"! No new licences are to be issued unless the British P.O. regulations are satisfied. Power will be restricted to 20 watts, on CW only. No 'phone work is officially allowed. The entire rig at 7ES, "from Aerial to headphones", is built up of U.S. Army Surplus and Service Salvage. WAC was worked in 5 hours, and "only" 52 countries have been worked so far! Incidentally, VS9RP, heard on 28 and 14 Mcs. was in fact VS7ES!

The only hams permanently resident on the island are VS7's EB, ES, PW, GR, EP, and GW. VS7JB is at present on a holiday visit to England, but hopes to be back in VS7 within a few weeks time. The sudden quota of other VS7 calls is due to the large floating population of Service personnel, which "fade out as quickly as they arise". The station that used VS7AX was operated by a radio op. on the S.S. British Aviator, and is now operating off Aden and signing VS9AX. We are pleased to hear that the pirate VS7JX, who was giving 7ES's QRA, has now been dealt with "in no uncertain manner"!

Finally, it would be interesting to know if any other reader of the "News" has such a long name as 7ES—it is Emil Savundranayagam!

● Gossip

G3ACR (Burton-on-Trent) lets off steam in a letter concerning remarks made in this section. In the June issue I said that during daylight hours top band working is confined to distances of not more than 50 miles, and in the November issue that contacts of 50 miles are possible during the day on 80 metres. 3ACR says the remarks are misleading, inasmuch as he himself has worked Worthing on 160 and over 50 miles on 80, both during daylight hours. I would like to point out that my remarks were meant to be taken in a general sense, in other words for average conditions. The fact that someone worked more than 50 miles on top band during the day, does not imply that this is an everyday occurrance. Or is it, 3ACR? It is possible to work W's on top band—but how many have done it? The very fact that G's have worked the States on the band wouldn't justify a remark that it is general to do so. As for "80", it is possible to work longer distances than 50 miles during daylight, but in general most contacts are confined to distances less than this figure. From my own station I have worked the continent during the mornings on 3.5 Mcs. but I would hardly say it happens every day!

John R. Buswell of XACP writes to say that Reply Coupons are not necessary with reports to this station. All reports are welcomed and will be QSL'd. The QRA is Radio XACP, Signals Officer, R.A.F. Station, Elmas, C.M.F.

We have just received the results of the Swiss National Field Day. The winners were: Category A, HB1CZ; Category B, HB1CA; Category C, HB1AW and HB1DR.

Les Coupland, G2BCQ (Boston, Lincs.) has been putting in some good work. Here are some of the stations worked during the past month:—VQ2hc, VS9an, VK2di, 3ae, 4ty, 5ju, ZLing, 3gu, 4gm, ZS1dk, 6df, K6plz, OQ5au, VE7aec, 8ai, EL4a, ZD4ab, SV5ec. Nice work, O.M.!

And to finish, here are some "potted notes" . . . KZ5AA has left the Canal Zone and is now back in the U.S.A. . . . VR5BY, according to reliable information,

is most definitely a "phoney" . . . Some rare 'uns to search for—AK1LO (Korea. 14 Mcs.), VK9AZ (New Guinea, 14060 kcs.), VP1EL (British Honduras, 14 Mcs.), YV7AA (St. Margarita Island, 14 Mcs.), VK4OS (Port Morseby, 14 Mcs.) . . . VP2GK is active on 14 Mcs., as is VP7XX on 14080 kcs. . . .

A. L. Crane (Lee, S.E.12.) is a real Old Timer. He is ex-G2CR and says he was the first one to be allocated a 3-letter call (2AAA) way back in the "20's".

● QSL's Received

D. L. McLean: (14 Mcs.): F3DF, 3JQ, 3QG, 8SI; LA4R, 8X; OA4M; PA0GI; VP5EM; W3KCE, 6ITH, 6OCA/J3, 7HRV, 8MSK/3, 8SIR/VP9; XACP, XAEF, XE1AX. (28 Mcs.): GM8MJ, YI2CA.

J. Bowes-Taylor: LX1AY, VU2AM, CN8AB, W2IXY, VS1BV, ZB2B, VE1pq, YI6C, VU2jd.

● Reports Wanted Corner

G2DHV: 3580 kcs. and 14196 kcs. CW: 28 Longlands Road, Sidcup, Kent.

G6MN: 59610 kcs.: "Castlemount", Worksop, Notts..

W2OQI: 14 Mcs.: Box 698, Center Moriches, Long Island, New York.

VP9D: 14 and 28 Mcs. C.W. J. A. Mann, R.N., W/T Station, Daniels Head, Bermuda.

G2UK/G2ATV/G3AKA: 3, 5, 7 and 14 Mcs. CW: c/o "S.W.N."

PSE QSL TO . . .

Some QRA's requested by readers.

CN8MZ: R. Cornebois, Rue de Quercy 38, Rabat.
CR9AG: John Alvarez, Government Office, Macao.
EK1AZ: Box 45, British Post Office, Tangier.
EL3A: c/o Vice Consul, Monrovia.
HP1A: Box 32, Panama City.
K6PLZ: N. Thompson, 1658 Piikoi Street, Honolulu.
KH6AR: Box 68, Waialua, Oahu, Hawaii.
KH6FD: Eleanor Christensen, Kuihaele, Hawaii.
OX1AS: Det. 1366, ATSC, APO 858, c/o PM, New York.
OX1WB: U.S. Government Weather Station, Scoresbysund, Greenland.
TI2PA: Apartado 159, San Jose.
VP4TB: B. Wilson, 61 Mucurapo Road, Port-of-Spain, Trinidad.
VP5EN: Jamaica Public Service Co., Kingston.
VP5AD: T. Meyers, 122 Tower Street, Kingston.
VP6PC: Box 1166, Bridgetown, Barbados.
VU2AK: Box 54, PCH GHQ, New Delhi.
VQ2GW: Box 74, Luanshya, N. Rhodesia.
W1IAV/KV4: T. E. Sharp, St. Thomas, Virgin Islands.
W3GZT/J9: 913 Bartram Avenue, Collingdale, Pa., U.S.A.
XACA: 977 Signal Service Coy., APO 512, c/o PM, N.Y.
XADW: Signal Section, Rome Area, APO 794, c/o PM, N.Y..
YN1LB: L. B. Satres, Ave. Bolivar 106, Managua.
YS1EO: Apartado 246, San Salvador.

(MAILBAG—Cont. from p. 322)

with the difficult task of unravelling the mystery of a Latin American station using only very rapid Spanish and the matter is put into the correct perspective. I am quoting Latins because these are the main source of DX interest in BC listening, but the remarks equally apply to other global areas.

Finally, it must be understood that BC stations by their very nature use telephony, whereas the majority of hams use CW!

So there you are, G3APA, BC DX is not considered in terms of high powered international-service stations any more than the criterion of ham DX is the bloke round the corner on 14 Mcs! Try it and see!

Sincerely yours,
J. Clarke ISWL/G1O (Brentford)

ISWL

Dear O.M's,

After reading your remarks on who is goin to run the ISWL, I am inclined to agree with your views. May I add that as the League is sponsored by "Short Wave News," the same spirit is bound to be evident in the League,

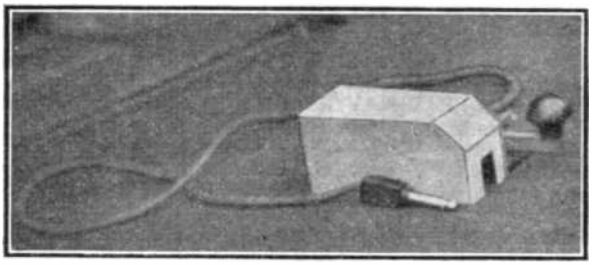
73,
H. H. Mansfield, ISWL/G12
(London, W.11)

Dear O.M's,

Your proposal to put all major questions to members is, in my humble opinion, a first class idea. If I may say so, it is an old English custom to abide by the finding of a majority vote, and I, for one, am quite ready to accept such a finding.

We shall, I hope, have many members from different parts of the Empire and various foreign countries and to allow these also to have a voice in matters appertaining to the League will, I feel sure, do much to foster and cement friendship, to say nothing of trust,

73 and good luck,
W. H. Harris, ISWL/G42,
(Woodbridge, Suffolk).



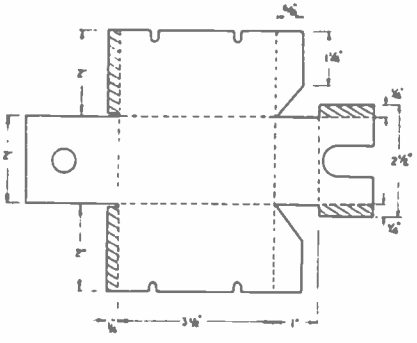
A Morse Key Cover

By "CENTRE TAP"

WHERE the key is inserted in high voltage circuits as is often the case when in the screen circuit (frequently at 250 to 300 volts above chassis potential) some sort of protective cover is highly desirable to avoid shock in moments of absent mindedness. The cover too, provides some protection from dust and dirt as well as a safeguard against a short should the metal parts come into contact with panels or any "live" part of the gear.

A useful streamlined cover is suggested in the accompanying photograph and drawings. Actually it is based on a Service pattern being made in three pieces.

A wooden base is cut, slightly larger than the key and the cover is made to fit by screwing on to the long edges of the wood. If slots are used instead of holes for holding down, the cover can quickly be removed when the operator wants to adjust the tension or gap, or when the contact points are to be cleaned. Felt or baize can be glued to the underside of the wood, although if it is to be used on a polished surface, thin rubber or miniature rubber feet are advisable to avoid slip.



Suggested template dimensions for average sized key.

A hole to accommodate a suitable grommet to lead the flex through should be cut in the back.

In the plan the shaded portions are used for soldering and if both their surface and the part to which they are to be soldered are well tinned no difficulty will be found in making a strong, neat joint. Should difficulty be experienced in getting enough heat on the joint, the surfaces can be "sweated" together by holding with pliers in a naked flame. Any surplus solder squeezed out should be wiped off while hot, with a rag .

The bends which are represented by dotted lines, can best be made by clamping between two pieces of hardwood and finishing off with light tapping using a mallet. Hard blows will, of course, dent the metal.

The dimensions given are those used for the original model and will probably suit the average key, but allowance will have to be made for keys of smaller or larger sizes. Measurements are best checked by making a cut-out in stiff card first. The card can afterwarrds be used as a template for marking out the metal.

The cover should be finished with a coat of good quality enamel; avoid any of those sticky concoctions which only too frequently masquerade as enamels nowadays. If the surface is very slightly roughened first the enamel will get a better grip on the metal, and future flaking will be avoided.

With a little care an extremely neat and clean looking job is easily possible, even by those inexperienced in metal work. There must, of course, be a clearance between all metal parts of the key and the cover, and if the key is to be used in power circuits the part of the arm projecting out of the cover if not already insusulated, should be neatly bound with an insulating material.

WORLD NEWS

Haiti

A powerful new short wave station, to be called "Radio Haiti," is to commence operation on January 1st, 1947. It will be the most powerful station in the West Indies, having a power of 150 kW. There will be three transmitters, providing beam services to Europe, Africa, North, Central and South America. Programmes will be radiated in four languages, French, English, Spanish and Portugese. The following channels have been allocated: 6077, 6200, 9563, 9620, 11815, 11820, 15300, 17150, 21500 and 21670 kcs.

New Zealand news and views

New Zealand has two short wave transmitters under construction at the site of the medium wave station 2YA, outside Wellington. These short wave outlets are expected to take the air in early 1947, the present holdup being the building of suitable aerial arrays. At present, a Post and Telegraph 'phone transmitter (ZLT7, 6715 kcs.) is the only short wave voice from New Zealand, and this relays a special news service to the Pacific at 0930 G.M.T. (transmissions start just before this time, and leave the air at 0940).

The New Zealand DX Club Inc., with Headquarters in Aukland publishes the bulletin "New Zealand DX-TRA" and is the oldest DX club in the Southern Hemisphere, having branches throughout the Dominion and members in all parts of the world. The club bulletin is an 8-10 page magazine, published monthly and featuring news on medium and short wave affairs. Subscription (including badge, etc.) is 6/6 per annum. The bulletin is to be extended to include a "tip sheet" of stop press items to be released between the monthly bulletin proper.

(Arthur Cushen—S.W.N. Correspondent)

From the U.S.A.

The Victory Radio Club and the "U.R.DX.C." have now amalgamated. It is estimated that the combined clubs will be the largest organisation of its kind in the U.S.A.

"Radio News" says that Dr. J. O. Stewart, ,the Princeton University astronomer, is of the opinion that sunspots will continue to cause interference to short wave radio services for at least a year longer. Dr. Stewart thinks that even then it will only be a brief respite, and that the present sunspot cycle will reach its maximum by the end of 1947.

(G. Calkins, S.W.N. Correspondent)

Netherlands-South America

Our good friend Eddie Startz, of PCJ, is now in South America, having flown there for the purpose of making Spanish and Portugese language broadcasts in relation to the new Netherlands airline to South America. The "Happy Station" programmes heard during his absence are specially recorded versions made before he left.

NEW CLUBS

BIRKENHEAD: Wirral Amateur Transmitting and Short Wave Club now meets monthly at the Y.M.C.A., Whetstone Lane, Birkenhead. Full details from the Secretary:—B. O'Brien, G2AMV, 26 Coombe Road, Irby, Heswall.

BLACKPOOL: This club meets on the first and third Friday of each month (7.30) at Bellevue Hotel, Whitegate. The Secretary is H. D. Ashworth, G4PY, 4 Albion Avenue, Blackpool.

JERSEY: A new club has now been formed with GC2CNC as the Secretary. For further particulars please write to E. Banks, "Port Rock," Tabor Lane, Route des Genets, St. Brelades.

OUR DIPLOMA OF MERIT

This month's awards of our Lids Diploma go to the following hams (take this last word in whichever sense you wish!):—

The G6 who generously provided local listeners with a 20 minute relay of the B.B.C. Home Service. We appreciated his good taste in not interfering with the music by unnecessary talking, but consider he should have reserved his whistling solo for a more appropriate time.

Another G6 who kept his 'phone carrier on whilst looking for an entry in his log book. He never found it, though it was (or should have been) made only a week previous. After this 10 minute interlude, it was only to be expected that we should "hang on a minute while I roll a cigarette"!

The G4 who said he is not going on the air yet because his rotary beam is not finished as "it's no good without one".

PUZZLE CORNER

We note an Editorial Article in a contemporary, dealing with the "mushroom growth of so-called 'national' and 'international' radio clubs, leagues and societies". We were entirely unaware of the existence of such a "growth", and unfortunately the article does not give the names or other particulars of any of the organisations concerned. For the purposes of our records, we should be glad of any information regarding new societies, etc., either in this country or overseas, which our readers may be in a position to let us have.

(ISWL NOTES—Cont. from p. 316)

I.S.W.L. TRANSLATION SERVICE

We are pleased to announce the first two sections of the service. The Service function is to translate short messages and letters received by members from foreign hams and BC stations. The rules for this Service are given below:

(a) No charge is made, but an S.A.E. must be enclosed with each query.

(b) I.S.W.L. membership number MUST be quoted.

(c) The Service cannot undertake to translate complete booklets, leaflets, and the like. Translation is restricted to short messages, letters and so forth.

(d) The Service can only deal with translation of script from either amateur or broadcasting stations.

The first two sections of the Service are as follows:

GERMAN and DUTCH: C. Jakes, GM34, 68 South Avenue, Blairhall, Fifeshire.

FRENCH: T. E. Tonge, G124, 67 Marsh Road, Little Lever, near Bolton, Lancs.

Applications are invited from members to act as managers for further sections of the Service ,particularly Spanish and Portuguese.

QSO CORNER

The following members wish to contact other local ISWL members:—

BOSTON (Lincs.): R. Warrener, G17, 19 Inglelow Avenue, Boston.

EXETER: E. G. Wheatcroft, G203, 7 Mount Pleasant Road, Exeter.

PLYMOUTH: C. M. Leach, G89, "White Cot," Kingsand, near Plymouth.

Member G179, A. Veness, of 37 Park Road, Bromley, Kent, wants to start a local Chapter in his district. He says that facilities for accommodating meetings of 15-20 members are available at any evening. Mr. Veness feels that a lot could be learnt by inter-discussion. We agree. So . . how about it Bromley members?

Member G203 is also interested in forming a local group in the Exeter area. His QRA is given above, so would Exeter members please contact Mr. Wheatcroft?

T. R. Salkeld, G68, of 3 Glovers Road, Smallheath, Birmingham, has recently bought a receiver type R116A and wants details of power supply, etc. Can any readers help, please?

FLASH!!

ISWL letter headings are now ready! The ISWL member's letter paper measures 8in. x 10½in. and is printed in green and black on a cream wove paper. It is available in packages of 100 sheets at 4/6 per package. Make a point of sending in your order to HQ as early as possible!

Other ISWL supplies will be forthcoming at the earliest opportunity. The "Next off the line" will be rubber stamps bearing the ISWL emblem. Our emblem, which has not so far appeared in print, is an original one—getting away from the rather timeworn theme of the usual club emblems!

Short Ends

The "Annual"

Our new publication, the "Short Wave Listeners' Annual" is now available. It's 84 pages are packed with information invaluable to the DX listener. Here are some of the many features:—Broadcasting station list of over 1,200 stations; Commercial W/T station list of 450 stations, for calibration purposes; A comprehensive list of BC station QRA's; Chapters on Identification (including translation guides, list of over 300 Latin American slogans, etc.); A comprehensive section on Amateur Codes and Abbreviations; Distance Table; DX Timetable; Local Time Conversion; Your Guide to the Short Wave Spectrum, including tables on allocation of the spectrum, Amateur and Commercial Call-sign allocations and call areas; An informative section on Short Wave Propagation; and so on . . .! And the price for this wealth of information is a modest 2/6 (from local booksellers) or 2/9 post free if ordering direct to "S.W.N."

Help, please!

This journal has decided to place at the disposal of the ISWL the use of a small printing machine, situated at HQ, for the purpose of printing League leaflets, circulars and the like. In this direction we would greatly appreciate assistance from League members who are either in the printing trade or who have some knowledge of composing, who would be prepared to come along and put in some spare time for the benefit of the League.

Full Bandwidths

The remainder of the 14 and 7 Mcs. amateur bands have now been released. The frequency allocations are 14000-14400 kcs. 7000-7300 kcs.

Component Review

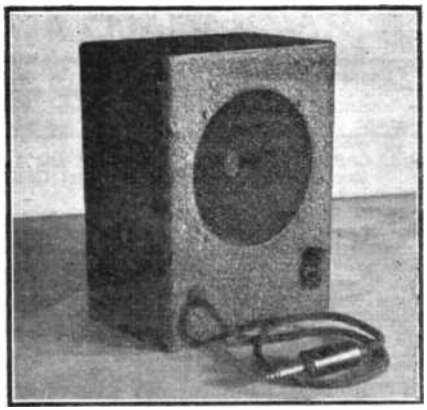
We can heartily recommend the metal cabinets and gear being turned out by **Messrs. E. J. Philpott, of Chapman Street, Loughborough, Leics.** The illustration above shows a speaker cabinet supplied to us to our specification. It is in black crackle, and is fitted with removable back. The speaker opening is covered by a metal grill, and a baffle board of non-resonant "Beaverboard" or similar material is included. One feature we noted, and liked, is that the back has two parallel edges turned over at right-angles, so that it is really rigid, and will not vibrate. In fact, the whole job is much more strongly built than the majority of cases on view at the present time, and has been well thought out. We think no one can possibly grumble at the moderate cost of 15s.

We have since ordered some more cabinets, with chassis, and these are all up to the same high standard and reasonable prices. A useful feature of the service given by this firm is that the cabinets, etc., are not made up as standard "lines," but are built to the customer's specification. If required, holes can be punched or drilled before finishing, so that the risk of damage to the finish, not to mention possible hard work! is minimised. Assistance is also available on the problems of layout as tied up with the constructional considerations involved in making up these jobs. The firm is prepared to tackle anything from a small panel to a complete station.

Mr. L. Philpott, G4BI, says that they are offering a "complete service." It seems to us that this is certainly no exaggeration!

BELLING & LEE, LTD.

Those readers who were actively engaged in construction before the war will remember the "B" type terminal manufactured by this firm. Fortunately, these are now once more available. The "B" terminal is of the same construction as heretofore, but all the metal parts are now silvered, for greater efficiency at high frequencies. Budding transmitters may be interested to know that these terminals are rated at 15 Amps., and will withstand a voltage of up to 2,500 between the terminal and the chassis or panel. The insulation resistance, with humidity 40 per cent., is 2,300 megohms. They are available with plain red or black tops, or with non-rotating



names in white on a black ground. The complete range consists of 52 different indications.

BOOK REVIEW

Wave Propagation in Periodic Structures. By Léon Brillouin. Pp. 247+xii. McGraw-Hill Book Co. Inc., New York. Price 20/-

It is a great help to the better understanding of any one branch of physical science to bring together and compare analogous phenomena; for example electrical, mechanical and acoustical resonance. In this book the author unifies, by a common mathematical treatment, an unusual variety of problems, including electrical transmission lines, filters, crystal lattice structure, anomalous optical reflection, and wave mechanics of the spinning electron. Those readers of SHORT WAVE NEWS who can cope with the advanced mathematics would no doubt find it a help in obtaining the sort of grasp of physical phenomena so necessary in modern radio research.

M. G. Scroggie.

The Thin Red Lines. By Charles Graves. Pp. 183. Standard Art Book Co., 10 Gt. Queen St., W.C.2.

An extremely interesting, readable and in parts exciting account of the part Cables and Wireless played in maintaining British and Allied communications over the Imperial cable and wireless network during the war. Quite apart from the interest of the war experiences recounted, this book will be enjoyed by all interested in radio communication. It is well produced and illustrated by more than two dozen excellent photographs. At 5/-, it is very good value for money indeed.

A.C.G.

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.

QSL CARDS, Short Wave Listeners' and Full Call. Samples Free. Send S.A.E. to G6MN, Worksop, Notts.

ODEON RADIO, HARROW. All components, complete equipment, test gear and technical books for transmitting amateurs, short wave listeners and experimenters now obtainable from 56 College Road, Roxborough Bridge, Harrow (2 minutes Harrow Met.) Prompt repair and re-alignment of communication receivers Personally supervised by G4HV. Postal enquiries receive immediate attention. Open 9 to 6.30 daily, including Saturdays. Odeon Radio, Harrow.

REPORT PADS ! 50 sheets printed report forms for the DX listener. Complete with instructions. Indispensable to the QSL collector. Send a report that will be appreciated by the recipient ! ! Price 2/6 post free from "S.W.N.", 57 Maida Vale, Paddington, London, W.9.

EAST ANGLIAN HAMS. All components for receivers and transmitters, crystals, test gear valves. Authorised distributors for Hamrad, Raymart, Eddystone, Labgear. No lists yet but all enquiries dealt with promptly, send stamped addressed envelope. Newson, G3GY ex-G2GF, 28 Market Place, North Walsham, Norfolk. Telephone 219.

LABGEAR, DENCO, RAYMART, BROOKES, etc., short wave accessories. Enamelled and D.C.C. wire from 14 to 40 swg in 1 to 8 oz. reels. Also "Short Wave News" etc. Bland, Exchange Bldgs., Whitley Bay.

WANTED. "Silvatone" (or similar) Complete Disc Recorder. State price and condition. Sale—8 valve Communication receiver £15. Evans, 83 Walsall Road, Four Oaks, Sutton Coldfield, Birmingham.

SALE—or part exchange for camera. 30W. Amplifier—£7. Pair KT33C's—10/-. 955, 9004 acorns —15/- each. 832 " door knob—35/-. 6C4 midget triode—7/6. 12 inch speaker (P.M.)—Offers. Box 1007.

WANTED URGENTLY.—A Communications Receiver. Full details and price please, to G2BNH, 366 Gillott Road, Edgbaston, Birmingham.

FOR SALE. Brand New H.R.O. Senior, with coils (30 mcs. to 50 kcs.) and power pack. £80 or offers. Also SX28 recently overhauled with new speaker. £80 or offers. Brand new 15 watt. amplifier £14. J. Wimble, 3 Hillmorton Road, Rugby.

BOOKS for the ham! The most comprehensive stock of radio books in the country, including many now out of print. Write, or call, for complete list. (Price 1d.):—Dept. S.3, THE MODERN BOOK CO., 19-23 Praed Street, London, W.2.

DUPLICATING and typing to requirements at reasonable rates. Club Secretaries—let me duplicate your news-sheets! Send for tariff of rates to: H. Lister, 19 New Street, Pocklington, York.

RADIO AMATEUR CALL BOOK (Winter Edition) 8/9 post paid. Subscription for one year 30/- post paid. Copies are posted direct from America. Orders with payments to authorised distributors: DALE ELECTRONICS LTD., 105 Bolsover Street, London, W.1.

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