

Short Wave News



1/3

Vol. 3 No. 4
April, 1948

For Transmitter and Listener



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AN AMALGAMATED SHORT WAVE PRESS PUBLICATION

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10 valves U.H.F. with 24 volt D.C. dynamotor power supply and carbon pile voltage regulator. Constructed on two separate chassis, size $12\frac{1}{2}'' \times 8'' \times 2\frac{1}{2}''$. Valves are 6 of 6SH7, 2 of 6H6 and 2 of 7193 U.H.F. transmitting triodes with top cap grid and anode; 3.5 watts. All have 6.3v heaters.

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Broadcast listeners were not allowed to listen to other radio-stations than Nazi-controlled ones, but everybody did listen to the B.B.C. news. In an effort to suppress this, every radio set was confiscated by the Germans in 1942. So amateur-radio had lost all its reason to exist, if it had not been for, what we might call underground work. Not much will be said about it here, but we might almost say that every good amateur, in a position to co-operate, did so.

And from this place we will honour all those heroes, who fought the battle in underground radio work. Theirs was the real ham spirit, and many paid for their love of freedom with the highest price, and fell in front of the German execution squads.

And all this good work was the reason why, very soon after our liberation, the old pre-war amateurs got their licences back. This occurred simultaneously with the release of the bands for the British amateurs in July, 1946. Since April, 1947, it has become necessary for new amateurs to pass an examination.

Since then there has been a rapid growth and the total number of Dutch stations is now about 500.

The Short-wave listeners number more than twice this amount.

In the organisation of the societies much has changed since the end of the War. In 1942 the three radio societies stopped their activity, under pressure of the Germans, so after the liberation nothing existed, because all their material was confiscated.

In October, 1945, a mere five months after the liberation, a conference was held between the former delegates of the old societies, together with several new members, and as a result of this conference on the 21st April, 1945, "Veron" was founded, the Society for experimental Radio Research in the Netherlands, instead of the former three societies.

There is a very great interest in radio these days, and so VERON, the only existing radio Society in the Netherlands, has more than 5,000 members.

They have a headquarters in Hilversum, a QSL. bureau (the well-known box 400 Rotterdam) and several other technical faculties for members.

In addition they issue a monthly magazine, "Electron," publishing articles on all kinds of topics in the wide electronic field.

So we see that amateur radio is a very popular hobby in the Netherlands, and it is to be hoped that it may keep on doing its fine work of improving mutual understanding for the benefit of all nations concerned.

AROUND THE SHACKS

No. 15
SM5ZD



WE are indebted to Goran Hill, one of our readers, for this brief description of a typical Swedish amateur station—SM5ZD.

The main transmitter is a four stage one. The driver unit is a VFO using a 6J5. This is followed by the first doubler stage in which a 6V6 is used. A similar tube is used in the next doubler stage and the power amplifier is an 807, with 750 volts on the anode, giving an input of 75 watts.

Rack construction is used as shown in our photograph. At the bottom are three power supplies. Above these is the modulator, giving anode and screen modulation, the transmitter itself being in the top of the rack. The aerial is a twenty metre dipole running SE—NW. The receiver is a BC—312 with a separate aerial.

The neat layout of the station can be well seen in the photo. Rack and panel construction is as popular in Sweden as it is here. The majority of Swedish stations are limited to a power of 50 watts input. One result of this has been to make the ten metre band a popular one as it is considerably easier to work DX with lower power on ten than on twenty metres.

Goran spent a holiday in England last summer and says he hopes to be on the air himself before long. Good luck to you Goran and hurry up and get that ticket.

Quarterly DX Prediction

APRIL to JUNE, 1948

Issued and prepared by the Leicester Tele-communications Laboratory,

Monitoring Dept., near Leicester, England

Introduction :

For the purpose of these predictions it should be noted that four major communication circuits are used extending to (a) North America, (b) South America, (c) South Africa, and (d) Australia. Reference to the Great Circle Map centred on London will show that the Australia circuit covers Asia and Japan. It should be understood that to forecast these communication circuits for a period of three months the data given is liable to slight errors, particularly in relation to the "disturbed periods."

The preceding Period :

During January communication has been very good on the 3.5 and 7 Mcs. Amateur bands but the night-time M.U.F.'s have been rather on the low side. Ionospheric storms have been recorded in a Westerly direction (i.e. circuits (a) and (b)). The day-time M.U.F.'s, on the other hand, have been fairly high for the time of the year, and communication has been very good on the higher frequency ranges up to 18.00 (G.M.T.).

February was much the same as January, but the 28 Mcs. band was "open" to most circuits from 08:00 (G.M.T.) each day. It was noticed by the operators on our Broadcasting Monitoring Service that the Ionospheric storms were very bad in the Westerly direction in the middle of the month, but during these "disturbed periods" stations in an Easterly Direction were recorded with very good signal strengths especially in the low frequency bands. At the time of compiling this report there is the predicted slight increase in the M.U.F.'s on all circuits. Two slight "disturbed periods" have been recorded, these having been registered on circuits (a), (b) and (d). It is expected that there will be the usual increase in these periods towards the latter end of the month.

Prediction for April :

THE daytime M.U.F.'s in this Hemisphere should commence their seasonal decrease on circuits (a), (b) and (c) whilst those on circuit (d) remain much the same. The night-time M.U.F.'s will during this same period show an increase on the same circuits. It should be noted however that owing to the increase in the hours of daylight the medium-high-frequency circuits should remain "open" for longer periods than in the preceding month.

It should be possible to use the 28 Mcs. band during the daytime in the early part of the month on circuits (a) and (c) : On circuits (b) and (d) however, communication should be most reliable on this frequency at 12.00 during the whole of the month.

During April there is usually a marked increase in ionospheric storms. Although these will be less frequent than in March, it is expected that the "disturbed periods" will be worse in the middle of the month. "Storm" periods will most likely take place on 2nd-4th, 9th-11th, 16th-17th and 28th-30th.

Prediction for May :

There will be the usual slight increase in the M.U.F.'s during the night-time, but it will be only very small compared with the April M.U.F.'s. It should be possible to use the circuits (b) and (d) during 25% of the time for 28 Mcs. communication, but these paths will not be very reliable during the rest of the time. Severe ionospheric storms are not usually recorded in May and it is not expected that major "disturbance" will occur during this month. The decrease in the day-time M.U.F.'s should not cause much trouble to the amateur transmitter except as stated above, on the 28 Mcs. band.

Sporadic E will increase, and should occur several times during the month. This will enable EXTRA-G-DX to take place on the 58 Mcs. band and communications around the 1,000: mile radius should be recorded.

Prediction for June :

With the steady decrease in the day-time frequencies taking place it will be noted that dx communication on the 28 Mcs. band will be very rare, and the most reliable frequency for long-distance communication will be 14 Mcs.

During the end of the month and the beginning of July the nighttime M.U.F.'s will be at their peak value during this year, and all circuits should be operative until the early hours of the morning. Circuit (c) should be workable from 06.00 (G.M.T.) until Midnight on 14 Mcs. and circuit (d) from Midnight until 20.30 (G.M.T.).

Ionosphere communication on the 58 Mcs. bands will be entirely controlled by Sporadic E, which will frequently occur during the month of June.



INTERNATIONAL SHORT WAVE LEAGUE

Monthly Notes

Annual Subscription 1/-

*We launch another new service for members !
Introducing the INSTRUCTION MANUAL
AND CIRCUIT SERVICE.*

THE above service is now available for ISWL members and is working in close co-operation with our Surplus Gear Query Service. The object of the service, as its name implies, is to provide members with instruction manual and/or circuits, on loan, of radio receivers, transmitters, etc., both of ex-WD origin and civilian manufacture. The working of this service depends to some extent on the co-operation of ISWL members themselves, since information is required by the service on many types. Here are the details as finally decided upon :

(1) Members with manuals and/or circuits that they are willing to either present to the service or to loan should send a list to the manager with as complete detail as possible. If the manuals are for loan only, please state the period for which they can be retained. When writing, please write name and QRA in block letters.

(2) Members who require a circuit or manual should contact the manager, enclosing a SAE. If the manual or circuit is in the files a card will be sent to him which will contain the name and QRA of the member who has the manual for loan. The card, PLUS return postage, is then sent to the address given and the manual will be forwarded. The owner will return the file card to the service manager. In the event of a request coming in for a circuit not available, it will be filed until the required data is to hand. If, after a considerable period, details cannot be found, a negative reply will be sent.

(3) The address of the section manager is :—
G. K. Sutherland, ISWL/GW384, "Dyffryn House," near Park Crescent, Llanfairfechan, North Wales.

* * *

LOCAL NEWS

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

A new Chapter has been formed in Leytonstone, holding meetings at the secretary's address as above. The first meeting was held on March 2nd. Members in the neighbourhood are invited to contact Mr. Baldwin for details of future activities. The Chapter has its own HQ station and it will be featured in an "Around the Shacks" article in a forthcoming issue.

*King's Lynn (TR : H.O. Armour, "Lorain,"
Green Lane, South Wootton, King's Lynn).*

The TR is anxious to form a local group in the district and asks for co-operation from members. Will any member in or around King's Lynn, please write their TR? Thanks, OMs.

*North West London. (Sec. : F. Wells, 8, Evan-
gelist Road, Kentish Town, N.W.5).*

Meetings are still being held at 41, Ingham Road, Fortune Green, N.W.6, and progress is being steadily maintained. The aims and ideals of the club include the Promotion of the Ham Spirit and to experiment on all frequencies from 165 kcs. down to the VHF's. The fees of the Chapter are 6d. per meeting and a 10% levy on individual sales accruing from the periodic junk sales. The "kitty" is used to form a fund to purchase the requirements of the club such as components, publications for club library and so forth. For the benefit of members wishing to attend the meetings (quite informal) a No. 28 bus is the best approach. Alight at the Weech Road stop and continue down Fortune Green Road. Ingham Road is the first turning on the left beyond Weech Road.

*Essex (Sec. : P. F. T. Redman, 108, St. Andrews
Avenue, Elm Park, Romford).*

The South West Essex Chapter has now launched forth with its own club news-letter, with Peter Redman as "editor, cutter, typist and printer"! Peter is ably assisted by the CR, Ken Goodley. Issue No. 2 contains details of the new committee, details of future meetings, reports of past meetings, etc. The finances of the club show a small credit, after expenses have been deducted. Future items will include Superhet Design (by P. Redman), Airborne Radar Equipment (by K. R. Goodley), Transformers and Chokes (by S. N. Radcliffe), Radio Control of Models (with the co-operation of the South West Essex Model Aircraft Society). Arrangements are in hand for visits to Broadcasting House or the Brooklands Park Transmitter.

Once again the club asks for some of the Essex hermits to come forward! The Chapter committee has passed a resolution to "black list" those members who have failed to acknowledge letters in the past, so if you want to be "in" on the local activity, OM's, jump to it and let either your CR or TR hear from you.

NEWS FROM EIRE

The Irish Section's newsletter, now three foolscap sheets per issue, shows that activity in Eire is still on the increase and it is apparent that the CR's and TR's are doing a fine job. A Chapter has been formed in Cork City in order to promote the objects and aims of the League and to present an opportunity for members to get together. A clubroom has been obtained and it is intended to apply for a transmitting licence. Members in the district are invited to contact the TR, Mr. C. Layton, at 2, Sheare Street, Cork City, for further details.

A Chapter at Limerick is also proposed and interested members are asked to write the Irish Representative at "Loc Greine," Farranshone, Limerick City.

The "Newsletter" is now issued in the middle of each month and is being distributed to all members in Eire and Northern Ireland. Representatives have been appointed for the following:— Counties: Cork, Galway, Kerry and Mayo. Towns: Bandon, Skerries, Dublin. Others are needed for various areas and members interested in taking on any position are invited to contact the Eire Representative (QRA given for Limerick Chapter).

* * *

SWL CARD SWAPPING

Though some harsh things have been said, and will no doubt continue to be said, against the practice of exchanging SWL cards, it is apparent that many members are interested in this side-line. One of the troubles is that the whole thing can become annoying if it is done haphazardly. For instance, we have had complaints in the past that members have been receiving SWL cards from other members repeatedly and asking for one of theirs. The point is that many are NOT interested, or may not have SWL cards—preferring to send stations a more complete report—and it is rather unfair to expect the recipients to swap if they see no point in it.

The solution was suggested by Hampshire CR Reg Masters, who offers to run a Bureau for those keen on SWL card exchanges. This method would ensure that people not interested would not be pestered by those who want to exchange cards. It would restrict activities within the circle of swappers. So there you are, OM's. If you are a scalp collector please write to Reg and he will compile an index and organise a Bureau for your benefit. The QRA is 62, Battenburg Avenue, North End, Portsmouth.

THE I.S.W.L. DEDICATORY PROGRAMME FROM W.R.U.L.

Excellent Reception of a most Interesting Broadcast

THE Special ISWL Broadcast from Radio WRUL on Sunday, February 29th was very well received at our listening post. Charles Southall began the programme by outlining the origin of the ISWL and the Announcer remarked that a growth of membership to the 2,000 mark was pretty good going for 17 months' work. The Announcer then told a most interesting story of how he first heard of the ISWL. Hailing a taxi in Boston, Mass. he asked for WRUL studios. The inquisitive taxi driver enquired who he was and on being told, started recounting some of his shortwave listening experiences. During the conversation he said he was a member of the ISWL and gave the Announcer full details of the benefits of ISWL membership. A few days later, Charles Southall's letter suggesting an ISWL Dedicatory Programme arrived at WRUL and thus the idea of the programme began!

Continuing, Charles outlined the purpose of the ISWL and dealt with the services provided for ISWL members. Following a musical interlude, details of the origin of WRUL were given and mention was made of the fact that the objects of WRUL resembled very closely the aims of the ISWL.

Charles concluded the programme by giving some particulars of interesting S.W. stations which were putting out good programmes at the moment. It was altogether a most interesting programme and in spite of some fairly rapid fading was received 100 p.c.

I.S.W.L. HOLIDAY SCHEME.

We continue to receive enquiries about the I.S.W.L. Exchange Holiday Scheme. Briefly the idea of this scheme is that amateurs in this country should entertain an amateur from overseas at their own expense in exchange for entertainment by the amateur who visits them. Fares must of course be paid by the visiting amateurs.

We have a file of addresses of amateurs in this country and overseas who are willing to participate in exchange holidays of this sort and if any readers are genuinely interested we can fix them up with someone, particularly someone in Holland where this type of Exchange Holiday Scheme is very popular. VERON in fact has its own Holiday Scheme Manager, Evart Kaleveld, PAoXE. Dutch amateurs are particularly interested in visiting this country. So any reader who has the room and the necessary facilities for giving an overseas amateur a real dose of British hospitality in return for a visit overseas, just write to the I.S.W.L. Exchange Holiday Scheme, I.S.W.L. HQ. 57 Maida Vale, London, W.9.

AROUND THE BROADCAST BANDS

(Continued from page 89)

trust others enjoyed such good reception as your scribe using an AR77E RX. Best listening was over 17750 kc. channel being R9 QSA5 with QSB to R7 from 2030-2100 (WRUW), WRUL 11730 kcs. could not be heard at all but 15290 kc. freq. was R6-9 QSA4 with bad hetrodyne QRM. Ray Aldridge heard this BC and states that sigs were: 11 Mcs. R6 QSA3-4, 15 Mcs. R9 plus QSA4-5, 17 Mcs. R9 QSA5. Broadcast came over very FB.

● **South America**

Colombia. HJCT Bogota 6199 kcs. heard R4 QSA3 at 2345 giving Light music and three note interval signal and mention of "Radio-fusora Nacional" (Wilkinson). HJAP 4930 kcs. R5 QSA3-4 at 0200 with call "Radio Cononial" (Aldridge).

Ecuador. HCJB Quito. Ray Aldridge has received a letter from them thanking him for his reports covering 12 months listening to their 12 Mcs. freq. (Nice work, Ray.) States they are increasing their power during the next year. The 15 Mcs. transmitter will be increased by about three times its present power. Freqs. now in use: 4107, 6240, 9958, 12455 and 15115 kcs. Complete reports are always appreciated by this station. Bob Iball logged them on their 9mc channel R8 QSA5 at 0430-0505 giving Organ music and Scripture Readings, call in Eng. "HCJB The Voice of the Andes, Quito, Ecuador, South America. Bob also heard a station taking the same programme on approx. 5970 kcs. This was I believe HCQRX Radio Quito on 6000 kcs. which has now moved to 4985 kcs. according to Roger Legge.

HC4FS La Voz de Esmeraldas, Ciudad Esmeraldas operates on 4560 kcs. and is a new station there. Heard at 0100-0400 (Legge).

Venezuela. Roger Legge sends in data on three new stations as follows: YVIRG Radio Cabimas, Cabimas 6150 kcs. heard 0000-0200. YV6RK La Voz del Tigre, El Tigre 3330 kcs. 2300-0230. YV9RA La Voz de Apure, San Fernando de Apure 4820 kcs. 0000-0230. Pearce lists YV5RY Radio Continiente 4725 kcs. relaying YV5RI (590 kcs.). Sends letter Veri by Air mail and QRA is Apartado 866 Caracas.

Peru. OAX4Z Lima 5895 kcs. heard at 2315-2345 R6x QSA5 with Rhumba orch. and call "La Voz del Peru." (Iball). R8 at 0000 (Aldridge).

● **Europe**

Switzerland. Geneva International Red Cross Station heard at 2215 asking for listeners' letters about future programmes. Freq. approx. 7300 kcs. Signals R8 QSA4 reported

by A. Baldwin who asks about this one. Another report which may help you OM comes from A. V. Wilkinson who has heard them on 6345 kcs. announcing in English, French and German. States that QRA is: International Red Cross, Geneva Studios, Geneva. Schedule 0800-0845 and 1700-1745. Gives musical programme and Displaced Persons' Bureau announcements.

Greece. Athens SVM 9935 kcs. heard with very FB signals R9 QSA5 at 2140-2205 in parallel with SVS 13725 kcs. R6-3 QSA3. Badly QRMD by CW all around its freq. Programme was talk by H.M. Queen of the Hellenes for Special recording for U.N.O. Report. This reader wants to know whether these are Commercial stations or BC. Well Bob as they were working Point to Point stations WEC and WQB I should call them Commercial. SVM used to BC evenings but has not been heard for some months now.

● **Honours List.**

You are requested to send in a list of Countries heard and QSLd. Broadcast Stations only. 50 countries and over.

	Heard	Verified
J. Beaunoir (Natal)	101	84
A. Levi (Belfast)	53	?
J. A. Jagger (Gravesend)	53	?

● **QSLs Received**

Sidney Pearce: Radio Africa (by Airmail) Radio Algeria, LLG, LLM XEFT TGWA (15170 kc.) XGOY (11 mc.) (also QSL for report on their 9640 and 9720 kcs. transmissions in April 1945 which has just reached them!) XGOA (11835 kcs.) VUB VUC sent cards, LRM (Airmail letter) OAX4Z, Radio Damas, YV5RY (Air mail letter) YFA4. Charles Southall: Radio SEAC (15 Mc) CFCX Radio Martinique HOLA TGWA HCJB (12 Mcs.) Radio Moscow KRHO (17 Mcs.) VLG10 OTC2 Paris HER4 FZI and PGD. Jean Beaunoir: CKNC CKLO CBLX VLN5 VLA8 VLN9 Radio SEAC JCKW. Ernest Field: WOOW CHLS CKCS WLWO VUD9. Your scribe from CR7BG and YDC also HI2T TGWA.

● **Acknowledgements.**

A. V. Wilkinson ISWL/G666 (Manchester 14), Sidney Pearce BSWL336 (Berkhamsted Herts.), Albert Dunscombe ISWL/G1144 (Radlett, Herts.), Ray Aldridge (Amersham, Bucks.), Bob Iball ISWL/G941 (Worksop, Notts.), Roger Legge (New York, U.S.A.), Charles Southall, ISWL/W3990 (Philadelphia Pa. U.S.A.), E. J. Field, ISWL/G962 (Watford, Herts.), J. Beaunoir (Jacobs, Natal, S.A.), A. Baldwin, ISWL/G193 (Leytonstone, E.11), also other readers who submitted items of news, etc.

REMEMBER THIS IS YOUR COLUMN. 73 es GUD CONDX. See you next month!

On the Ham Bands (Continued from page 98)

General trend has been an improvement at end of period after a very poor start. It seems that poor conditions are due to lack of solar activity rather than to disturbances. Auroral and very long paths affected most.

We should be running into the equinox peak period now, perhaps the last "high" of the present solar cycle, though next November may be quite good. February 28th, was remarkable in that paths to VK2, ZL, ZS and C. opened together—0745 to 0830. BST will make early morning DX difficult as the ionosphere sticks to GMT! Congrats to G8IG on leading European 28 Mcs. section of VK contest with 810 points. Think I was second with 720—(by Air Mail from VK6RF.)

Europe. "Mixture as before."

Asia. First DX opening about 0700 except on bad days. VS7PS usually leading. VU stations lasting till lunchtime lately—a good sign. Even CR9AG heard on March 10th, at this time though usually N.E. Asia openings much earlier (0900-1030). Several Koreans (using HL prefix) heard around 0900-1000.

Africa. Difficult at convenient times, though mid-Africa (ST, ZD4, VQ3, VQ4) have been good at lunchtime. ST2FU QRO 11 watts a very fine signal.

N. America. Mostly good but some complete interruptions (March 2-3 mid-day). Openings have lasted till 2100 March 9-11. W6 fair and sometimes coincident with XE openings.

S. America. Better than last period. Often good signals lunchtime and during and after W/VE evening fadeout.

Oceania. PK2RK, W2EJV/PK3 good signals many lunchtimes. Heavy going to VK except Darwin boys, 5AE, 5KL and to a lesser extent VK6. 5AE says 5NR given up ham radio but may talk over 5AE as he is now stationed at Darwin—a great loss. ZLs very good in mornings 0745 for about an hour lately. Long route—nil, except few ZL1 alternate paths in morning (when they have an echo).

Crafty Corner. ST2FU says prefix for Tripoli now MT2 for civilians; military continuing to use MD2. ZP8AC (Paraguay) an Englishman using 40 watts on 28400 fone heard working W's recently. W2EJV/PK3, Box 222 Soerabaya Jave. VFO fone; C2CS, Box 409 Shanghai and CPIAP, Box 346 La Paz, Bolivia, on 28145 are the pick of the bunch this month.

* * *

BOTTLE SWAPPING SECTION

D. Hencher, Sunnyside, Blissford, Fording-bridge, Hants.; wishes to swap 2 of 9D2, 3 of 6S97, 1 of VR150/30, 6969, 2050 and QP240 for 2 of TH2, VP23 and/or 1.5v., filament midgets, eg 1C5.

CLUB NEWS

SOUTH SHIELDS AMATEUR RADIO CLUB.

Activities are in full swing, the club having received its Transmitting licence and the call letters are G3DDI. We hope to be on the air by the middle of next month and would like to hear of any reports.

The new address of the club is "TRINITY HOUSE," Laygate Lane, South Shields, and meetings are held every Friday evening commencing 7.30 p.m.

A course of lectures and demonstrations is being arranged and anyone interested will be quite welcome.

Particulars from the Sec., W. Dennell, G3ATA., 12 South Frederick Street, South Shields.

Cannock Chase Radio Society

The Society holds meetings every second and fourth Tuesday in each month 7.30 p.m. at the "Unicorn Inn," Church Street, Cannock and all new members will be welcomed. Future programme includes participation in the National Field Day in June, a course in Radio Fundamentals, and visits to places of Radio interest during the summer months. The Secretary is D. M. Whitehouse G2YV, 69 Church Street, Cannock.

Stourbridge and District Amateur Radio Society

The Annual General Meeting was held at King Edward VI School. Before a good attendance, the President G6OI referred to the happy atmosphere prevailing in the Society and expressed the hope that many new activities would be undertaken.

The Society will welcome any radio enthusiast and applications for membership should be made to the Secretary, Mr. W. A. Higgins, 35, John Street, Brierley Hill.

Basingstoke District Amateur Radio Society

This Society has been enjoying some publicity in the local press—the "Hants. and Berks. Gazette." A very interesting winter's season of lectures has just been completed, including the subject of "Micro Waves," "Some Direction Finding Problems," "Navigational Aids" and the "Future of Amateur Radio." The Society's membership now numbers 32. Secretary:—L. S. Adams, 16, Brambly Drive, Basingstoke, Hants.

“from our Mail Bag”

Editorial Note. Besides the letters we print in full from time to time, we receive a lot of letters which include items which we think would interest our readers. Whilst these letters are usually not intended for publication we feel their authors will not mind us picking out interesting paragraphs for inclusion in this feature.

A recent letter from ISWL G/183, Fording-bridge, Hants., contains the following:—

“A very annoying bee in my bonnet is:—How is it that some firms can get paper supplies to produce lurid magazines of absolutely no educational value and of prewar size, while yours and other technical journals are restricted to miserable sizes and not even enough to go round.”

Yes, o.m., we have wondered that too, sometimes!

He continues:—“Congratulations on the improved cover design, but personally I should prefer one of the usual photos instead of the aerial on the globe.”

Thanks for your views, o.m. Any other ideas on this subject?

* * *

We received a very pleasant surprise in the shape of a letter from VK2ADR.

Barry writes:—

“Having been introduced to your splendid publication only to-day I feel that as praise is due it should by all accounts be QSP'd to the right quarters, hence this short note. Actually there is a story attached to how it came into my possession. Five months ago PAOUM arrived in Australia and came to this area where by means of 28 Mcs fone he kept in touch with the U.K. and Holland, particularly G6DH and PAOUN. A few weeks ago, through the kindness of the former, PAOUM received your magazine together with one or two others which he passed on to me. So in a roundabout way, I was introduced to SWN.

“I must confess that to me, the ham portion of your magazine is excellent and I have thoroughly enjoyed browsing through its pages. I have also found some QRA's which were badly needed.

“I would appreciate it if, through your pages, you would pass on my regards to those hams I have met on “ten” and even though it will be somewhat late may I wish you and them too the compliments of the season.

The transmitter used is a pair of 807's running at 95 watts into a 3 element rotary. The receivers are a National NC-100-X and a Marconi B28. By the way VK2ADR is 100 p.c. QSL and if the QRA is required on signals heard up to 23rd January 48 the new QRA will be, “Warrandyte,” Karong Ave., Mirreem, via P.O. Edwardstown, South Australia.”

* * *

John Whitehead, G/1323, Walton-on-Thames, has some interesting points to raise on the subject of mains receivers. We take the following points from a recent letter of his:—

“In the series ‘My Favourite Receiver’ I notice that every receiver described since September last is battery operated. This seems to me rather peculiar and raises a suspicion that there may be many enthusiastic constructors who do not appreciate the advantages of mains operation with o-v-1 and similar sets. I submit that a mains driven o-v-1 is little more expensive to construct, certainly cheaper to run, entirely free from mains hum even with phones, as powerful as a battery o-v-2, smooth in reaction, compact in size and light in weight, neater in appearance than any battery job, and is capable of taking additions at will.

“Another point which I think is still overlooked by many enthusiasts is unit construction . . . The all-in-one layout is very nice, until something wants modifying, and then the whole job is out of action and half the other departments get messed about as well as the one that's actually offending . . .”

John says he has the following:—A mains power pack measuring $5\frac{1}{2}$ by $5\frac{1}{2}$ by 6 inches, for the main receiving equipment. There is also another to drive subsidiary apparatus. Then he has an o-v-1 measuring 5 by 5 by 6 inches, a 1-v-o of similar size and a unit housing a pentode output and a 5 inch speaker which measures 6 by 6 by 7 inches. He has a preselector of similar size in the planning stage. “Thus,” he writes, “I can scrap a whole circuit without being completely off the air and as inclination or finance permit, can add further units. A cabinet at the back of my bench will house eight units of the above size just as neatly and in little more space than is taken by one normal superhet. Moreover a small unit is ten times easier to handle when ‘tinkering’.”

A very excellent idea, John; one we recommend to our readers.

Q.R.P. CLUB

by G2SO

HAVING compiled the above Notes for the past few months, I have realised that I have mentioned several calls of stations that indulge in low power contacts, so I thought perhaps that the writer should have had some up-to-date information from his own personal experience, consequently I recently built a Hartley oscillator a la G6ZN for use on the lower frequencies i.e. 1.8 and 3.5 mcs. The first effort was rather unstable and tone given was in two cases T7 very chirpy. A rebuild took place with all components in a more rigid constructive manner, and a CQ was sent out on 1.8 mcs. No reply, but during the same evening G2CD (London) replied to a call, and a report of RST549 received with an input of 1.8 watts, a 132 foot end fed aerial, and an RCA AR77e receiver. The same evening the eighty metre band was also used, and the first call received RST559 from F8XS of Lille, RST578 from G8JR, and ON4IE Le Panne, 569. Reports were given that the note was chirpless, with a very slight frequency creep. This creep is due to the fact that the Hartley is keyed on the same table, and thus causing a slight wobble when the key is "bashed"! I had been warned by 6ZN that this type of TX should be keyed with the key on a separate table, but as the whole affair was in a purely experimental stage no change has taken place yet! The following day on the same band G8RL RST569 (Rugby) and G2BQ 558 (Petts Wood) were worked. On top band the best contacts have been with G2FNW 559, Melton Mowbray, G3PU 339, Weymouth, and G3NA, Hereford. Several other stations have been contacted on both bands, but no real dx has been contacted. The input at all times was 1.8 watts. During the past few days, however, I have been convinced that a well planned Hartley can be used with a great amount of success, and, provided several points are taken into consideration, a stable note can be transmitted without any form of frequency drift.

G6ZN with his Hartley using the usual three watts has during the past month been on several bands. On 1.8 mcs. getting RST449 from Ok1H, and 559 from D2IJ. On eighty 589 from F8VR, and on 7 mcs. numerous G's and GM's, and also SM3EV 579. On the 29th February he operated for a few hours on 14 Mcs. and contacted UA10B Archangel 559, and also IIPQX Rome, 559. Note that all Tones have been reported 9, which speaks for the efficiency of his transmitter.

One watt fone on Top band! Yes that has been done, and very good quality at that. G2AJU of Ipswich was worked the other week

on this frequency on CW and during the course of the contact, I suggested that he should go over to telephony, and was extremely surprised to hear the quality of this transmission, as he told me that his input was just one watt. The strength was S7 to 6, and Q5 all the time, a 100% contact lasting for about 45 minutes. On eighty he has had several fone qso's with similar power including the following:— E19Q, D2GV etc., with 5 watts fone I1ALX, I1AJJ, and finally with 3.5 watts-MB9AA getting Q4-5, S7. 2AJU suggest that the time has arrived for a definite Band Planning Scheme, and I am inclined to agree and consider that our G.P.O. could start "the Ball Rolling," by making it a rule on our licences that separate portions of the numerous bands must be split for either telephony or CW stations. AJU goes on to suggest even further, that 25 Kcs of the 3.5 mcs. band should be devoted to low power operating only, but although I am in agreement, it's impossible. Incidentally I am told that G5VP of Farnborough is using a 6C4 in a Hartley circuit, how about some of the results obtained on? Reverting back to 2AJU, he states that some time ago he contacted W1MXD and W1QCA on 3.5 mcs. with ten watts, and being his first W contacts, he was so excited that he forgot to reduce power to see exactly what power would have been required to "Get across the Pond."

A letter has been received from G8JC with suitable comments, and I propose to refer to this next month, so for the time being 73 to all you low power fiends, and how about a line from you all?

*Have you had your
copy yet of the ...*

DATA BOOKLET No. 1?

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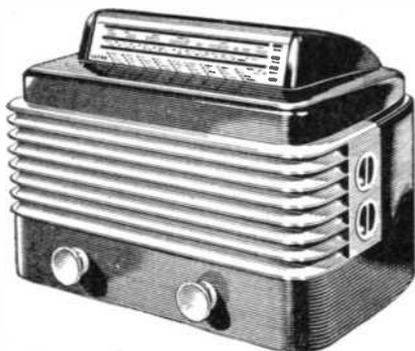
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Set Review

THE ULTRA MODEL T. 49



THE Model T.49 series of Ultra receivers have made radio history by the unique design of their chassis arrangements. It is truly claimed that it is not possible to cite any previous case where in the design of a receiver the service engineer has been so remembered. Every internal component can be got at with the greatest ease, the loud-speaker, valve strip, coil packs and smaller components being released by removing three screws only, thus separating them from the power pack which is mounted on its own chassis.

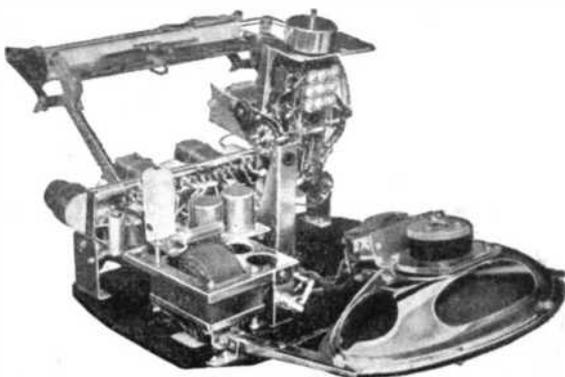
The T.491 is a 5 valve, 3 waveband superhet covering 16-50, 200-550 and 1000-2000 metres for A.C. mains operation and as can be seen from our illustration is of very attractive

external appearance. The stream-line backless cabinet measures 16½" wide, 11¾" high, and 10¾" deep. It is finished in non-stain, non-fade plastic with controls and loudspeaker louvres in contrasting colours. The controls are arranged on a front and side panel as shown. On the front panel are the on/off switch and volume control and the tuning control, and at the side are the wavechange and gramophone switch and tone control. The valve line-up is:—Frequency changer, Mazda TH41; I.F. Amplifier, VP41; 2nd det. and AVC, HL41DD; Output pentode Pen45; Full wave rectifier UU6. The power output is 4 watts audio and the consumption 60 watts. An 11¾" Ultra Elliptical Permanent Magnet speaker is fitted. Provision is made for an extension speaker and either an electromagnetic or a crystal type pick-up can be used for gramophone reproduction.

Aerial arrangements include separate sockets for normal use or for use when a nearby station is in operation. An indoor aerial proved quite satisfactory but an efficient outdoor aerial is recommended for S.W. use.

With the flywheel tuning the receiver is pleasant to handle and S.W. tuning presents no difficulty, and its attractive appearance will make it a popular set with the xyl's. At £22 0s. 0d., with £7 purchase tax, this receiver is fairly priced and will we feel certain enjoy the popularity always associated with Ultra Receivers.

The Tri-Unit Chassis is so designed that any part can be reached in less than a minute



Book Review

Microwave technique. An R.S.B.G. Publication. By Shankland and Hart. Price 2/3 by post, from the R.S.G.B., New Ruskin House, Little Russell St., London, W.C.1.

It was with considerable interest that your reviewer opened this the first of a new series of R.S.G.B. Technical Publications. As one who was not fortunate enough to receive training in this the latest of radio techniques in H.M. Forces, as did many amateurs, he was able to assess this booklet from the point of view of the real beginner to microwave technique.

This booklet is an expanded series of articles which appeared in the R.S.G.B. Bulletin in 1943. At that time, secrecy regulations prevented the publication of much information which has now been released and incorporated in the eight chapters of this booklet.

Chapter 1 defines the Microwaves as those in the range 500 to 25000Mcs. (60 cms to 1.2 cms.) and outlines current use of these frequencies. The characteristics of microwave propagation are also discussed.

Chapter 2 deals with Resonant Circuits, Butterfly Circuits and Cavity Resonators in a

way which makes the comprehension of new techniques tolerably easy. Similarly in Chapter 3, Wave Guides are treated in a very explicit manner. Valves are dealt with in Chapter 4, including such types as Disc-seal; Grounded Grid; Positive Grid; Magnetrons; Klystrons and so on. Chapter 5 deals with the essentials of transmitters and receivers. The chapter on Aerials—Chapter 6—is an interesting one, discussing dipoles, horns, cheese and slot aerials. Chapter 7 deals with "Measurements" and Chapter 8 consists of a very comprehensive Bibliography, wherein can be found the sources of much further information.

The approach of the booklet is mainly theoretical. It is attractively produced and is a pleasure to read and handle and it can be thoroughly recommended to those who wish to become acquainted with this latest field of amateur activity; particularly to those who so far have been hesitant of approaching a subject in which they feel they may be rather out of their depth.

A.C.G.

* * *

Mr. L. S. Adams, "Roslen," 16 Brambly Drive, Basingstoke, Hants; would like to contact any reader who has built the Eddystone V.H.F. T.R.F. A.C. receiver described in Eddystone Manual No. 6.

Trade Notes

The Mail Order Supply Co. announces that, owing to expansion of business, a new Mail Order office has been opened at 3 Robert Street, Hampstead Road, London, N.W.1. Will readers please note that in future all *Post Orders* should be addressed to the above and, all other enquiries to 24 New Road, London, E.1, as heretofore.

* * *

An illustrated brochure has been received from **Stratton & Co. Ltd.** of Birmingham, giving details of the latest *Eddystone* lines. These include a streamlined semi-automatic morse key, fully adjustable, which retails at £3 17s. 6d., an "S" meter designed for the 640 receiver at £5 5s. 0d., a modulation level indicator at £8 15s. 0d., a crystal calibrator (signal generator) at £12 0s. 0d., and several other interesting items.

The Automatic Coil Winder & Electrical Equipment Co. Ltd., of Winder House, Douglas Street, London, S.W.1, have sent an illustrated booklet containing details of their famous *AVO* test instruments, together with details of the delivery period for each model.

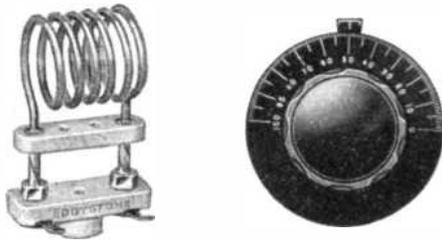
* * *

A folder from **Goodmans Industries Ltd.**, of Lancelot Road, Wembley, Middx., gives some useful data on their heavy duty 15" and 18" loudspeakers, and a suitable line transformer. The latter has a handling capacity of 50 watts AC maximum, and is wound to an impedance match as ordered.

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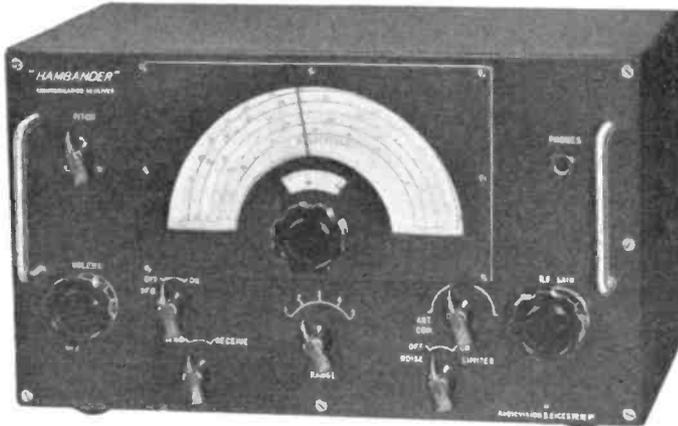
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4a.	2in.	—	Port	H.W.H.F.	3/6
20a.	2in.	—	Flush	M.C.D.C.	7/6
40a.	2in.	—	Flush	M.C.D.C.	7/6
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500micro.a.	2½in.	500 ohm	Flush	M.C.D.C.	7/6
5mA.	2½in.	—	Flush	M.C.D.C.	10/-
1mA.	3½in.	—	Flush	M.C.D.C.	20/-
500micro.a.	3½in.	—	Flush	M.C.D.C.	25/-
20v.	2½in.	—	Flush	M.C.D.C.	7/6
15v.	3½in.	—	Flush	M.I./A.C.D.C.	12/6
150mA.	2½in.	—	Flush	M.C.D.C.	7/6
200mA.	3½in.	—	Flush	M.C.D.C.	12/6
5,000v.	4½in.	—	Flush	Electrostatic	65/-

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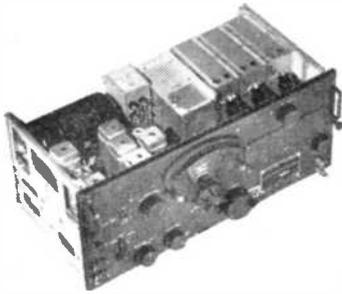
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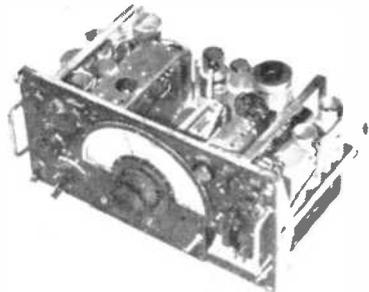
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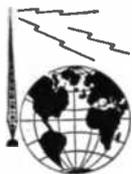


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VISIT OUR BRANCHES IN SCOTLAND, ENGLAND AND NORTHERN IRELAND



Short Wave News

Vol 3 No 4

Annual Subscription 16/-

April, 1948

Editors :

ARTHUR C. GEE, G2UK

W. NORMAN STEVENS, G3AKA

Advertisement & Business Manager :

C. W. C. OVERLAND, G2ATV

Editorial

A New Contributor

We have great pleasure in welcoming to our pages a new contributor in Leslie Coupland, G2BQC. Les is taking over the feature "On the Ham Bands" from its present compiler "CQ." Les is one of those who has qualified for his ticket since the war and has in the short space of two years or so come right to the fore where dx is concerned. He holds BERTA, WBE and WAC. He boasts 85 countries and 48 states, so he should know something about dx and what's doing on the dx bands. So Les, we all wish you a very happy association with the SWN and can assure you we shall look forward to your contribution with keen anticipation month by month.

It would seem an appropriate moment to disclose the identity of "CQ." He is no other than my long-suffering co-editor, Norman Stevens. His increased duties in connection with the numerous publications we have on the go at present necessitates his handing over the feature, much, he tells me, to his regret. I know all SWN readers will like me to thank him for the fine job he has made of the feature during the past eighteen months.

No Price Increase

We have decided not to increase the price of the SWN—at present at any rate. We know that there is a feeling amongst many amateurs that prices and subscription rates are being pushed up regardless of the fact that amateurs as a body do not possess long pockets. So we shall try to keep our prices at present levels, and we can assure readers that no immediate increases are contemplated, where our publications or the services of the ISWL are concerned.

The VHF's and Top Band

We should like to see more reports from our readers on activities on both 60 Mcs. and on "top band." Last summer saw very considerable activity on 60 Mcs. from both G stations via tropo propagation, and from European stations via sporadic E propagation.

There should be similar activity this summer, so we do suggest more attention be given this band by our SWL readers. We get more reports every month on the dx bands than we can cope with, but we get very few reports on 60 and 50 Mcs. So those of you who are listening on the VHF's, do please let us have your reports for inclusion in our VHF News.

Similarly "top band" seems to be neglected, which is very strange as there is a great deal to recommend the use of this band. We should like to see more activity on both the transmitting and reception sides of activity on this band and listener's reports will be very welcome.

I.S.W.L. Membership

Those who heard the recent I.S.W.L. Dedicatory Programme from WRUL cannot but have been left with the feeling that the ultimate possibilities of the League are truly staggering! In the short space of eighteen months, the League has caught on so that we have members in sufficient countries to make its title, the International Short Wave League, entirely justified. "Unity is Strength" is an old adage, and we should like to see all our readers join the League, thus adding their weight to our cause. With a subscription rate of 1/- none can complain, so those of you who are not already members of the League come and join us and give your support to a really worthwhile cause.

A.C.G.

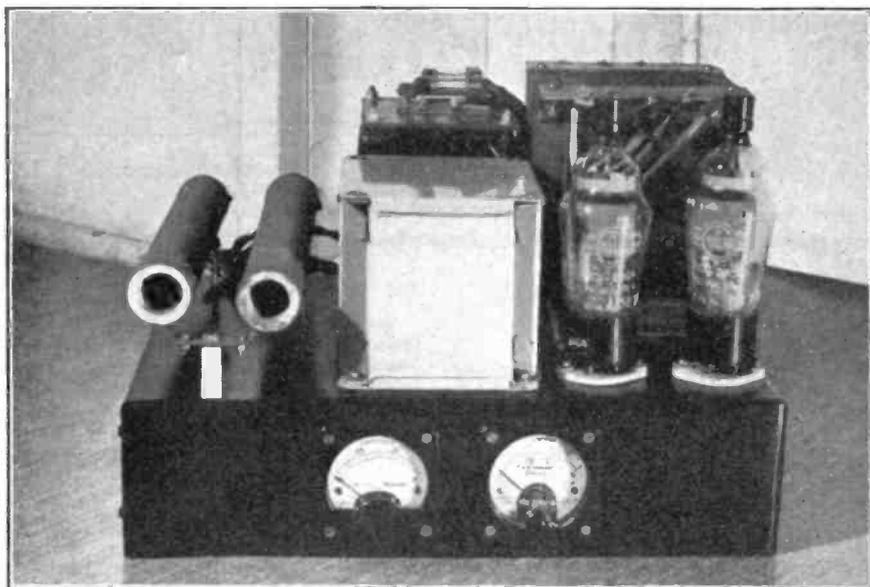
NOTICES

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

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

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

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



The "SWN" Power Pack No. 2

Described by Les Coupland, G2BQC

Editorial Note. Some while ago we promised to describe a series of power packs. For our second pack, we have chosen this versatile power supply built by Les Coupland, G2BQC.

When the time arrives to increase power from 25 watts to 150 watts, one seems to have two alternatives. One can either use small valves in push pull or parallel arrangement or one can use a valve of the 1,000 volt anode voltage class. The power unit described herewith was built so that it would form a suitable supply for a power amplifier of either type. It incorporates its own HT voltage and mA meters, so that any type of equipment can be connected to it, thereby avoiding the expense of incorporating meters in each individual piece of apparatus and by means of taps on the HT transformer voltages of either 600 or 1,000 can be obtained.

The general layout can be seen from the photograph, and the circuit diagram shows that two separate half wave rectifier valves are used for rectification, and that smoothing is by a choke input circuit. Good voltage regulation is assured by this type of smoothing circuit, typical readings obtained by a test of the unit shown were:—Connected for 1,000 volt supply—No load, 1,100 volts, On load, 1,000 volts at 250 mA.

Connected for 600 volt supply, No load, 700 volts, On load 600 volts at 250 mA.

As stated above the dual range of voltages obtainable is provided by using a mains transformer with a tapped secondary.

To get the final voltages quoted, a transformer with a 1,200—1,200 volt secondary winding, tapped at 750-0-750 and centre tapped is required. That shown is a *Hamrad* 250 mA. RG1/240 A type rectifying valves are used. These are half wave mercury vapour rectifying valves. They fit a standard four pin base, the connections for filament being as shown. Anode is connected to top cap and the filament requirements are 4 volts 2.7 Amps each. A 4 volt 6 amp Woden filament transformer is shown just above the meters, to the side of the valves. Behind the valves is the high voltage transformer and next to it is the 5-25 H swinging choke. Choke CH2 is placed beneath the chassis, as are the capacitors C1 and C2. R1 consisting of two 25K 50 watt *Radiocraft* resistors connected in series. They can be seen mounted on top of the

chassis, being supported on small standoff insulators.

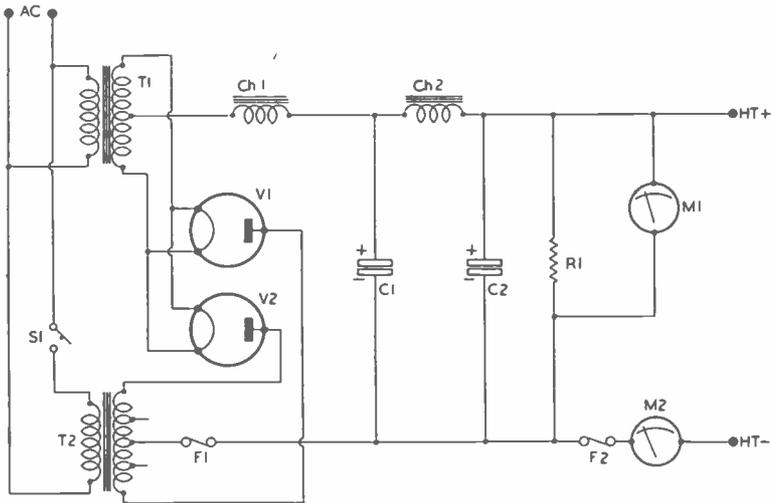
There are no particular points needing comment in regard to construction. The actual size of the chassis is unimportant provided everything can be comfortably accommodated on it. It is obviously a good plan to get together all the components shown in the circuit diagram and arrange them more or less as shown, on the bench. It is then a simple matter to see what size chassis is required. Remember to have it deep enough to accommodate the 20 H smoothing choke and the capacitors C1 and C2. With regard to the meters, here again use what you have available and make sure the side of the chassis is deep enough to take them. The chassis shown was made to measure, but any standard one, fitting in with the above requirements would of course do equally well.

No switches are visible in the photo shown, but two are required, one to switch the AC on to the unit so that the filaments can be switched on first, the other to switch on the HT transformer, once the filaments are thoroughly heated up. Those readers who do not already know, are warned that mercury vapour valves must never have the HT applied until their filaments are thoroughly warmed up. The filament voltage is usually applied

for two or three minutes before applying the H.T.

These switches can be located in the most convenient place to suit individual requirements. The fuses shown are of the tubular type and are located on top of the choke C1 but here again they can be placed in any convenient place.

Wiring up should be done with heavily insulated wire and particular care should be taken to see that leads which have to pass through holes in the chassis will not be chafed. Rubber grommets are the best insurance against this. For those who have so far confined their experience to the construction of packs of 500 volts or so, it may be well to say that there is little difference between constructing this pack and a lower voltage one except that more care should be taken in construction, particularly in regard to insulation. And it cannot be too forcibly stated that whereas "getting across" a 500 supply is "unpleasant," "getting across" 1,000 volts may be very serious. So too much care cannot be taken and those who have not had previous experience with packs of this voltage are particularly warned to be careful when the time comes for testing and connecting up. Apart from this preliminary warning, little fear of difficulty need be anticipated.



- T1 : 4 V 6 A
- T2 : 1,200-0-1,200, tapped 750-0-750, 250 mA
- C1, C2 : 4 μ F, 1,500 V wkg
- Ch1 : 5-25 H swinging choke
- Ch2 : 20 H
- R1 : 50,000 Ω 100 watt

- S1 : HT on/off
- F1 : 750 mA
- F2 : 250 mA
- M1 : 1,500 V meter
- M2 : 250 mA meter
- V1, V2 : RG1/240A

Around the Broadcast Bands

Monthly Survey
by "MONITOR"

All times are given
in G.M.T.

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



Another view of the transmitter at AFN

ALL matter for this column should be addressed to "Monitor" C/o S.W.N. to reach your scribe by the 5th latest.

Support for the Honours List has been most disappointing with a few readers sending in uncertain lists. We must have the *exact* number of countries heard with number verified. Who's going to top the list? Your Honours List must be on separate sheet to other news OMs. Now for the month's news, including our Special BC from Boston on February 29th.

● Australasia

Australia. Sidney Pearce (Berkhamsted) starts the ball rolling again this month with the following "Aussies": VLG6 Melbourne 15230 kcs heard often with R7 signals from sign on at 2000 carrying the ABC National Programme. Signals fall off around 2100. Operates in parallel with VLH4 and VLR2. VLG6 also carries a BC to the Brit. Is. at 2210 and heard with R5-6 signals. VLC3 11760 kcs. is now being used again after a long absence (badly QRMD by a Delhi station on same frequency when last heard by your scribe two years ago when it carried BC to Brit. Is.). Heard at 1500 with R6 sigs. giving BC to West Coast of USA in parallel with VLB9 and badly QRMD by Moscow. BC to Brit. Is. at 2000 now over VLC9 17840 kcs. in parallel with VLB9 and VLA8. Ray Aldridge (Amersham) lists the ABC stations VLH3 on 9590 kcs. heard at 1330 R5, VLH4 11880 kcs. 2000 R8. Your scribe heard VLH4 Q5 R7-9 on February 29th carrying the ABC Interstate Programmes. Ray also heard VLQ3 in Brisbane 9660 kcs. at 2000 R7. Albert Dunscombe (Radlett, Herts.) sends in his first log which I note is very neatly laid out. He tells me he has built the SWN "Basic Super-het" and is getting some good

results from it. Albert says that his listening is done at week-ends, like many of us these days. Condx at his QRA have been very consistent over the past 5 or 6 week-ends.

This reader logged VLB9 9615 kcs. and VLA8 11760 kcs. at 2000. Both with very good signals. VLC 15200 kcs. has been an excellent signal peaking R8 with no QSB when signing on at 2000 with "Waltzing Matilda" on Musical Box. Gives time from Melbourne GPO clock at 2000 and 2100. Signed off at 2130.

● West Indies/Central America. Fr. West Indies.

Haiti. HH2S Port-au-Prince, heard on 5948 kcs. at 2330 with R8 QSA3-4 signals. Call "Societe Haitienne de Radiodiffusion." (Ray Aldridge). Pearce also has logged them at 2345 R6 with Guitar Music. Some slight CW QRM.

Jamaica. ZQ1 Kingston, 3480 kcs. heard at 0145 with Dance music, News at 0200 and close at 0300 with National Anthem. Signals R8 QSA4. (A. Baldwin). Charles Southall of Philadelphia whom we heard so well over the Boston stations with our Special ISWL BC on February 29th sends along a nice list of DX heard at his QRA. Please state times in GMT OM. He has logged ZQ1 there giving local and World news at 0200. Programme being all in English and a very fine signal.

Martinique FWI. FZF6 Fort de France 9705 kcs. has fine signal after 2300 when a US outlet signs off. Announces as "Ici Radio Martinique." French only. (Charles Southall).

Curacao NWI. PJCI 7250 kcs. Wilemstad gives good signal until 0100. Announces in Dutch as "Radio Princess Juliana" (Southall).

Ray Aldridge states that on a QSL card sent him they mention that they now have an English Programme on Wednesdays from 0100. Also confirmed Ray's report on their low modulation. (Nice work, OM).

Dominican Republic. HI2T Trujillo City has now moved to the 9 Mcs. Band and is reported by several readers. Sidney Pearce says they are on 9750 kcs. from around 2200 with R7-8 signals. Call "La Voz de Yuna."

Ray Aldridge also mentions them on this freq. from 2300 with R8 signals. Bob Iball states they are on 9735 kcs. (approx.) and heard at 2100 R7 QSA5. This reader also logged HI1Z Trujillo City on 6312 kcs. from 0415-0500. Signals R9 QSA5. Rhumba Orch. and mention of "Broadcasting Nacional."

Cuba. COBC Havana 9360 kcs. heard 2300-2340 with R8 QSA5 signals.

Call "Radio Progreso," COCW Havana 6322 kcs. 0430-0500 R8 QSA5. Call "CMCW (MW, which it carries) Cadena Azul, Habana, Cuba." Has chimes and trumpets in intervals. COHI Santa Clara 6450 kcs. 0445-0500 R8 QSA5. Heard with Rhumba Orch. and Advert for Alka Seltzer. All reported by Bob Iball of Worksop. Glad to hear your Brother Bill is coming back on the Ether Waves again OM and we hope to hear from him too. What's the story OM?

Ray Aldridge lists COCQ 8825 kcs. R7 at 0000 with call "Cadena Oriental de Radio, Habana." COKG Santiago 8960 kcs. R7 at 0030. Bugle call and "Cadena Oriental de Radio." COBZ Havana 9026 kcs. R4 at 0015 with call "Radio Salas."

Honduras. HRQ is a new station operating on 6125 kcs. from San Pedro Sula and is heard in New York from 0000-0200 by Roger Legge. Do you know E. 45th St. Brooklyn OM? Have a special "interest" there, hi! What say? Aldridge has logged HRN "La Voz de Honduras" 5875 kcs. at 0030. Signals were R4. They QSL ONE report in a 1000 . . . it is said, fellows! Have you got one Sidney?

El Salvador. YSCP San Salvador 5200 kcs. Heard 0100-0200. Newcomer (Legge).

Guatemala. TGWA "La Voz de Guatemala" Guatemala City 9760 kcs. heard R8-9 at 2330 with call "TGW-TGWA La Voz de Guatemala" (Aldridge).

Costa Rica. TIPG San Jose 9615 kcs. heard at 2345 R4 QSA3. Uses three chimes and gives call as "La Voz de la Victor" (A. V. Wilkinson, Manchester).

● Asia

China. XGOY Chungking 6140 kcs. Very erratic signal often not receivable at all. R7 on February 28th with news in English for Europe, etc., 1600-1610. Announced on March 1st that they would be on 11913 kcs.

Uses 7150 kc. channel and closes after news in Mandarin with English and Chinese National Anthems at 1640. Pearce reports this and says also that two Engineers from XGOY paid him a visit recently before returning in April to Chungking. (VFB OM.)

Charles Southall lists say they are best in the U.S.A. at 1145 on 6 Mcs. freq. This reader also mentions XLRA Hankow 11490 kcs. audible sometimes under heavy QRM. Signs off at 1430, XGOA Chungking 11835 kcs. has English news at 1400 and 0330 and often heard at fair strength.

Korea. XLKA The Korean Broadcasting System 7930 kcs. Transmits 1100-1330. Prior to giving call, they use a three-toned gong and followed by announcement "This is the Korean Broadcasting System X-L-R-A."

Southall says they are heard there with fair to good signals from 1100-1330.

Netherland East Indies. Sidney Pearce lists some good catches in: YDC "Radio Batavia" 15145 kcs. with R8 signals giving news in English at 1430-1500. At 1700 BCs to Brit. Is., Middle East through the following stations: PMW 17630 kcs. (R7), PMA 19345 kcs. (R5-7), YDC (R7 but QRM). At 1730 uses Arabic over PMW while other freqs. close at this time. Station heard announcing as "Radio Batavia" heard on 18580 kcs. with R7 QSA5 sigs. Dutch announcements and Marches at 1600-1630 (Iball).

Malaya. BFEBS Singapore. Excellent signals afternoons from 1400 to sign off at 1635 on 15300 kcs. also R6-7 on new freq. of 11735 kcs. (was 11770 kcs.) also heard on 6770 kcs. The 21720 kcs. channel heard poorly from 0900-1030. News at 0903 and again at 0950 (Pearce). Ray Aldridge lists them on: 15300 kcs. R9 QSA5 at 1415-1655, 6770 kcs. R8 QSA4 1600, 11770 kcs. R5 QSA3 1400, 21720 kcs. R7 at 0900.

Ceylon. Radio SEAC Colombo has been heard on its various freqs. 9825 kcs. channel heard R7-8 with BC to Brit. Is. at 1830-2030 on Sundays in parallel with 15120 kcs. This latter freq. heard strongly afternoons to 1630. Also R5-6 on new channel of 17730 kcs. carrying Sports relay on Saturday afternoons. (Pearce.)

R9 on 9 Mcs. freq. at 1830-2030 (Aldridge). A. Baldwin lists their 15 Mcs. freq. carrying "Blightly Beam" with R9 plus signals. Programme consisted of News, music and description of Procession past Duke and Duchess of Gloucester on the occasion of Ceylon obtaining Dominion Status.

● North America

U.S.A. (East Coast). Our special BC over Boston stations WRUL and WRUW was very well heard here in the West Country and I

(Continued on Page 104)

V.H.F. News

OUR recent requests for SWL's prepared to record MUF'S, has brought to light the fact that there is a sad lack of knowledge on just what is needed and just how to set about the observations.

The first thing which is required is a receiver which will tune from about 30 Mcs. to 60 Mcs., preferably continuously. Suppose we join this receiver to a long wire aerial, not to a directional one, and start tuning from 30 Mcs. upwards—in frequency. A number of signals will be picked up—mostly harmonics of powerful commercial telegraphic transmitters. On some days, these harmonics may be heard on frequencies as high as say 40 Mcs. On other days they may be heard up to as high as 50 Mcs—when the 6 metre band would be open. This happened during the very high sunspot activity just before Christmas. On days when VHF conditions are very poor, these harmonics may not be heard much above 35 Mcs.

Another point to note is that if the locations of the various transmitters are ascertained, it will be observed that conditions vary during the day and from day to day over different routes. For instance regular checking of some of the Russian transmitter harmonics emanating from the location of Moscow will show that the path from England to the East varies in a different way from that to the West—checked in a similar way by observing harmonics from American stations. Similarly South African and Middle East transmitter harmonics have a variation of their own.

If the data recorded by SWL's doing MUF observation is to be of value, separate records of the paths to East, West and South should be kept. It is therefore essential to identify the harmonics one hears and make a note of them for future reference. If those readers who are interested will let us have the call signs of station harmonics they cannot identify themselves, we will let them know what they are, provided the approximate frequency is given.

Observations should be made as frequently as possible during the day and more or less at the same time every day. Graphs should be drawn for the three paths—East, West and South, plotting frequency against time. Three or four observations each day, say at 0830, 1300, 1800 and 2000 should be made if possible, the frequency of the highest harmonic heard on each occasion being recorded. If circumstances make several daily observations impossible, the regular daily observations at one or two specific times are still of value, as we can correlate the observations of various readers and thus draw complete graphs for

each day. So let's have some more volunteers for this work.

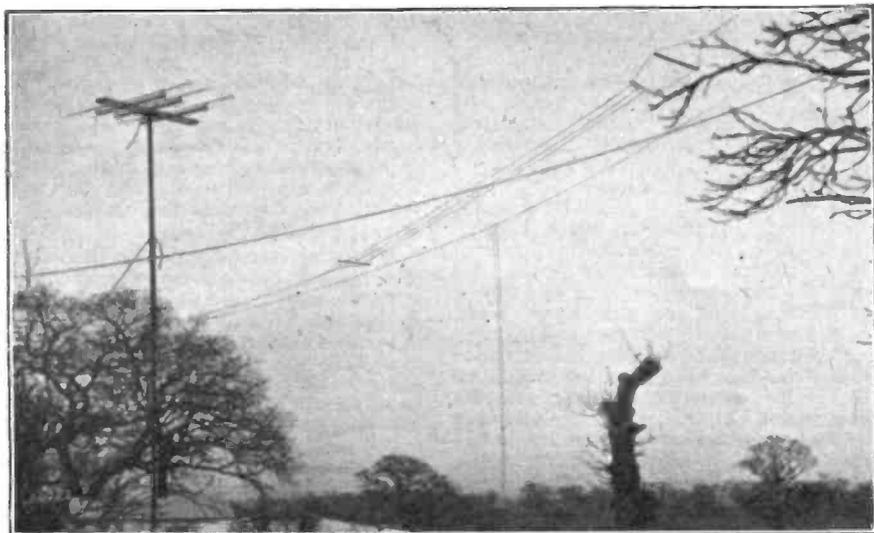
The Month's Conditions.—Contrary to expectations, the MUF has been very much lower than was predicted, and the hoped for 50 Mcs. ionospheric openings have not occurred. The pundits are divided into those who think these poor conditions are a temporary lull between two peaks, and those who think that the sunspot maximum is definitely past and that we shall not see any further dx on the VHF's apart from summer sporadic E propagation.

During the past month, the MUF has not risen above 42 Mcs.

Tropo conditions have improved considerably with the recent spells of anticyclonic weather and some good contacts have been made by tropo propagation on both 60 and 50 Mcs.

March 8th was a particularly good day when G5BD in Mablethorpe said that in his opinion, it was one of the best days since the war. He heard all the regulars on and they were all on phone, with S9 signals; this of course on 60 Mcs. 5BD has heard no signals lately on 50 Mcs. He did hear F8NW on 60 Mcs on the 9th and G6DH has been working this station quite regularly on 50 Mcs.

As a change from lists of 60 Mcs G calls, here are extracts from a letter from Leslie Orton of Uxbridge, showing what can be heard on the VHF's above 30 Mcs. This is the sort of letter we should like to see from more of our SWL readers. He writes:—"... I have been keeping watch on frequencies above 10 metres and as a result have logged many American police, weather and telephone stations. On the 17th February, I observed WWV coming in extremely well on 30 Mcs. This station is operated by the National Bureau of Standards, Central Radio Propagation Laboratory, Washington... Finding WWV such a fine signal, I began to carefully search the bands. U.S. police and weather stations were audible at decent strength... One was in Wokesbury, another in Plymouth... Calls heard were WXGT and WNB. The 21st brought more excitement. Two stations... reporting weather were W8XUN and W8XVL on 32 Mcs. On 32.5 Mcs... a telephone station was logged. A station announcing itself as 6KN was heard on 35.25 Mcs. The description of a missing man was heard on 33 Mcs and a station W1UIV was heard on 34 Mcs. On the 23rd, WEEI was heard calling another station on 35 Mcs... This was an S9 signal... On the 27th, WNV, WR1, W2MI, W2IV and WDSJ were heard in the region of 33.5 Mcs." Good work, Leslie. Any other readers heard signals on these frequencies?



*Receiving Aerials at Crewe
of R. W. Ainge, ISWL/G219*

The Receiving Aerial

By G2UK

THE sensitivity of the modern receiver has resulted in less and less attention being given to its aerial, so that now there is an almost universal expectation that a receiver should work satisfactorily with any odd length of wire slung up in some out of the way corner. Whilst the broadcast receiver may stand up to this treatment, the shortwave receiver suffers badly, and the more attention given to the S.W. receiving aerial the better will reception be.

The function of the aerial is to pick up radio signals and pass them to the receiver. Unfortunately, besides the radio signals we want to hear, there are many electrical noises we don't want to hear, noise produced by motor cars, household appliances and so on, and many of these are also picked up by the receiving aerial. It may happen, too, that we are interested only in hearing signals from a certain country or direction. Our receiving aerial should then be capable of receiving signals from that direction only.

The majority of listeners will want an aerial which will give as good a pick up in all directions over a fairly wide frequency range, so to start off with we will consider what we can do in this respect. We want to get as strong a radio signal as possible, at the same time picking up little of the local electrical noise, because, no matter how much amplification a receiver has, if there is little difference in the relative strength of the wanted signal and the unwanted one the noise will be amplified as well

as the signal, and we shall be no better off. So our first considerations are to get an aerial giving as high a signal to noise ratio as possible.

Most man-made static is produced in the vicinity of buildings, so the higher up and the further away from buildings our aerial is the less influenced will it be by this interference. Electrical interference is said to be chiefly vertically polarised, so our aerial should be horizontal. If we tune the aerial to respond to waves of a certain frequency, we shall also increase the signal to noise ratio, as the frequencies for which it is not tuned will not be brought up in strength as much as those to which it is tuned. The length of the aerial itself should therefore be cut to a length which will resonate on the required frequency.

If we put our aerial up somewhere in the clear, away from buildings, we have got to use some means of connecting it to the receiver, and the wires used for doing this are known as "transmission lines." Our transmission lines must be designed in such a way that they themselves do not pick up electrical interference. The usual way of doing this is to use two wires, "balanced" to each other, so that the noise pick up in one cancels out that in the other. In its simplest form such a transmission line can be made of twisted flex, the aerial being cut into two equal parts separated by a small insulator and the two wire ends of the flex connected across the "break" in the aerial, thus giving us the well known dipole

aerial. The receiver end of the flex is joined to a small two or three turn coil placed over the aerial coil in the receiver. Many other types of transmission line can be used. Instead of flex, the line can be made from say 16 to 18 SWG bare wire, "transposed" every few feet by means of small, specially designed, insulator blocks, by means of which the wires can be made to cross over each other without shorting. The various tuned transmission lines used by the transmitting amateur can also be very effectively used for receiving purposes. The "untuned feeder," of the co-axial type, or the "flat twin pair" type also makes a good transmission line from aerial to receiver. Many modern commercially-built receivers have provision for this type of aerial input and they specify some particular impedance into which the aerial transmission line should feed. For instance the latest type of Eddystone receivers have aerial connections for a transmission line of 400 ohms, in addition to normal aerial and earth connections. The latest National NC57 has an aerial trimmer providing means of matching the receiver to various types of aerials to quote two examples only.

In the same way that the transmission line must be matched into the receiver, so it must match into the aerial. In the simplest case—that of a length of wire cut in two with twisted flex connected in the centre—the impedance of the aerial at the centre is roughly 75 ohms, if the aerial is one half wave long. The impedance of average twisted flex is also 75 ohms, so we can connect the flex straight into the centre of the "dipole aerial" without any special matching arrangements. A two or three turn coil close to the receiver aerial-coil will have a similar impedance so we can again match our flex easily to the receiver. Such a system is of course the simplest example of an aerial with matched transmission line. For those who are interested in the subject, further information should be sought in the chapters on transmitting aerials in the various radio handbooks. Any type of transmitting aerial system will of course make a first-class receiving aerial.

One of the most popular of transmitting aerials in vogue at the moment is the folded dipole. This has a transmission line impedance of 300 ohms and is therefore ideal for coupling into line which will match directly into the aerial connection on modern receivers. Instead of a single length of wire, one half wave length long, two wires are used stretched between insulators and separated by spreaders so that they stay two or three inches apart throughout their whole length. Each is connected to the other at the ends and one is cut in the centre and insulated from its other end so that the whole forms a continuous loop, broken in the centre. To this point is joined the 300 ohm transmission line. The overall length of

the "top" should be slightly shorter than a half wave length. Suitable feeder having 300 ohm impedance is now readily available from radio stockists. It consists of two thin wires in a polystyrene or similar matrix forming a flexible tape $\frac{1}{4}$ inch or so wide, thus making an extremely light and flexible line ideal for joining the aerial to the receiver.

If your receiver is not fitted with this type of feeder input, but has conventional A & E terminals only, several alternatives are possible if you wish to use this type of aerial system. An aerial matching transformer should be made up. This can take the form of twenty or thirty turns for the lower frequencies or five or ten turns for the higher frequencies of 16 SWG bare wire on a $1\frac{1}{2}$ " former. The centre of this coil should be earthed and the ends left unconnected—simply anchored to the ends of the former. The ends of the transmission line are terminated in small crocodile clips; the aerial and earth leads on the receiver are provided with similar clips. Each pair is then clipped on either side of the centre tap until the best match is obtained. If the impedance of the transmission line is less than that of the receiver, then it will have to be clipped across fewer turns than the leads from the receiver, and vice versa. Another possibility is to tune the coil to the desired frequency, still retaining the clip connection or using coupling coils on transmission line and receiver leads.

If circumstances make it impossible to place the aerial away from buildings, the only thing to do is to place it as high and clear as practicable and use a screened transmission line joined to one end. The aerial may take the form of as long a length of wire as possible—stretched between insulators of course—between two chimneys, or adjacent buildings. If this cannot be arranged a vertical or horizontal rod as long as possible can be used, fixed to the highest point of the building. The transmission line is then connected to the end nearest the building. It is in circumstances such as this that co-axial cable comes into its own, as the outer conductor can be earthed, the inner one then being screened from local electrical interference. There will be some mismatch between aerial and line but this is not serious. If one wishes to get the very best results one of the small matching transformers made by firms specialising in aerial equipment should be used. One must be careful to see that the outer conductor of the co-axial cable does not pick up interference. This is best avoided by earthing it at several points right up to where it leaves the building. Make sure the earth points are good ones however, such as water tanks or pipes in the roof. Long earthing wires may make things worse. The aerial matching transformer with centre tap earthed as already described will help also to remove interference picked up on co-axial cable.

So much for general omni-directional aerials. Briefly summarising, the points to aim at are to get the aerial as high and as clear of buildings as possible, to use a properly matched transmission line between receiver and aerial and to take all practical steps to avoid picking up electrical interference.

Directional aerials are not used to the extent they should be by the listening fraternity. There are times when it is interesting to concentrate on receiving signals from one part of the world only and it is then very well worthwhile considering the possibilities of a directional aerial system. On the higher frequencies such as 28 Mcs. it may be possible to put a three element beam up. This will improve reception quite as much as it will improve transmission and in fact it may make the difference between hearing some signals and hearing none at all on such frequencies as the 60 Mcs. band. If the beam can be made rotatable so much the better. Details of beam aerials for these frequencies can be found in the handbooks and we shall be publishing particulars of a 28 Mcs. easily rotatable beam in these pages in the near future, which, whilst originally intended for use with a transmitter, will add greatly to the efficiency of a receiver.

On the lower frequencies, space considerations usually make a rotatable beam impossible. However, it is often possible to put up an 8JK beam, or a doublet with reflector, or even an array such as the Lazy H aerial system described some short while ago in these pages. These will improve reception in one or two directions and may help in adding to the list of countries heard. So it is always worthwhile bearing in mind the possibility of erecting such an aerial system.

It is obviously impossible to describe in detail in the short space available, all the possible arrays which can be erected to suit different requirements and different locations. The purpose of these paragraphs is more to point out to the keen listener that he can get just as much improvement in efficiency with a directional beam or array as can his transmitting colleague and he should consider with equal care the possibilities of erecting one or other of the arrays described in the transmitter handbooks. Even though they are designed primarily for the transmitting fraternity, they are of just as much interest to him. So don't ignore those chapters in the handbooks on transmitting aerials, just because you are a short wave listener. If you use some form of matching transformer as already described, you can match any aerial array and feeder system into your receiver. We shall be describing aerial systems in these pages in the future and, though the emphasis may be put on the requirements of the transmitter, do not forget that these aerials can be just as useful to you, the S.W. listener.

EUROPEAN BAND PLANNING

The following Band Plan drawn up by the Codes of Practice Committee of the Radio Society of Great Britain, and approved by the Council of that body, has been submitted for consideration to all I.A.R.U. Societies in Europe. Copies of the plan have been forwarded to I.A.R.U. Headquarters and to the W.I.A. (Australia), N.Z.A.R.T. (New Zealand), and S.A.R.L. (South Africa) for information.

The Council of the Society recognises that any form of Band Planning will fail unless it is introduced into the licence and enforced by the respective licensing authorities. For this reason the European Societies have been asked, when commenting on the plan, to indicate whether they consider that their licensing authority will agree to make the plan mandatory if it is finally adopted.

Details of the Plan are set out below:—

Band	Frequencies	Proposed Occupancy
1.7 Mcs.	—	Telephony and C.W. (no sub-division considered necessary).
3.5 Mcs.	3500—3550 3550—3750 3750—3800	C.W. only Telephony and C.W. Telephony only
7 Mcs	7000—7050 7050—7100 7100—7150	C.W. only C.W. and Telephony Telephony only
14 Mcs.	14000—14050 14050—14200 14200—14250 14250—14350	C.W. only C.W. and Telephony Telephony only C.W. and Telephony
21 Mcs.	21000—21100 21100—21150 21150—21250 21250—21450	C.W. only C.W. and Telephony Telephony only C.W. and Telephony
28 Mcs.	28000—28100 28100—28400 28400—28500 28500—29700	C.W. only C.W. and Telephony Telephony only C.W. and Telephony
Above 28 Mcs.		No sub-division between Telephony and C.W.
		* * *



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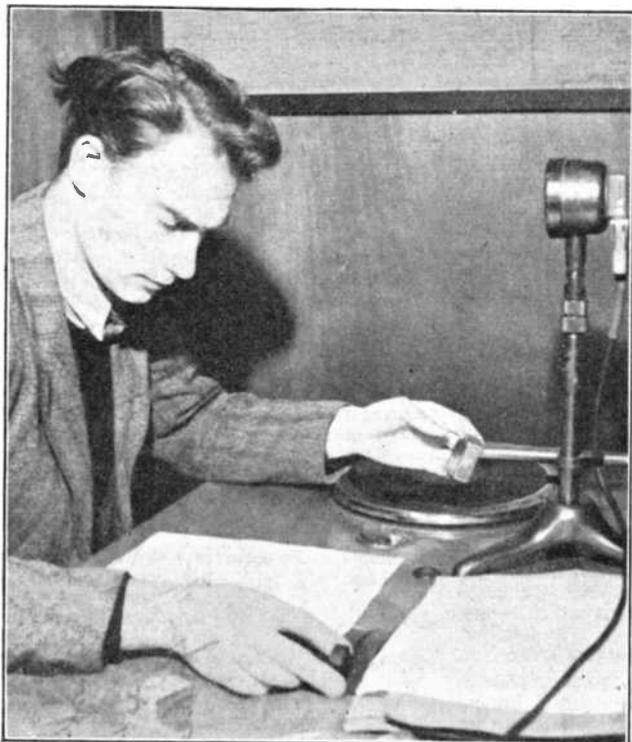
No. 16

LH2A

TECHNICAL UNIVERSITY

TRONDHEIM

NORWAY



LAST autumn, the Students' Society at the Technical University, Trondheim, Norway, went on the air with their own short wave broadcasting station LH2A. The occasion was the "Studenter—uka" or Students' Week, though the actual celebrations spread over several weeks. During this period, the Students' Society Club House is transformed into a great entertainment centre, with "bodega"—dance halls each with their own bars.

Permission was given by the Norwegian G.P.O. for the students to run their own broadcasts from their own short wave transmitter. Two transmitters were used, both of the same type, each putting about 600 watts into the aerial. They could be tuned to any wavelength between 17 and 55 metres. One of the transmitters was owned by the Norwegian Technical University and was located at the University. The other belonged to the Norwegian G.P.O. and was installed at the regional broadcasting station in a suburb of Trondheim. The frequencies 6130, 9540, 11735 and 15175 kcs. were allocated to these transmissions.

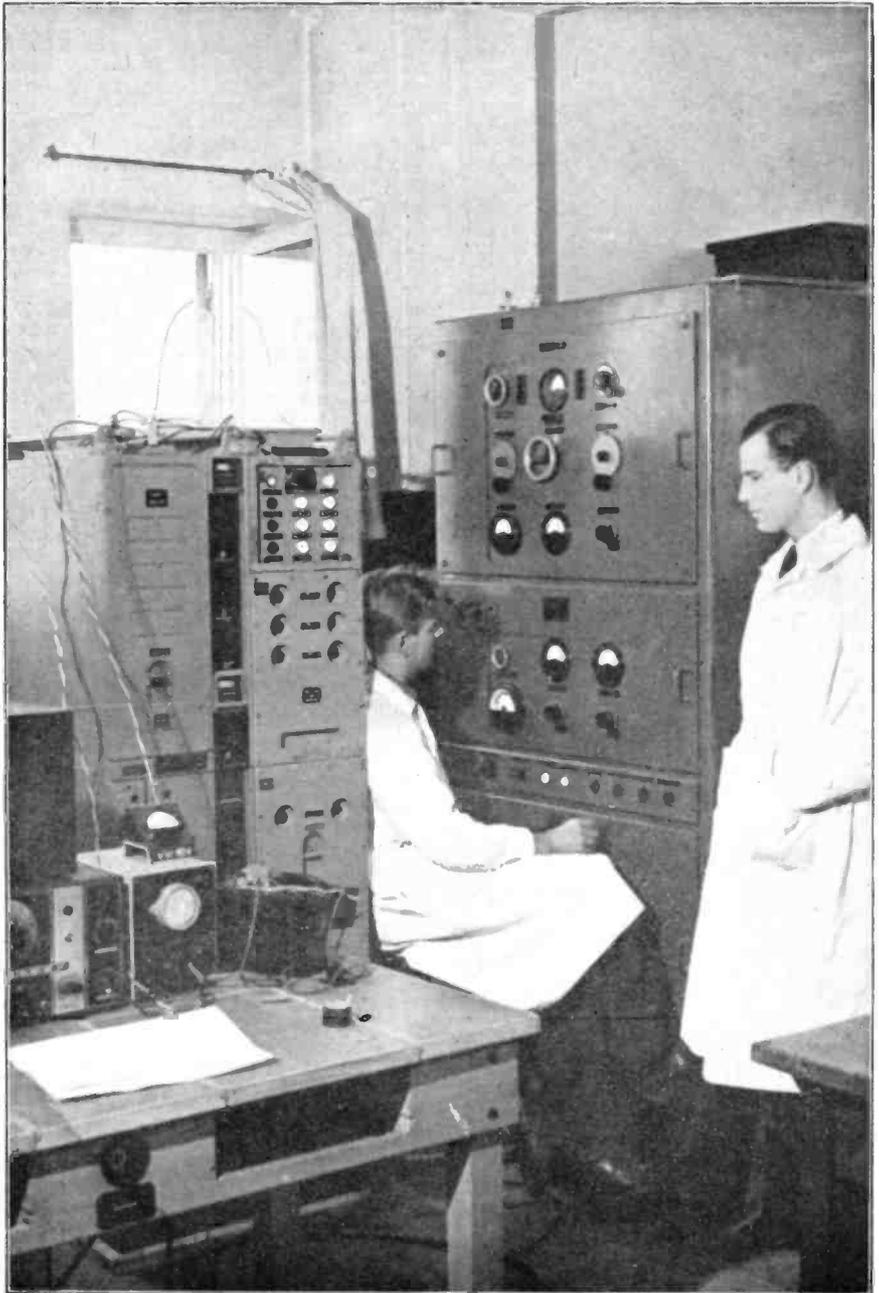
Two different studios were used for the programmes, each working in co-operation with

the other. Each could be connected to both or either transmitter and a comprehensive system of interstudio and studio/transmitter intercommunication channels was installed. Among the technicians in charge were LA9J, LA1VA, LA3UA, LA3ZA and LA9QA. LA9J is the director of the regional broadcasting station LKT, the others being students at the University.

A separate monitor station was set up in the Club House and the studio equipment included a tape recorder and a disc recorder. The programmes radiated were acted or performed by students from the University.

LH2A had to close down at the end of the "Studenter-uka," but it is hoped to obtain Government permission to recommence transmissions at a later date. In the event of permission being given and broadcasts being radiated, reports on them would be greatly appreciated and should be sent to: The Students' Society, Norwegian Technical University, Trondheim, Norway.

The photograph opposite shows one of the transmitters used, together with its associated equipment.



On the Ham Bands

Conducted by Les Coupland

—G2BQC—

Editorial Note. As already mentioned in our Editorial, we have pleasure in welcoming G2BQC to these pages. Les will conduct this feature for us in future but we shall still require the help we have enjoyed in the past from our readers. So please continue to send us your letters and reports, but mark them "For Ham Bands" instead of "CQ" in future.

Readers' News. There is a fine collection of readers' reports this month which is very gratifying indeed. First, a "brickbat" from J. H. Endersby, GW703, however, saying that he prefers the style of "On the Ham Bands" featured last December. Well, let's have some more views on the way readers would like this feature conducted, and I will try and please the majority.

R. W. Ainge, G219 (Crewe), sent along a very fb photo of his aeri— which the Editors have swiped! Thanks o.m. for the list of DX. His best are :—CX3CN, 5AE, 5CN, EL4A, 5A, PY1ACQ, 1KZ, 2CK, 3AB, 6CO, 7AY, 7CE, 9AT, PZ1J, ST2JF, VP6CDI, 2GB, VQ4NSH, 4ACS, VS2BU, ZD3B, ZL2BT and numerous ZS stations. Not bad going even for 28 Mcs, and certainly proves that his 8JK beam is pulling them in. His three element beam accounted for CX5CN, CR9AN, HZ1AB, HC20A, HK3AB, J9ABO, J9ABX, W6PJM/KG6, KP4EZ, KZ5CS, ST2JF, TI2MY, VP4TAX, VP6CDI, VU2CS, AF, BG, LJ, VQ3EDD, ZD4AS and 2KC.

R. F. B. Featherstone sends us another fb report from Nakura, Kenya Colony, the rx being a Hallicrafter S40 which is run from an all battery supply. His best dx was KL7ms on 7 Mcs. Also several VS7 stations on 7 Mcs fone. On 14 Mcs fone the following were filtered from the QRM : CR4KI, CR7BB, ET3AD, 3AG, MDSAK, VK4VD, VQ2JM, 3ALT, 3WSS, 4KTB, VS2BU, 6PL, 5BU and 7DI. The VU stations 2BH, 2CB, 2CW, 2CR, 2DY, 2FJ, 2MZ and many ZS stations were also logged. 28 Mcs. has as usual turned up from the plums, AR8AB, CX3WB, HPIA, KG6AER, 6AO, LU2BL, NY4ZQ, MD2CH, OA1AL, OQ5NR, VK3AE, VP4TU, 6CDI, 6KDI, 6ZI, VQ2HC, 4EHG, VS1CH, 7AC, XE1AC, YV1AU, ZE1JZ, 2JL, ZS1AX, 2AH, 4BL, 5BY, 6PM, 6FT, 6GN, 6HB and on CW ; CE2ag, CR7bc, OQ5bg, UA3af, ZS2ak, 2dy, 5hc, 6ct, 6cy and 6ov. Mr. Featherstone makes some remarks with which I thoroughly agree. He says, "Some 'G' stations would get a lot more replies to their CQs if they were to send readable morse." "Makes you think !"

L. H. Waive, G328 (Yeovil) with a SWN TRF 3 and a long wire aerial, sends in a very precise log of what can be heard on 3.5 14 and 28 Mcs with a straight receiver. WIMZQ 2IQQ, 2IRS, 3LDI, 4LR and 8 MZQ showed up on 3.5 Mcs., which is certainly good going for that band. On 14 Mcs. he did well with CO7BP, LU7FW, NY4ZQ, PY6CD, SVoAD, VQ4NSH, W7HTB, YV1AU, 5ABT, 2LBP, ZS1ED, 6AJ, and 6FC. All these were heard between 1900—2230 GMT. On 28 Mcs., CX1DV, HK1FQ, KP4DE, W5GZK, W7JNC, YV4AN and ZS1T. Thanks for your kind remarks o.m. I am sure we can keep this section up to scratch if we continue to get such nice reports as your o.b.

Don Robertson, GM1051 (nr. Wick) assures us by his log that our Scottish readers are keen dx men. Don uses a No. 18 MK 111 four tube super which he says is a very fb job. Some choice 14 Mcs cw stations were KA1ac, ZS6a, W7eys, VQ4ehg, W6an, and VS2aa. By the look of things, 7 Mcs seems to be living up to its reputation of being a dx band. PY1fw, PY4zb, KH6lf, Wodib, VK2se, ZL3ab and also numerous W calls were logged. Well it just goes to show! How much is midnight oil a gallon o.m. Fone on 28 Mcs slipped in while the BFO was off. VU2AF, CR9AG, LU3OH, KP4CI, VP9F, HK3AB, YV4AM and VK6RU being heard.

B. S. Strudwick, GW1702 (Cardiff) using an ordinary B.C. 5 valve super sends us his first report. (The forerunner of many more we hope). South America seems to be his meat CX2CO, CE3GA, CE2BQ in QSO with G6YE of Bristol and PY2AK in QSO with G2XC in Cambridge. (This would be G2XV o.b. who you will find works ALL the dx on 14 Mcs.). Keep the good work going o.m. and let's have some more reports.

John L. Hall (East Dulwich) with a few yards of wire, a picture rail and an R 101 Rx made me sit back and look twice at his 7 Mcs and 3.5 Mcs log. W.A.C. has been logged several times on 7 Mcs cw, some of the best dx being CE3ag, CM2sw, CN8bi, FA8ih, FM8ad, NCles, HH2ea, HR1at, J3aad, KH6ez, KL7cz, KP4bc, KS4ai, KV4aa, KZ5a1, MD5kw, UJ8ad, VE8wb, VK2ns, VO6ep, VP2ks, VP5hn, W6qdg, W7ebs, ZD3b, ZL1hy, ZS2ci. Try as I may this still looks like my two year 14 Mcs. log.

On 3.5 Mcs fone, W9VMG, OX3GE, and XE1A made themselves heard. Also on cw, W5ark, W6bc, FM8ad and ZL11m. Drop us a line again soon John.

F. Clarke, G2FAY, (Oldham) sends us a list of his recent 7 Mcs contacts, all cw, covering the latter half of January. W4fcb, 8axm, 1ldv/3 ; average RST 569 around 0800 GMT. European contacts include HB9hc, SM7vx, SM51f, OZ5tz and LA2ha. Fred reports working ZD9b, who is most likely some one with a funny sense of humour, but one never knows these days, so keep your fingers crossed Fred.

H. Ablitt, G1171 (Hove), sends a nice list once again, which includes AR8BC, C4CA, CO2JV, CX2CL, HH2CW, HK1BE, HZ1AB, KH6CT, MI6BC, NY4ZQ, VP2GE, VQ2AG, VU2LU(?), VU2BK and ZS1CN all between 1800—2200 GMT on 14 Mcs.

Bernard Elvey, G330 (Dover) writes again, his chief topic is not amateur radio however, but his "glee" at saying goodbye to them all in the Army and getting some real dx hours in. Good hunting Bernard. 14 Mcs seems to be his spot. PY2AK, YV5AB, 2BZA, CX2BG, VE1FQ, ZE2JN, AR8AB, CE2BQ, HF1FO, VE6FK, 8MO, VP2GE, 9F, Ws, 5KUC, 7ERA, 7HTB, VK2TE(?), XE1AC, ZS6AJ, were all heard on an S.H. 5 Rx with a doublet or vertical aerial. An Eddystone 504 pulled in C1CS, CM9AA, HLIAR, KV4AD, PY2RK, ST2FU, SV1WE, TG9AG, T12WR, VE5EA, VE6AC, VE7ABD, VK6BK, VP2KS, 5RS, VQ3EDD, 4EHG, VU2BK, ZC1AF, ZC6JP, ZD1BD, ZD2KC, ZD4AS, ZL4AO. Boy, I don't know what he will hear now he is out of the Army. We shall no doubt see in due course !

Tom Jones (Birmingham), sends in a first class log of 7, 14 and 28 Mcs fone and cw. His 7 Mcs cw includes, VE8ow and MD5zc.

T. Pimblett (Bishops Stortford) is a weekend only man, and like Don Robertson, must burn the midnight oil. However it seems to pay dividends, CE1BE, 2BQ, CX2AX, HZ2AB/Airborne, OY8LA (probably pirate) OX3BD, VK6HL, VP2GE, VQ3ALT, ZC1AF, 6JL, 6JU, ZBiBD, ZS5Q, 6DY were all pulled in by a V55R Rx on 14 Mcs fone.

R. Vincent, G748 (Enfield) who uses an o-v-o and separate amplifier for ten and a 1-v-3 for 14 Mcs and lower, sends in a good log. This includes W1ONK on 28 Mcs who was using 2½ watts. Yes, watts, not kilowatts.

G. K. Cundell, G1793, (York) is another who is doing well with an o-v-1. On 14 Mcs his log includes VO6J, YV5AY, CX2BT and LU2FN. Let's have some more reports from you o.m.

A. Baldwin, G193 (Leytonstone), using the "Hambander" receiver, produces, PY2os, VE7arm, 8nb and 8nn, W6efr, 7cdw and



Beam array at HK1FQ,
Barranquilla, Colombia
(Courtesy of F. W. Hardstone)

71wb, ZS1m, on 7 Mcs. amongst many others, and WIAAH, 1KH, 1KLL, 4CGP, 4CQW, 5ATW, 5EV and 5GGW all on 3.5 Mcs. fone. Nice work o.m. and glad to see you are putting this nice little receiver through its paces.

W. Metcalfe, G3DQ, (nr. Ashford) rounds off this month's reports with a résumé of his QSOs for Wednesday evening Feb. 18th. OX, VE, W1, 2, 5, 8, PY, ZS, ZD4, VK and ZL were all worked. Good show o.m.

The Month's Gossip. Don Robertson sends some useful information. HL1AA is J8AAA in Korea. W2EJV/PK will QSL 100% by air mail. VU2GI in Pakistan is G3BYH. PK2KK is active on 6 metres. VP4TU has stopped answering SWL's reports so save your postage chaps ! Bernard Elvey queries ZB2A, TRIC, NB9AI, YV5AB, CY2CK, CX2BG, XAMC, and ZE2JN. Well, o.b. TRIC, I suggest is TR1P. NB9AI is MB9AI, CY2CK possibly PY2CK who is a well-known PY station. ZB2A is o.k. in Gib. I hope the latter's MCW will not make the QRM on 14 Mcs. worse too frequently ! YV5AB, CX2BG and ZE2JN are all o.k. XAMC was o.k., but I understand all XA calls are now void.

Arthur Levi asks about HLIAR, heard 0925 GMT on 28 Mcs. Well, Arthur, the

popular belief is that HL stations are in Korea. Don Robertson informs me that J8AAA is now HL1AA, so I hope that is true. Fred Clark, G2FAY, wants dope on ZD9B. Wish I knew, Fred!

W. Metcalfe, suggests that all would-be "bug kings" perfect their sending before throwing themselves on the air. It is pathetic to hear some of the "lids" on the go, they take about twice as long to QSO as the chap with a straight key. 3DQ could give these boys a few lessons by what I hear of his fist with a "bug." Incidentally o.b. your remarks re XU2UU are interesting and such things are definitely happening. Would like to say more on that but the Editors won't let me for fear of starting another war! Please drop me another line again when you have time.

Don Addison, VS6AC is home again after a spell overseas. VS6AC is being operated by his pals whom he left behind. Don is an old pre-war pal of mine. He assures me his rig was only 25 watts input to an 8O7 and a two element beam made from curtain rail! The way his signals pounded in here on ten, you would think he had 1 kw and a whole tram line system. The local officials viewed ham radio with a very poor eye in Hong Kong.

J. H. Endersby wants to know why we don't have more top band logs. Well, o.m. here is an interesting one from one of our German readers in Schleswig-Holstein. Waldemar F. Kehler reports hearing the following on top band:—G3cql, D2jp, G3xh, GM5ba, G5LC and G6CT. G4dc, G8vz, G2jf, G3af1, G6qb, GM3bl, G2sc, G8is, G2rj, G2nh, G2cfc, GM5ba, D21m. We should like some more reports on top band activities. Waldemar asks us to point out that in spite of rumours to the contrary, there are no German nationals licenced yet. He says "Would all foreign amateurs be so kind as to ignore all the D calls in the range: D2aaa—D2zzz, D4aaa—D4azz and D5aa—D5az. They would help us to prevent German amateur radio being prohibited for all time." "No QSLs to those stations will be forwarded and we ourselves do not handle cards containing reports to German pirates." By the way, if any of the stations mentioned in Waldemar's log would like further reports, they can have them on forwarding QSL card to I.S.W.L. HQ.

C. H. Henderson, G3CLB, has worked LJ2b on 7 Mcs. He tells us that this station is at the Seamen's School, Haguesund, Norway. Input is 25 watts, Tx is c.c. and QSL's should be sent direct.

One of the best signals from the Isle of Man, is being put out by GD6IA. He uses an input of 70 watts, his outstanding signals being due to his aerial systems. A rhombic directed to

USA and East Africa puts an S9 signal into the latter with ease and a.V beam covers the Canal Zone/India route. There are seven or eight amateurs in GD, most of them being employed at the airport. GD6IA seems to be the only one however, heard on the higher frequencies, the others confining their activities to 3.5 Mcs and to top band.

Y12FDF requests that cards for him be sent via RSGB and not direct as there is every chance of his licence being stopped, as the Iraq authorities are not very sympathetic to amateur radio.

J. H. Endersby gives us the following further information. VE8MB is on Cornwallis Island, NWT. 75 degrees N. 95 degrees W. 600 miles North of the Arctic Circle. 900 miles from the N. pole. He is not on Manual Island as stated last time. He would like to know the position of VE8PA, and also whether TAINR heard on cw on 14100 kcs is genuine or whether it might have been K1NR—one of the new W calls.

Well, o.m.s., that's the lot for this month. Please let me have your reports by the first of the month.

TOPICAL DX QRA'S.

- VP4TT:—73 AACG Group, APO 869, c/o P.M. Miami, Fla, U.S.A.
- W6PJJ/KG6:—VPMS6, c/o Fleet Post Office, San Francisco.
- VU2BG:—George Benzie, Jokai Post Office, Assam, India.
- CR9AG:—Macao, nr. Hong Kong. (That's all that is needed, so he says!).
- KP4DP:—Box 106L, San Juan, Porto Rico.
- PY6CO:—Box 533, Salvador, Bahia, Brazil.
- T12WR:—Box 1345, San Jose, Costa Rica.
- VE8MB:—U.S. Weather Bureau, Arctic Section, Washington D.C.
- EK1AA:—P.O. Box 57 Tangier, Morocco.
- ZC6SM:—P.O. Box 4099, Tel-Aviv.
- KP4EZ:—A.P.O. 851 c/o P.M. Miami, Fla, U.S.A.
- J9AAR:—A.P.O. 331, c/o P.M. San Francisco.
- VS6AE:—P.O. Box 547 Hong Kong.
- W2EJV/PK3:—P.O. Box 222 Soerabaya, Java. N.E. I.
- LJ2B:—Seamens School, Haguesund, Norway.

28 Mcs. Review (To March 12th). By Cliff Ranft, G5RF.

G5RF now on phone despite previous statements to the contrary! Finding it easier to work DX that way. Stations mentioned this month are all phone.

(Continued on page 105)

Amateur Radio in the Netherlands

By

E. Kaleveld, PA0XE

AMATEUR radio in the Netherlands is as old as the art itself. As early as 1916 there were enough enthusiastic followers to form a Society, the N.V.V.R. During those days no transmitting licences were given to amateurs, so most of the experimenting had to be done with receivers. Not much is known of amateur transmitters of those days, at any rate they did not perform remarkable acts. After World War I the radio-valve became known, and it caused quite a sensation. The Government started giving experimental licences to companies and some Technical high schools, but transmitting by the individual amateurs had to be done "under cover." Many old timers will remember the transmissions from the Hague, where Mr. Iozeroa had obtained a special licence to transmit speech and music, and as early as 1919 his broadcasts started, and his Sunday afternoon concerts were famous in England, too. Then, in 1924, came a big thrill, transatlantic tests started, sponsored by A.R.R.L. and in December 1924, one of the first radio contacts was made between an American amateur station and a Netherlands amateur, PCii, who had no licence of course. He made several more contacts during those tests, and it could not be helped, that rumours spread who PCii was, and so he had to be tried, charged with using a transmitter, and we saw the unique fact, that the Judge started his speech by congratulating PCii with this very fine effort, and expressing his regret that he had to punish him !

Everywhere in the country amateur-transmitters were built now but it still was a forbidden thing to do, though the Government was rather lenient.

In 1927, however, the Government started issuing transmitting licences on an amateur basis for which you had to pass an examination. The examination has been about the same ever since, and comprises transmitting and receiving morse with a speed of 8 w.p.m. correctly, the principles of magnetism, DC and AC technique, radio technique (of this only the fundamentals of course) and legal regulations.

This test is oral, and is held in the Hague, at the office of the General Post Master. We get our licences at present under the following rules.

Only operation in the bands 3,500—3,625, 3,608—3,800 kcs., 7,000—7,300 kcs., 14,000—144,000 kcs., 28,000—30,000 kcs., 58,500—60,000 kcs., is allowed.

Maximum power input shall not exceed 50 watts except in the 28 Mcs. band, where 100 watts is the limit.

For the rest the Netherlands and British regulations do not differ very much. We have two different kinds of licences, when you pass your exam you get a licence to operate an amateur transmitter. Then one has to ask G.P.M. for a permit to own a transmitter, for which you have to be 18 years old at least, and for which an annual contribution of about £1 is due. The transmitter is tested by G.P.M. and after that the new amateur is allowed to transmit.

In 1928 a new society was founded—the now well-known N.V.I.R., the Netherlands section of the I.A.R.U. The N.V.I.R. was more specifically for short-wave fans, while the old N.V.V.R. was chiefly for broadcast-listeners as well. From 1930 to 1939 amateur-radio was still going strong, became more and more popular and towards the beginning of 1939 there were about 300 licensed transmitting amateurs, while the N.V.I.R. then the representative organisation, totalled nearly 1,000 members.

In those years, to be exact in November, 1937, another society was founded, the V.U.K.A. which did not have so many transmitting amateurs but more Shortwave listeners.

Then came 1939 ; August, 1939, when mobilisation came, and subsequently all owners of amateur-licences received a telegram ordering them to stop the use of their transmitter.

A few days later all the gear was fetched by our army who put it in store, until after the war . . .

May 10th, 1940 : German invasion.

Dark clouds were packing over the amateur world. In August, 1940, a regulation came, in which it was forbidden to possess or use a specific short-wave receiver. Every such receiver had to be delivered to the Germans.

(Continued overleaf)