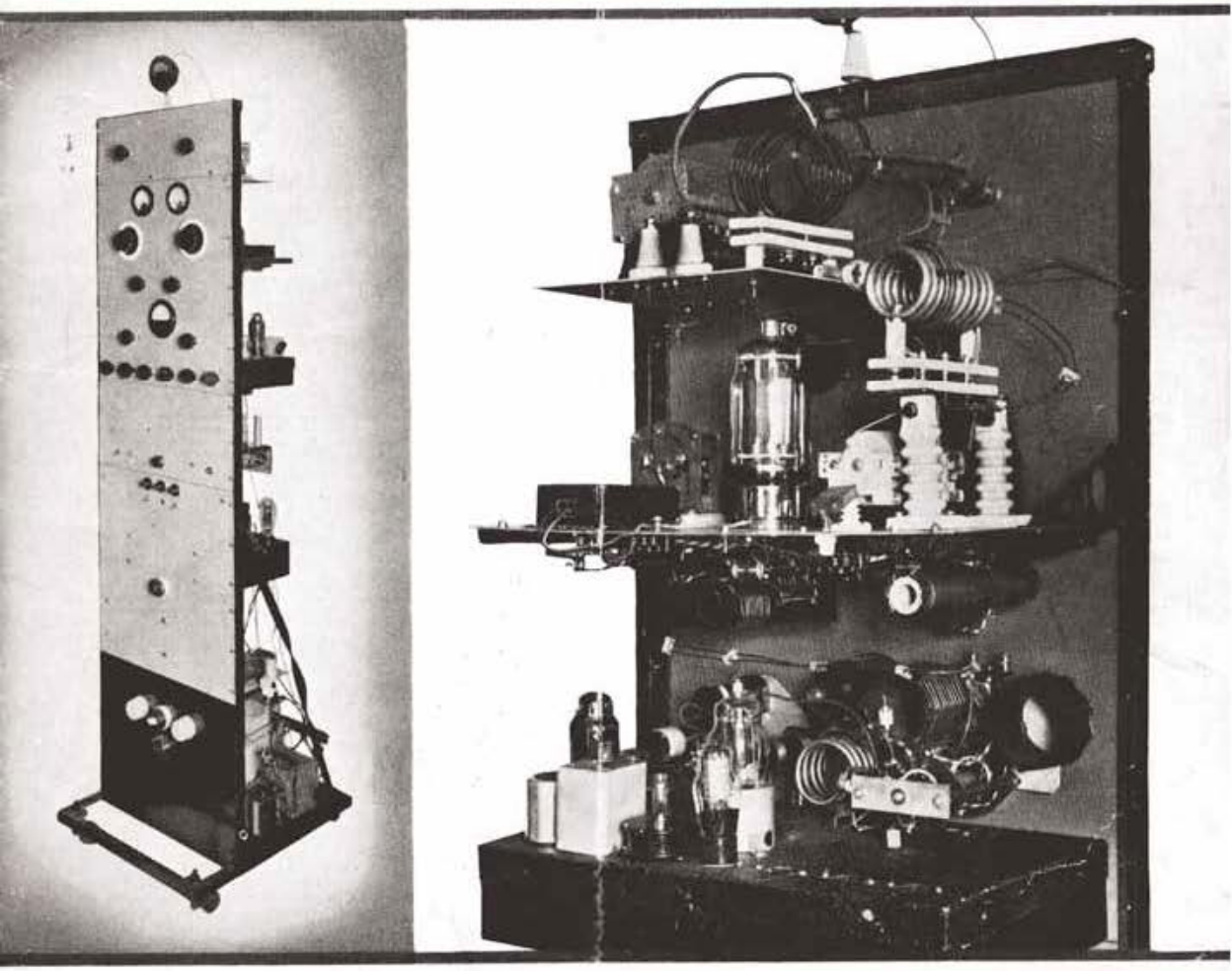
R·S·G·B VOLUME 23 · No. 1 · COPYRIGHT · PRICE 1/6 JULY, 1947

BULLETIN

JOURNAL OF THE RADIO SOCIETY OF GREAT BRITAIN



- VARIABLE SELECTIVITY I.F. AMPLIFIER
- DX PEARLS No. 3
- ATLANTIC CITY, 'HAMFEST'
- CALCULATING AERIAL LENGTH

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ANNUAL HOLIDAYS 1947

Please note that we will be closed from **Saturday the 19th July until Monday the 4th August inclusive** *for annual holidays. During this period no despatches will be made nor will there be any staff available to deal with enquiries, etc.*

If any of the items advertised by us from time to time are unobtainable in your district we would be pleased to be advised accordingly. If necessary we will supply direct.

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R.S.G.B. BULLETIN

OFFICIAL JOURNAL OF THE INCORPORATED RADIO SOCIETY OF GREAT BRITAIN

Published on or about 15th of each month. Issued free to members.

Editor :
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Editorial Office :
NEW RUSKIN HOUSE, LITTLE RUSSELL ST., LONDON, W.C.1
Telephone: Holborn 7373

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Advertising Office :
PARRS ADVERTISING LTD., 121 KINGSWAY, LONDON, W.C.2
Telephone: Holborn 2494

Honorary Editor : ARTHUR O. MILNE.

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VOL. XXIII — No. 1

GETTING TOGETHER

ONE of the most significant sidelights on the Atlantic City Conference is, without doubt, the International "Hamfest" reported elsewhere in this issue. What other hobby could assemble a meeting of fourteen nationalities in such an atmosphere of equality and good fellowship ? It is just one more practical demonstration of the true democracy which is Amateur Radio, where men of all nations are treated as individuals and where the label of nationality is of secondary importance. To the "Ham" a man is a man whatever his country, class or creed. We do not condemn all the inhabitants of a country because one of their number has incurred our dislike nor do we hold one man responsible for the shortcomings of his government. This is the one fundamental lesson which all men must learn before world peace is assured.

It is gratifying to learn that this historic meeting took place at the suggestion of our own delegates both of whom, by their energy and enthusiasm, helped to make it such a great success.

QSL Cards.

We feel certain that for every amateur in this country who is pleased to have a QSL card after a QSO with G2MI, there are a hundred who wish it was from ZD4AB, ZK1AB, or perhaps AC4YN ! With this thought in mind we began to wonder whether the sending of QSL cards for inter-G contacts in these days of expensive cards, paper rationing and purchase tax, is really worth while and whether, in fact the recipients are all that pleased to have them.

We made a few enquiries of our fellow amateurs, both newly licenced and old timers, and have come to the conclusion that the practice is a waste of the sender's money, the QSL Bureau's time and the recipient's storage space.

The QSL Bureau is, of course, quite impartial in such matters and like the faithful machine that it is, will cheerfully grind out whatever is fed into it ; nevertheless we do beg leave to put this thought into your minds and suggest that as an experiment, all inter-G QSLing should cease unless a card is specifically requested.

We cannot see any objection to this system, for it gives full opportunity to anyone who wants a card ; he has but to ask for one. If he forgets to ask, he can still send one and ask for a reply. If he does not mention the subject, the station he is working will be justified in assuming that a card is not required. The QSL manager meanwhile can stand aside with his tongue firmly in his cheek and maintain an attitude of studied indifference as he watches his load become a little lighter.

Headquarters Station

The mounting pile of correspondence from members regarding the Headquarters station ranges from mild interest to biting sarcasm ! It is only to be expected that members should be interested in what is being done with the transmitter and other gear now assembled together at Headquarters and we can assure them that the matter is being actively pursued.

In order to put GB1RS on the air, a number of things have to be done, all of which take time. First and most important of all these is to obtain a licence from the Post Office so that we know just what we may or may not do.

Secondly, we have to erect an aerial which, in central London entails negotiation with a number of interested parties, not least of whom are the Owners of New Ruskin House, the Borough Council and the Society's Insurance Company.

Finally, there is a quantity of ancillary equipment which has to be designed and manufactured ; control circuits, automatic switching and safety equipment, keying circuits, etc., all these must be made and tested before the station can begin operation.

This work is well advanced but no announcement can be expected for a month or two yet. When we have something really definite to say, an announcement will be made. Meanwhile no transmissions will take place from GB1RS until a full statement giving details of the service has been made in this journal.

Official Regional Meetings

Members should note that they are fully entitled to attend the business meeting at an O.R.M. and free of charge, if they do not wish to take part in the luncheon or tea.

A. O. M.

OUR FRONT COVER

THE transmitter illustrated is G6RY (H. L. Bowen of Mullard). A high tension unit using FW4/500's supplies the exciter, the main H.T. supply unit uses two RG1-240A's, while two FW4/800's are used for the modulator H.T. supply.

The exciter unit consists of an EL33 and QVO4-7 in a Pierce oscillator arrangement followed by another QVO4-7 doubling to 28 Mc/s. Power supply to the crystal oscillator is stabilised by a 7475 tube. In the output stage is a QVO5-25, and the unit is switched for all amateur bands.

The final amplifier employs a QY2-100 as Class C amplifier. The exciter unit and final stage are link coupled, as are the final stage and the antenna tuning unit.

The conventional modulator unit uses two EL38's in the Class AB push-pull output stage.

ATLANTIC CITY, 1947. ACT II.

AMATEUR BANDS UNDER DISCUSSION—AMATEUR SERVICE DEFINED

By JOHN CLARRICOATS (G6CL), GENERAL SECRETARY

AS was to be expected Dame Rumour has been very active in Amateur Radio circles ever since the International Telecommunications Conference opened on May 18 last. If only half the stories were true we should by now be in a parlous state—fortunately they are not. Our strong advice is *ignore all rumours* and wait patiently for official information in the BULLETIN.

The period covered by this report represented a month of intense activity among the 71 nations participating in the Conference. At times the pace appeared to be slowing down, but upon reflection it became clear that much more was going on behind the scenes than was apparent on the surface.

The ten main committees of the Conference began their work in earnest during the early days of June, and, as was to be expected, these committees frequently found it necessary to set up sub-committees. Even this division of labour was not always sufficient, for on several occasions small sub-sub-committees were appointed to study some specific aspect of the sub-committee's work.

The three committees in which we, as amateurs, are chiefly concerned are No. 5 (Frequency Allocations), No. 7 (General Technical), and No. 8 (Operating). We propose, therefore, to refer briefly to the work done by each of these three committees insofar as it affects amateurs.

Frequency Allocations

The stupendous task of preparing new frequency allocation tables is being undertaken by committee 5, under the chairmanship of Col. Sir Stanley Angwin (U.K.), and in order to speed up its final report two sub-committees have been set up. The first, under Dr. Mao (China), is charged with the duty of examining complete frequency plans, covering the spectrum from 2·85 Mc/s. to 25 Mc/s., as submitted by some 15 nations. The second, under the chairmanship of Mr. R. V. McKay (Australia), is examining the plans for that part of the spectrum which falls between 10 kc/s. and 2·85 Mc/s.

In the case of 5A the spectrum was considered in eight sections, namely 2·85–4 Mc/s., 4–6 Mc/s., 6–8 Mc/s., 8–10 Mc/s., 10–12 Mc/s., 12–16 Mc/s., 16–20 Mc/s. and 20–25 Mc/s., and target figures tabulated for each of the five main services. Up to June 21 this sub-committee had met 22 times and at each meeting the R.S.G.B. representatives were in attendance.

A pre-conference examination of the various frequency plans revealed wide divergencies of opinion. For example, in the Amateur Service the U.S. and Canada proposed a continuation of the Cairo allocations whereas certain other nations proposed drastic reductions. An examination of proposals for the Aeronautical Mobile, Broadcasting, Fixed and Maritime Mobile Services showed equally wide divergences of thought as between the various nations concerned.

Gradually, by dint of much hard work and in a spirit of compromise, many of the knotty problems were ironed out, but it is with regret we have to record that one or two nations have been loath to compromise on frequent occasions. Fortunately for us these nations raised no objections when our 14 and 21 Mc/s. bands came up for final consideration by 5A; consequently we are in the happy position of being able to report that unanimous agreement was reached, in regard to both bands. Last month we stated that the sub-committee had tentatively agreed to fix 400 as the kc/s. target figure for amateurs in the 21 Mc/s. band. We can now report that, as the result of some back stage work, the U.K. followed the U.S. up to 450 kc/s. and all other nations represented in the sub-committee agreed to adopt the new figure.

For one brief but tense moment it seemed that a small portion of our 14 Mc/s. band was in danger, but a ten minutes' recess for coffee did the trick and unanimous agreement was reached for a continuation of our present 400 kc/s. allocation.

We cannot yet report fully upon our 7 Mc/s. band, except to state that every effort is being made to gain support for a new U.K. proposal that the band should be re-assigned to amateurs on the basis of Cairo. Originally (see April BULLETIN) the U.K. proposed a reduction to 200 kc/s. with 7·2–7·3 Mc/s. assigned to Broadcasting. When the views of other nations had been considered the U.K. attempted to achieve agreement among the European nations by suggesting that 7·2–7·3 Mc/s. should continue to be used by amateurs on a shared basis. Only Australia supported this proposal.

Readers will no doubt appreciate that the North and South American nations are pledged to press for the full 300 kc/s. allocation at 7 Mc/s. In this they are backed by China.

Russia and France propose a reduction to 150 kc/s., with no sharing above 7·15 Mc/s., whilst the Netherlands and Sweden (speaking for the Scandinavian countries) propose 200 kc/s. with no sharing.

Before the Conference opened we predicted that our 7 Mc/s. band would be subjected to severe attack by certain European countries interested in propaganda broadcasting. At this writing we have no reason to change our views.

Discussion regarding frequencies between 2·85 and 4 Mc/s. has been desultory except on one never-to-be-forgotten occasion when the U.S. spokesman informed the meeting that he would not, in any circumstances, allow any other Service to encroach into the 3·5–4 Mc/s. amateur band. This declaration was made when the Aeronautical Mobile Service was under discussion. After agreement had been reached on this Service the committee decided to recommend that the other four Services seeking frequencies in this part of the spectrum should have their demands met on a regional basis. Thus, we breathe again.

It is early days yet to say whether our arguments aimed against the U.K. proposal to cut us down to 100 kc/s. on an exclusive basis will prevail, but we feel it is desirable to record at this stage that we have informed the U.K. delegation that 100 kc/s. around 3·5 Mc/s. is totally inadequate for our present needs. We have reason to hope that our points have been well taken.

That is the story to date insofar as Committee 5A is concerned.

Turning to 5B; as stated earlier, this sub-committee is charged with preparing a frequency table from 10 kc/s. to 2,850 kc/s., therefore, the only amateur allocation in this part of the spectrum is our beloved "top-band"—a band which, incidentally, is now barred to our U.S. friends.

We are glad to say that after considerable discussion it was finally agreed to add a footnote to the

Convention agreement giving authority to any nation desiring to do so to licence its amateurs to use a band 200 kc/s. wide with an input of 10 watts in the 1·7 Mc/s. region. We are, therefore, 85 kc/s. down, but it was tough going to get even this concession The U.K. delegates recognised that frequencies in this part of the spectrum are very useful for beginners as they provide facilities for morse instruction and technical investigation.

Those last two words provide a cue for us to discuss the work of Committee 7 (General Technical).

IT'S IN THE BAG—WE HOPE!
Left to right: Group Capt. H. C. Blair (Dep. Director Signals, R.A.F.), G6CL, Col. Eric Cole, G2EC, and our President, G6LJ.

Amateur Service

For the first time in the history of our hobby the Amateur Service has been defined as "*a service of self-training inter-communication and technical investigations practiced by amateurs, that is, by duly authorised persons interested in radio technique solely with a personal aim and without pecuniary interest.*"

The U.S. originally proposed that the word "experimentation" should follow "inter-communication," but after the U.K. delegation had pointed out that the inclusion of this word would make it necessary for the G.P.O. to introduce more stringent examinations, the term "technical investigations" was proposed and adopted. A proposal to add the words "of a non-professional character" did not carry full support so was dropped.

The R.S.G.B. and A.R.R.L. representatives worked in close liaison with their respective delegations before this definition was considered in committee and all have expressed complete satisfaction with the final phraseology.

Amateur Station

The definition of "amateur station" had not been considered up to the time of writing, but it is expected that it will be of quite a simple nature probably "a station in the amateur service."

Amateur Regulations

Every student of the Cairo regulations knows that Article 8 therein refers to Amateur and Private Experimental Stations. There is a proposal before the Conference that this Article should be split so that the two types of stations are dealt with separately. The U.K. will no doubt support this view, but it would seem that as the U.S. has no experimental stations they will propose that Article 8 be modified to cover amateur stations only.

When this story was written Article 8 had not reached the committee stage but it is certain that discussion will take place shortly. As a number of other proposals have been submitted (including one by France restricting the power to be used by amateurs to 300 watts when working between 5 and 40 Mc/s.), it is probable that a sub-sub-committee will be appointed to draw up a trans-actional text based on the decisions reached by that body. The Society's representatives are working in close liaison with the U.K. delegation in regard to this important Article.

Agreements reached by Sub-Committees have to be agreed also by the Committee before they can be regarded as settled.

Caution Needed

May we once again remind members that no *final* decisions of any sort have yet been taken.

IGNORE ALL RUMOURS!

M.O.S. Surplus Transmitters

Below is a further list of members who are prepared to furnish details and circuit diagrams of various transmitters, many applicable to the above scheme.

Cpl. Burden, BRS12952/D2DC, "M" Tp., H.Q. Sqdrn., 2nd (BA) Div. Sigs. Regt., B.A.O.R., Set No. 19 and No. 58 (Canadian).

L. K. Hudson, BRS14999, 54 Sunny Bower, Tottington, Nr. Bury, Lancs. Set Nos. T1196, T1154, R1155, RCA, AR88, RA1B, TR9, T1083, T1131, R1124, TR1143, TR1133, SCR5043.

H. Howard, BRS14464, 7 Berkeley Square, Bristol, 8, RT34/APS13.

* * *

Further to my comments in the June BULLETIN, I have now had the opportunity of seeing the completed orders of the whole country, and in a great many instances, popular sets are heavily oversubscribed, i.e., Set 17, 1131, B2, T1360C, BC338A, RT34/APS13, T39/ABQ9, BC950A, etc. The M.O.S. is endeavouring to share the available transmitters around the various districts on a percentage basis, so many of you fellows are going to be disappointed. Please, therefore, do not blame your county or town representative; it is not his fault, it is the luck of the draw.

* * *

To all County Representatives.—Be sure to write or phone the M.U. before arranging collection, so as to ascertain that the clearance notes on the gear have been received by them, thus avoiding a wasted and expensive journey. G8TL.

Reception Contest

The Contests Committee had made arrangements for a Reception Contest during October, but in view of the poor response in similar events, namely: B.E.R.U.—7 entrants — and Five Metre Contest—2 entrants, it is not intended to organise the proposed event unless sufficient evidence of support is received by the end of August.

Members interested in such an event are requested to write in without delay to the Secretary of the Contests Committee. Mr. C. J. Greenaway, G2LC, 56, Jubilee Drive, S. Ruislip, Middlesex. If the response is sufficient, the committee will be pleased to go ahead with the original proposal.

A Variable Selectivity I.F. Amplifier Using Modified R1155 Transformers

A. J. BAYLISS, B.Sc. (G8PD)

Introduction

THIS article describes a method of modifying the I.F. transformers used in the well-known R.A.F. type R1155 receiver to give a variable bandwidth. Bandwidths of ± 10 kc/s., ± 5 kc/s. and ± 2½ kc/s. at 6db down may be obtained by using a pair of modified interstage transformers (ref. 10K/12136) in conjunction with an unmodified diode transformer (ref. 10K/12137). The bandwidth may be selected by means of a three-position switch on the receiver front panel, and covers a range of bandwidths suitable for most purposes from high quality broadcast reception to short-wave telephony reception.

Modification

As used in the R1155 receiver the I.F. transformers are "top capacity" coupled. In the modified form, this top coupling capacity, of 2 *p*F, is removed, and instead, the "cold" end of the primary winding is taken up and wound round the "cold" end of the secondary coil former close to the coil to give inductive coupling. A total of six turns of No. 34 D.S.C. wire should be used (although the exact wire gauge is not critical), tapped at one turn and 3½ turns. The photograph in Fig. 1 shows both sides of the modified I.F. transformer and gives a clear indication of the layout of the components and how to use existing anchoring tags for connections. Fig. 2 (*a*) shows the theoretical circuit diagram of one complete modified I.F. transformer, and Fig. 2 (*b*) a sketch of the connections. It should be noted that when the three-position switch is connected to the one-turn tap the bandwidth is narrowest, and when connected to the sixth turn the bandwidth is broadest. Care should be taken to copy the construction illustrated in the photographs as closely as possible so as to avoid the rather unpredictable effects of stray capacity coupling.

The single pole three-way switch wafers should be mounted below the I.F. transformer so that the connections are as short as possible in order to minimise the risk of instability.

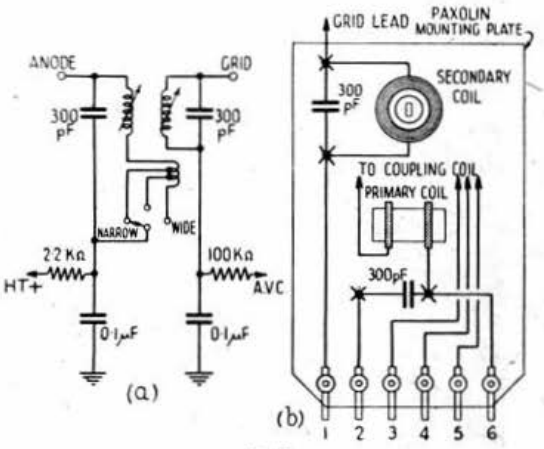


Fig. 2.

(*a*) Theoretical Circuit of one complete modified I.F. transformer. (*b*) Connections of I.F. transformer: 1. A.V.C.; 2. H.T. and switch rotor; 3. ± 10 kc/s. tap; 4. ± 5 kc/s. tap; 5. ± 2.5 kc/s. tap; 6. anode.

Complete I.F. Amplifier

Fig. 3 shows the circuit of a complete I.F. amplifier using two modified and one unmodified diode transformers. The circuit will give enough gain for most amateur requirements and has selectivity characteristics as shown in Fig. 4.

Tuning Up

The method of tuning up the I.F. amplifier is as follows: Set the bandwidth switch to the ± 2½ kc/s. position, and with a 560 kc/s. modulated signal feeding into the mixer grid, adjust all the six dust-iron core trimmers for maximum output as indicated by a suitable output meter. No further tuning is required on the ± 5 kc/s. and ± 10 kc/s. positions.

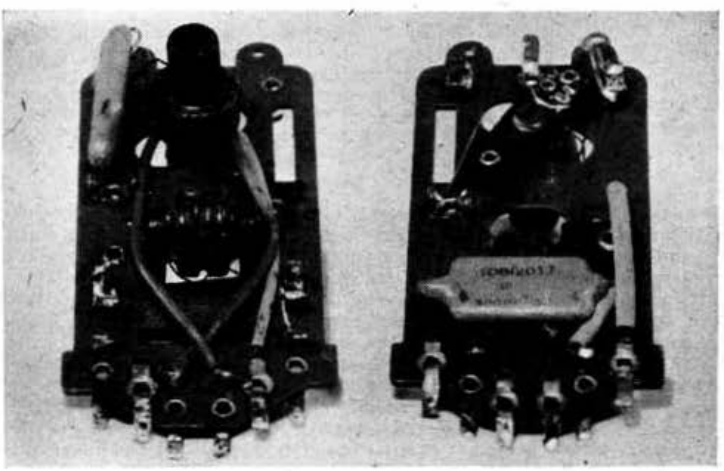


Fig. 1.

View of both sides of Modified R1155 Receiver. I.F. transformer type 10K/12136.

Other Bandwidths

Bandwidths other than those shown here may be obtained by varying the number of turns of the primary which couple with the secondary coil. Further bandwidth variations may be obtained by using different combinations of taps on each of the transformers.

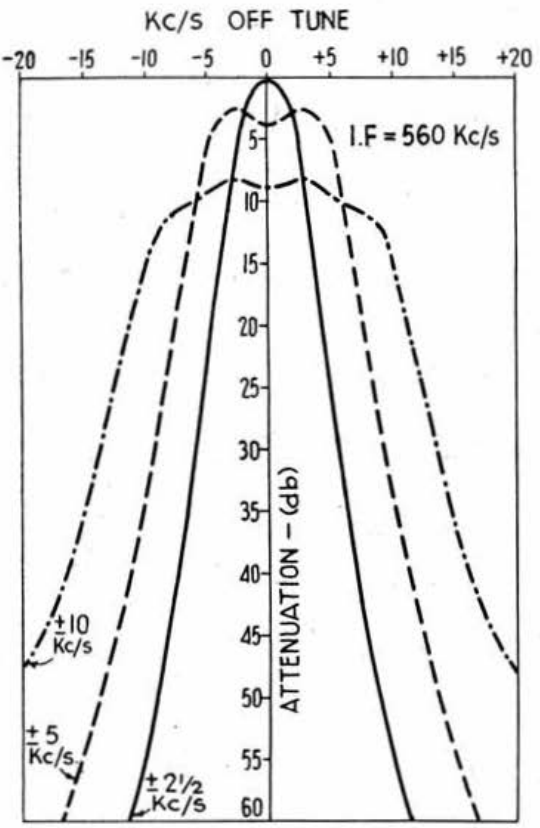


Fig. 4.
Selectivity Curves for I.F. amplifier shown in Fig. 3.

V.H.F. Double Superhet

The ± 10 kc/s. bandwidth position of the amplifier would be very useful if the amplifier described in this article were to be used as the second I.F. amplifier

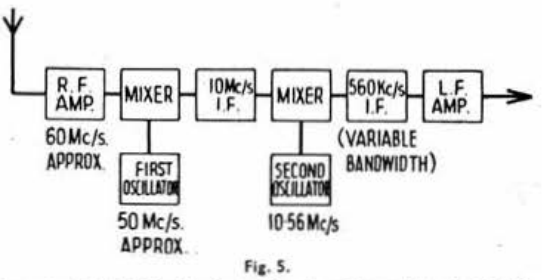


Fig. 5.
Suggested V.H.F. Double Superhet using the variable bandwidth (560 kc/s.) I.F. of Fig. 3.

of a V.H.F. double superheterodyne receiver covering the 5-metre band. A first I.F. of about 10 Mc/s. would give good image suppression, and the second, 560 kc/s. I.F., would give good adjacent channel selectivity, with sufficient bandwidth to cope with the frequency drift of modern transmitters and receiver local-oscillators. Fig. 5 shows a block diagram of the suggested double superheterodyne receiver.

SERVICE EQUIPMENT.

THE EDITOR WILL BE PLEASED TO CONSIDER FOR PUBLICATION FURTHER ARTICLES DEALING WITH THE MODIFICATION OF SERVICE EQUIPMENT TO AMATEUR NEEDS.

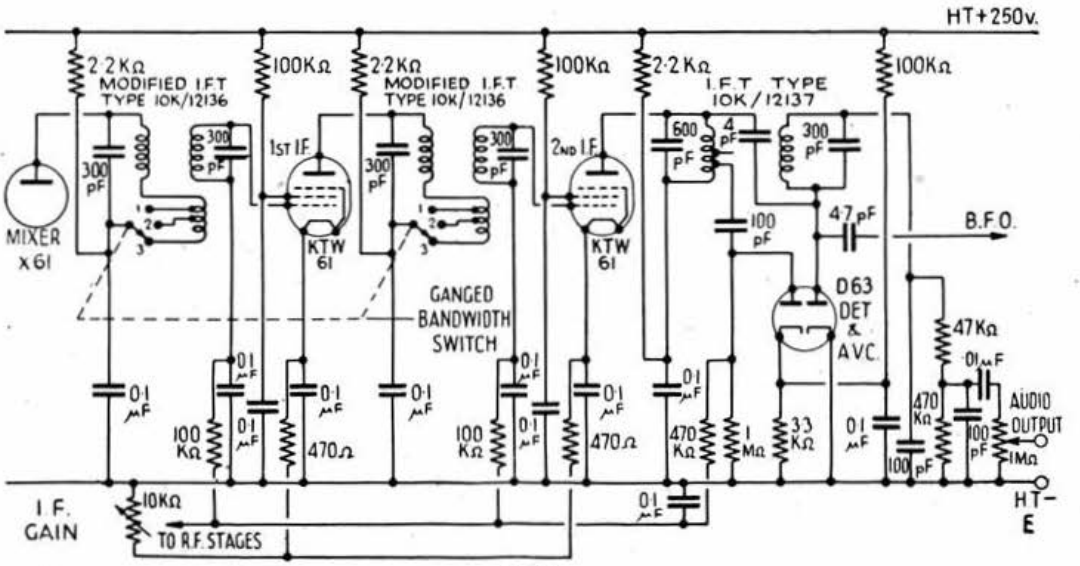


Fig. 3.
A complete I.F. Amplifier using modified R1155 I.F. transformer. Switch positions: 1. ± 2.5 kc/s.; 2. ± 5 kc/s.; 3. ± 10 kc/s.

CALCULATING AERIAL LENGTH

ERIC JOHNSON (G2HR)*

MOST amateurs are satisfied with using an empirical formula for calculating the length of a half-wave or multiple-wave aerial. It is usually accepted that, for fundamental resonance, the radiator should be approximately 95 per cent. of the full theoretical length. For harmonic working, where " end-effects " obviously only influence one half-wave of the system, the practical dimensions more nearly approach the theoretical maximum. For " long-wire " aerials, where the radiator accommodates many half-waves, no great error will arise by making the aerial 100 per cent. of the free-space length.

The usual back-garden precludes many amateurs from erecting anything larger than a fundamental wire for 7 Mc/s., using it as a second and fourth harmonic for 14 Mc/s. and 28 Mc/s. respectively. It is better to calculate the length for one of the higher-frequency bands, and let 7 Mc/s. look after itself where, in any case, serious work at the moment is more than a headache. Bearing this in mind, the writer erected an end-fed Hertz for working on 14,104 kc/s. The usual formula gave a length of roughly 68 feet. The aerial was rather on the low side, and was uncomfortably close to sundry earthed objects. This gave one the feeling that " end-effects " might well influence the resonant frequency more than the formula allowed for. Trial and error method is a lengthy one, and was quickly discarded in favour of an idea where one could see what was happening.

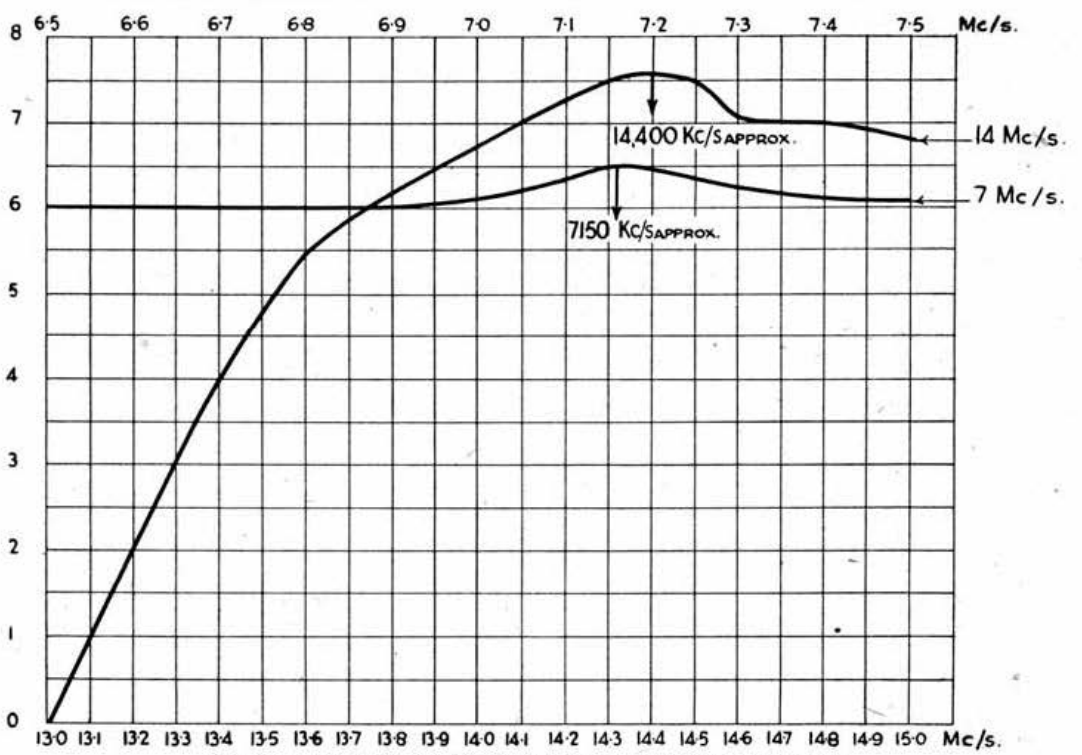
It was therefore decided to excite the aerial with a calibrated low-power oscillator. An ex-R.A.F. type W39B wavemeter immediately suggested itself. It is well shielded and calibration is quite accurate. However, no provision for external coupling is made, but sufficient excitation for the aerial was forthcoming by fixing a rigid one-turn loop about six inches from the wave-meter coil, leading the aerial through the shielded case with a small stand-off insulator. Tighter coupling would, of course, upset calibration. As the wavemeter is designed to work off a 12 volt H.T. supply in conjunction with 2 volt valves, no qualms need be felt on interference grounds, quite apart from the very loose coupling employed.

For the actual measurement of the radiation on any desired frequency an " S "-meter was fitted to the receiver, a Sky-Champion. An initial test showed a negligible deflection from the wavemeter radiation itself. With the aerial connected, readings were then taken over the range 6.5–7.5 Mc/s. and 13–15 Mc/s. The vertical scale is purely an arbitrary one, but clearly shows the resonant points. It is apparent that the fundamental resonant frequency is very flat, and comfortably covers the whole of the 7 Mc/s. band. The second harmonic on the 14 Mc/s. band is much sharper. Particularly noticeable is the slow falling-off on the H.F. side of resonance which suggests that it is better to cut a radiator a trifle on the long side for full band coverage. It can also be seen, although the effect is not pronounced, that the second harmonic is not exactly twice the fundamental frequency, as is borne out in practice.

This method of determining aerial length makes no claim of razor-sharp accuracy. One objection is, of course, that receiver sensitivity may vary from point

* *25, Clivedon Road, Highams Park, E.4.*

continued on page 8



Calculating aerial length by means method of a calibrated low-power oscillator.

HAMS ACROSS THE SEA

An account, from the pen of our General Secretary, of an International "Hamfest" held in Atlantic City during the period of the International Telecommunications Conference.

WITH nearly 1,000 delegates from 75 nations in attendance at the Conference, it is not an easy matter to discover those among them who are licenced radio amateurs, for the simple reason that Government Delegates, with few exceptions, do not identify themselves by lapel badges.

Shortly after their arrival in Atlanic City, the R.S.G.B. representatives approached the local group, headed by Larry Norcross, W2PXZ of Samess Point, and suggested to them that a "Hamfest" would no doubt provide an opportunity for the Conference Delegates and the local amateurs to get together. The suggestion was quickly followed up with the result that on Saturday, June 7, amateurs from 14 nations met together at St. Paul's Methodist Church Hall, Atlantic City. The pastor of the church is the Rev. Stanley Wagg, W2JBF and it was largely due to his wholehearted co-operation that this gathering—the most representative amateur meeting ever held in the United States—took place.

invited to speak upon Amateur Radio activities in their own country and to extend greetings from their Society.

Among the speakers were: Kenneth B. Warner, W1EH (Secretary A.R.R.L.); Stanley Lewer, G6LJ (President, R.S.G.B.); John Clarricoats, G6CL (Secretary, R.S.G.B.); T. R. Clarkson, ZL2AZ; L. Elliston, ZL2XL; G. M. Sibletz, YV5AC; C. Cordovez, HC1FG; J. J. Roma, XE2DW; R. D. Prescott, HP1A; G. de Ring, PAØRG; P. de la Llama, CO2PLL; A. Guildermann, HB9DB; K. T. Chu, C1KT; B. A. Rorholt, LA1GA; A. Guimaraes, CX1CC and A. Navatta, LU5AQ.

Many speakers referred to the importance, at the present time, of international Amateur radio and to the whole-hearted support which their Government is giving at the Conference to the Amateur Service.

LA1GA spoke of the achievements of the radio amateurs in Norway during the German Occupation.

HAMS ACROSS THE SEA.

Amateurs from fourteen nations figure in this photograph taken on the occasion of the international "hamfest" held in Atlantic City, New Jersey, U.S.A., last month. Mr. K. B. Warner, W1EH (Managing Secretary, A.R.R.L.), is seated immediately below Mr. John Clarricoats, G6CL (General Secretary, R.S.G.B.), 7th from left 2nd row. Mr. S. K. Lewer, G6LJ (President), is 6th, Capt. Rorholt, LA1GA, 8th, and Mr. Fred Hartley, W2MI (ex W3MD), 9th from left in the same row. Mr. Clem Giberson, W2PG (ex W3PC), through whose station G6CL and 6LJ have maintained contact with home, is 11th from left in back row. Mr. A. L. Budlong, W1BUD (Assistant Secretary, A.R.R.L.), stands at extreme left.

Conference Co-operation

The problem of giving wide publicity to the meeting was solved by the Conference Secretariat who agreed to prepare and distribute an English and French version of the general invitation to all Conference Delegates.

Many Tongues

The early stages of the proceedings were given over to general rag-chew and introductions. QSL's were signed and numerous schedules arranged between the locals and visiting amateurs. The secretary's running diary:—"Atlantic City Adventure" bears witness to the international character of the meeting for it carries the autographed signatures of all who were present.

Roll Call

With W2JBF acting as Master of Ceremonies, representatives of all nations in attendance were

Incidentally, Capt. Rorholt is one of the very few Norwegians who hold the British Distinguished Service Order.

Although, for obvious reasons, Conference matters could not be discussed at length, several delegates made it clear that the interests of the Amateur fraternity were being well looked after at the Conference by the A.R.R.L., R.S.G.B. and other representatives.

The Chinese delegate (C1KT) spoke of the rapid growth of interest in Amateur Radio in China and gave advance information of an International Amateur Radio Exhibition to be held in Chungking on May 5, 1948. He appealed for exhibits from other National Societies.

The U.S. Amateurs present—upwards of 50 in number, came from many parts of New Jersey and were pleasantly surprised to hear from one of the South American representatives that U.S. 6-metre signals are frequency heard in the Argentine.

The Lighter Side

The formal proceedings were followed by an hour of magic presented by W2JBF assisted by G6LJ who provided the incidental music and by G6CL who acted as stooge for certain very effective illusions.

* * *

It was most gratifying from the viewpoint of the Society to find that many of those present were anxious to join our ranks. During the short time the Society's representatives have been in the States, the R.S.G.B.-United States membership has trebled; an indication of the interest shown in Society activities. There is, furthermore a general desire on the part of American Amateurs to help their British colleagues in any way that may be possible and to that end many of those who have for long been hardened 75-metre phone addicts—content to work locally—are now preparing for DX operation on 28 and 14 Mc/s. in order to associate more intimately with "hams across the seas."

International Co-operation.

The Atlantic City get-together and the many friendships it has produced will, if it has not already done so, lead to a very much wider appreciation of International Amateur Radio, which, in its turn, will bring about closer liaison between the many National Societies which form the I.A.R.U.

When we return to England it is hoped to publish in this journal a more detailed account of our amateur as distinct from our official, activities whilst in America. J. C.

Prestatyn ORM

Mr. E. G. Foulkes, GW5FU, Crown Hotel, High Street, Rhyl, the R.R., would be glad to know as soon as possible how many visitors propose to attend the Prestatyn O.R.M. on August 17. Those intending to do so are requested to get in touch with him as soon as possible.

CALCULATING AERIAL LENGTH—*concluded from page 6.*

to point and thus vitiate readings. It is unlikely, however, that receiver response will vary seriously over the comparatively narrow frequency coverage required for the measurements. Once having determined the resonant point, it is, of course, quite easy to trim the radiator to the required length. The end-fed Hertz, where the radiator is brought right in to the station, is particularly suited to this form of measurement. Feeders can be rather unpredictable and would certainly make observations more difficult.

NORTH EASTERN REGIONAL
— MEETING —

COUNTY HOTEL : : NEWCASTLE

SUNDAY, AUGUST 24th, 1947

Assemble	2. 0 p.m.
Meeting	3. 0 p.m.
High Tea	5. 0 p.m.

Discussion after.

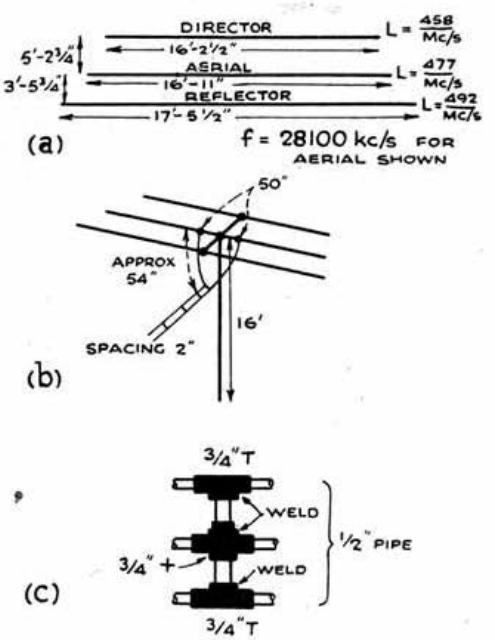
Tickets from T. ORR, G3IV ,31 Grange Park Avenue, Sunderland, or N. COOKNELL, G2CO, 25 Ridley Avenue, Blyth, or any T.R. 5/- each.

Bradford Amateur Radio Society

Members join in sincere congratulations to our President, Sir Edward Appleton, who was recently admitted to the Roll of Honorary Freemen of the City of Bradford. The Society was represented at the ceremony by Messrs. C. A. Sharp (G6KU), Vice-President and J. H. Macdonald (G4GJ), Secretary. Sir Edward, in referring to the eagerness of the scientist to adapt war-time advances to benevolent ends, said that it seemed essential for the public to make its own effort towards understanding science and that only too often the average citizen was apt to regard science as magic.

Dagenham Amateur on Seven Metres!

On Wednesday, May 28, 1947, G2AKY of Dagenham, Essex was interviewed in the B.B.C. Television feature programme "Picture Page." Questions concerning the number of amateurs in England and their uses were put to G2AKY. 2AKY's rig and receiver were shown to viewers and an assortment of QSL cards were pinned to a board and formed the background of the picture.



"THE PLUMBER'S DELIGHT"

It is thought that these three little pictures give all the necessary information. You just make it and the aerial does the rest! With acknowledgements to the Port Elizabeth Radio Association, South Africa.

Marconi CR100

Mr. Ian Shaw, GM3ANO, 167 Perth Road, Cowdenbeath, Scotland, has full service data on this receiver and will be pleased to assist any member requiring help or advice.

Congrats

● To Mr. and Mrs. Neville, of Norwich, on the arrival of a son.

● To W. W. Turner, G2CBH, and Mrs. Turner of Romily, Cheshire, on the arrival of a son on May 5.

THE MONTH ON THE AIR

By A. O. MILNE, G2MI*

Comment

"YOU and who else"?—Several witty drawings have been received from members who, like us, can see no sense in this "We" business. The explanation offered by one ingenious wag is that these people have become wedded to their hobby and that the description "We" refers to the object of all their love and devotion.—"Who are we?" he asks: "Why me and my lovely transmitter!"

The Darkness Effect

The keeping of regular schedules with a specific station at the same time every day is a very interesting experience. The regular 10.15 p.m. D.B.S.T. contact between W2PG and G2MI is a case in point. In particular has it been noted that S9 low angle signals can be exchanged until around 10.40 p.m., when the American end begins to disappear into the mush. As darkness falls American signals reappear and gradually build up in strength, at the same time signals from this side begin to fade in America. After half an hour of difficulty at each end, by 11.30 p.m. signals are once again back to their previous strength and now appear to come in at a much steeper angle. The whole period of dislocation occupies about an hour, whilst the "E" layer goes off duty and the "F" layer punches the clock.

Incidentally we would like to take this opportunity of thanking the many hams all over the country who rang G2MI on the night of June 13th to tell him that G6CL was calling him over W2PG. Very fine co-operation, chaps! Ham spirit with a capital H and much appreciated.

Kufra

Here at last is the full story of Kufra from the O.M. himself.

Kufra is a large oasis situated 23° N and 24° E, 400 miles of rock and sand from Wadi Halfa and 600 miles of the same stuff from Tobruk. Population consists of 5000 very pleasant Arabs, two French officers, one British Officer and a R.A.F. "met" unit of four men. John Oliver, operator of the station, has just arrived back in this country after 2½ years there as a W/op mechanic.

"On Christmas Day, 1946," he says, "we were all very lonely and one of the boys said: 'I wish your radio could contact England.'

"The service tx would have needed considerable modification, but I had a little 20-watt T1083 with me, hitched it up to a length of wire and some batteries and did the trick.

"Later on we made some very pleasant contacts and we received many cards. Please assure members that in due course they will receive one in return.

Kufra has now passed into history, shall we say, for the time being, but contact with home and a little QSP worked wonders with a band of lonely men far from home."

Notes and News

G5RF gives OY5GS as George Sinclair, Postal Office, Arsuk, Box 55, Greenland. Position, 48°W, 61·03°N, on the S.E. Coast, but why not OX?

GM2UU has worked VE8MZ at Aklavek, N.W.T., at 16.45 G.M.T.—14060 kc/s.

G5CI has a nice selection this month. CR7AL, 14150, Box 251, Lourenco Marques. PZ1OY, Box 637, Surinam. LZ3ZA, 14075, who says he is in Sofia.

YI7G is now MD6DJ although still at Shaibah. All service YI's are now using MD6. He expects soon to be moving to Libya. Here are a few interesting frequencies. VS2AL, 14070, PK1HX, 14065, XE1BC, 14060, PK1RI, 14040, VS1AQ, 14115, VS1AS, 14090 and PK2DL, 14100.

G6WY is now VE3BWY, address, Rev. H. A. M. Whyte, 214 Delaware Avenue, Toronto, Canada.

From G8VR we have G3BMJ/VS7, 14100, K7JDA/KP4, 14100 and EA7A on 14120, who says his address is Box 101, Cabo Yubi, Rio de Oro. He gave the same QTH to G6ZO, who says he will believe it when he sees the card. 'ZO is of the opinion that EA7A is the latest manifestation of the same joker who has already pulled our legs with CR8AC, FL8AE, W6ODD, and LI1A. We don't know!

G8VR and G2YS give FQ3AT (operator F3AT) on 14090, as Ivan Pastre, Bas Aérienne, Fort Lamy, Tchad, Equatorial Africa. CR4AA has QSL'd, but the card bears no mention of a QTH, only—"QSL via REP."

VS2BU and 2BJ are both looking for G's on 28, QSL via R.S.G.B.

J3WGT, ex-W8WGT, recently worked G6AY and G6XP, said he is on the look-out for G contacts and especially G4GY.

Apropos an editorial note about Spain last month: a card has come through from EA5AQ, quite open and bearing his QTH for all to see. This is the only one, however, and we still have no information on the Spanish Society, if any, or on any QSL Bureau in that country.

VS7GH is now back in this country. Says there were 16 stations active when he left, all licensed for 100 watts, most of them grouped around Colombo. The main bugbear is QRN from fans, car ignition and the frequent thunderstorms. 807's are a few bob each and plenty of ex-service gear is available cheap.

Via GM3RL comes news from RAEM of a new Polar Club station UA1KEB at Amderma City, on the South coast of the Kara Sea.

G6RC tells us that BRS6928, of Wallington, who recently went to South Africa, is now ZS1FH.

Cards are through from YT6MEN—W6MEN, working from Split, Yugo-Slavia.

XABU is now MD5BO, and says so far as he knows there are no more hams in the Dodecanese.

G3BRH, ex ZD2K/ZD4AD says he went off the air from Nigeria in January, 1947, and has no knowledge of the station now using the call ZD2K. All his own QSO's have been QSL'd. BRS11494 says YS3PZ is a nice one on the HF and LF ends of 14 Mc/s. He comments on the VFO's who swamp VR6AA's frequency, even after he has definitely stated "QRT." '11494 suggests it would be a good idea if some people could read morse!

G6NB has been doing a little QRP work. With 4 watts to an 807, he has worked VS1BX, VK3NM, VK5KG and VK6RF on 28 Mc/s., ZD4AI, CN8EZ, PY2KT, W6LHN, CR6AI and UD6BM on 14 Mc/s. Aerial was 50 ft. long, 20 ft. high.

GW6AA suggests rare dx should say what frequency they are going to listen on for replies. He thinks that a quick QSY to a specified frequency would spread the calling stations a bit more widely and keep them off the dx station's frequency. It's a very deep one, but you see what he means?

BERS195 says VK9 has been reallocated for Papua. He has heard many G's on 7 Mc/s. usually working local contacts; here are a few G5LP, 3UV, 5FA, 3TO, 6PW, 3BLZ, 3SA, 8OJ, 2HAC, 4AY,

Continued on page 12.

* 29 Kechill Gardens, Hayes, Bromley, Kent.

DX PEARLS—No. 3

VS4JH-LABUAN ISLAND

By JOHN A. HUNT (G2FSR)*

IN February, 1946, the writer was licenced to operate with a power of 25 watts in the 28 Mc/s. band, from an army station in Labuan Island, which is about three miles off the coast of British Borneo. This followed a spell of "under-cover" activity in the late autumn of 1945 on 14 Mc/s.

Equipment was not easy to acquire at this stage, in fact, much "scrounging" was required in order to construct a simple 807 tritet/power-doubler. H.T. voltage was derived from a combination of batteries, and the heater voltage was "borrowed" from a small Service Transmitter. The receiver which was two-valve, minus slow-motion or band-spread, made tuning on 28 Mc/s. somewhat difficult, but nevertheless, results were very encouraging. Contacts were possible under favourable conditions with all continents, although DX operation was usually confined to the evening hours because of the heavy interference caused by the Service transmitters, which normally operated in the shack throughout the day.

Early in the year, European stations could be heard from 11.00 G.M.T., peaking to maximum at 14.00. It was not easy to receive these stations on the two valver, in fact, only when conditions were exceptional could the G's be heard sufficiently well to call them. The first European contact was with Jim Kirk, G6ZO/I, who later disclosed that he had been calling VS4JH for ten days!

This QSO proved that signals were getting out reasonably well, so an attempt was made to secure a better receiver. After a fruitless search for a communications type, it was decided to compromise by using an Australian BCL receiver in conjunction with a single valve converter for 28 Mc/s. This more or less permitted a signal (once found) to be held, although reception was accompanied by an S7–8 noise level, which resulted in periods of temporary deafness for the operator!

On very rare occasions an RCA, AR88 was available, but these periods always seemed to coincide with a spell of poor conditions, so little was gained in this respect.

Early in May, a quantity of salvaged Australian and Japanese gear was obtained, more than sufficient to construct a larger transmitter. An application for permission to use 100 watts was approved, and the new rig took shape. This time the final employed an 813, which really did a fine job, despite the complete lack of screening. The equipment was assembled into a wooden rack, constructed from old boxes secured from the canteen. The accompanying photograph shows the result.

An explanation as to how the change of country prefix took place may help to dispel any illusion cherished by a few amateurs who may still think that they worked not one, but three rare countries!

Having nothing better to rely upon than rather distant pre-war memories, the prefix VS5 was used prior to being licenced, and for a time thereafter. On occasions the prefix was queried, but on the whole, everyone appeared satisfied. It was presumed therefore, that VS5 was correct. However, shortly after being licenced, instructions were given by the C.O. to change to VS3. In spite of protests that this prefix was incorrect the operator was compelled to use the new call, with the result that all stations previously contacted immediately assumed that he had moved to another area, and the clamour for QSL cards started all over again! Needless to say, it was extremely difficult going into details over the air, but with the help of certain other amateurs, it later became possible to make the reason known to the R.S.G.B., A.R.R.L., W.I.A., and other amateur

organisations. Eventually, after the R.S.G.B. had explained the position to the local PMG, the prefix VS4 was issued. This naturally led to further confusion for a time, but finally VS4 became properly recognised.

Aerial Systems

To continue with the story, a few words on the aerials used may be of interest. Apart from a short spell when a centre-fed doublet with resonant feeders was in use, all work was done on co-ax fed dipoles, the first being 15 ft. above ground and the last 45 ft. high.

In the initial stages, no co-ax was available, and owing to the unfavourable location, single wire feed was out of the question. This fact enforced the use of some form of transmission line, and the above-mentioned doublet was adopted. Spacers were cut from young bamboo shoots, the latter being secured with the aid of two native lads and a two ounce tin of Australian tobacco! The construction of this 60-foot feeder involved two days of sweat and toil in the merciless tropical sun, so hot that soldering irons were hardly necessary! Finally the job was completed, and the aerial performed well until scrapped in favour of co-axial feeder line.

Early in June, the station was moved to the opposite end of the island, but owing to pressure of work in other directions, nothing further was done on 28 Mc/s. The new location was situated in a clear patch of ground about 80 feet above sea-level, a belt of surrounding trees some hundred feet distant towering upwards for 75 feet.

The Opening of 14 Mc/s

With the opening up of 14 M/cs. on July 1, plans were laid to begin operations on that band. The series cathode modulation previously employed with varying success on 28 Mc/s. proved even more satisfactory on the lower frequency, with a complete absence of feed-back troubles. This system of modulation was employed owing to a complete lack of components needed for the more conventional methods. Series Cathode Modulation required neither power supply nor modulation transformer. It was not possible, however, to run full power on 'phone, consequently, all 'phone transmission were made with inputs of from 50 to 75 watts, compared with the 150 watts on CW.

Late evening of the Great Day found VS4JH idly tuning 14 Mc/s. Apart from a quick test QSO with a Chinese station in Shanghai, the rig had not been put on the air. Suddenly the Gs started to come through. On went the transmitter, down went the key, and out went the first CQ on 20,

* G2FSR, 2 Parkhill Road, Chingford, E.4.

and back they came! It was a great thrill to be able to contact England so easily on this band, making home seem very near. A few Gs were worked that evening, but as our power went off at 23.00 hrs. (local time), it was not possible to continue. After some wheedling, permission was obtained to switch on our generator early next morning. To cut a long story short, such was the activity VS4JH did not leave the air for nearly 18 hours! Conditions were excellent and all continents were worked several times during the first day.

From then until the middle of August, every available moment was spent on the air, reaping rich rewards, and bringing the countries worked total up to 84.

One Saturday night, G2MI relayed my transmission via land-line to my family on the other side of London. Although this sort of thing took place frequently from Services operated Amateur stations all over the world, I shall always regard this as my greatest experience in Amateur Radio.

One might think that being in a remote location was all and more that any DX enthusiast would want. This was not so, however, because as soon as work commenced we were at the mercy of the "VFO merchants." For hours they hovered on one's frequency, almost snarling and attacking in force at the conclusion of each QSO. These gentry could be excused, but not so those who deliberately broke in during actual contacts, swinging their VFO's across to attract attention, or the young hopefuls who sent in cards for contacts which never took place. Two stations (not British), even stooped to a form of bribery in order to secure a QSL.

With genuine regret, the station was dismantled on August 15, 1946, and we bid farewell to the isle of Labuan after many happy months of amateur Radio. One day, perhaps, I shall return, who knows?

In conclusion, may I just say thank you, to G2MI, G6ZO, VK2RA, WIFH and TI2OA. Each one of these amateurs did a lot to make "Ham Radio" well worth while for me in that far-away equatorial island, where the monkeys, parrots, and local inhabitants are no longer disturbed by the queer noises emanating from a queer little tumble-down tent in the jungle.

THE MONTH ON FIVE

By W. A. SCARR, M.A. (G2WS)*

THOSE who expected big things from the 5-metre band this midsummer have been far from disappointed, as conditions have almost certainly exceeded anything previously experienced in the history of amateur work on these frequencies. The last few days in May and the first three weeks in June produced so many outstanding results in the way of DX contacts that a full record is quite impossible. Reports received are summarized under the calls of the foreign stations which were most in evidence, though these only represent a fraction of the QSO's effected by British stations during the period.

Outstanding were the Algerian pair FA8IH and FA9BG. Peaking about 8 p.m. on the best days, their signals were loud and steady for long periods and were recorded by G hams all over the country. G6DH (Clacton) and G5BD (Mablethorpe) were amongst the first to work FA8IH early in June.

The Italians came up at the end of May. I1XW was worked by G5BD and G6MI (Blackpool), I1AK also by 6MI and I1DA by GM8MJ, GM3BDA, G5BD and others. Incidentally, I1DA was also transmitting on 225 Mc/s. and is anxious that G's shall listen for him on that frequency when conditions are favourable.

W5BSY/MM, a ship sailing from Europe to the States, gave thrilling contacts to one or two G's who were lucky enough to be on the air at the right time. G6DH was his first G, QSO and G5BD hooked him on the same outstanding day, June 13. OK3IT sends an imposing list of G's heard on June 7, as follows: G2MR, 2NH, 2XC, 5BD, 5BY, 5MP, 6DH, 6LK, 6VX, 8DM and 8VB.

On June 23, PAØUM worked ZB1AC, a first Malta/Europe contact on the band. G6DH has been keeping daily skeds with PAØPN and other PA and ON stations at 06.00 and 21.00 G.M.T.

In addition to this "sporadic-E" working, the hot weather has produced excellent tropospheric bending and G DX stations have been heard at remarkable strengths. G5BD has at last succeeded in working G5BY, the distance being 285 miles.

Turning to local affairs, the Slade Radio Society recently held its meeting "via 60 Mc/s.," the secretary and others taking turns at the mike and addressing the other members listening on 5-metre receivers at various QTH's in the locality. Later G2ATK/P continued transmission whilst travelling by car from one station to another.

Contacts with F and ON were too numerous to mention but a list of QTH's and frequencies (received via BRS3003) may prove useful for checking purposes.

PAØFR	Hilversum	59·72	Mc/s.
PAØHQ	Rotterdam	58·65	,,
PAØGK	Delft	59·30	,,
PAØHL	Eindhoven	59·16	,,
PAØUM	Elburg	58·50	,,
PAØMU	Apeldoorn	59·30	,,
PAØUN	Eindhoven	58·60	,,
ON4KN	Oudenarde	56·10	,,
ON5G	Near Antwerp	58·45	,,
ON4IF	Antwerp	56·00	,,
ON4T	Antwerp	57·12	,,
ON4KD	Lokeveh	56·67	,,
ON4TD	Ghent	58·50	,,
ON4DJ	Knocke	57·80	,,

Dr. Siljeholm, SM5SI, Ängby, Sweden, writing to G6OT, reports that he is keeping a daily sked with SM5FI (90 miles). Five-metre activity is increasing steadily in Sweden. Italian stations have been contacted by SM5SI and SM5FS has worked G5TH.

VU2LR, Delhi, reports that he is operating regularly on 5 and 6 metres with automatic C.W. and 80 watts input. Crystal frequencies are 51·6 and 56·34 Mc/s. No other VU stations are active on these bands says 2LR, though VS7EV in Ceylon is keeping skeds on 56·016 Mc/s. VU2LR thinks there is a reasonable chance of his signals being heard in Europe during 1947.

Finally, a reminder about Field Day (July 20). Those who intend to compete will already have made preparations. Fixed stations are urged to spend as much time on 60 Mc/s. as possible on the day and to listen for portable calls. Any QSO with a portable station should include the QTH of the fixed station, however well-known the latter may be!

* 8 Beckenham Grove, Shortlands, Kent.

South-Western Regional Meeting, May 1947

Numerous groups of members all wearing their R.S.G.B. badges were to be seen assembling outside the Beach Hotel, Weston-super-Mare, for the first South-Western Regional meeting, from 11 a.m. on May 11, enjoying the delightful morning sunshine and a ragchew at the same time.

An excellent attendance of 104 was recorded, though reservations were made for only 70 to 80; the catering arrangements managed to cope with the unexpected increase in the attendance.

Large parties from Bristol, Cardiff and South Wales, Gloucester, Cheltenham, Stroud, Taunton, and Swindon came by devious routes, some by bicycle, car, coach and pleasure steamer.

Headquarters was represented by Messrs. A. O. Milne, G2MI, C. H. L. Edwards, G8TL and Dr. Bloomfield, G2NR.

G2MI gave details of the Tele-communications conference, the QSL bureau and news from Headquarters, including the continued difficulties affecting the publication of the BULLETIN.

G8TL, supported by G2NR, dealt with the disposal scheme under the Ministry of Supply and answered several questions on this subject. The applause which greeted G8TL at the conclusion of his talk, truly signified the appreciation of all members in the Region for the excellent job both he and G2NR are doing.

After an excellent tea, many of the members enjoyed visits to the stations of G6BY and G8GB, admiring the excellent equipment and also the truly magnificent locations of these two stations.

THE MONTH ON THE AIR—(*concluded from page 9.*)

2BYC, 2DOW, 3APQ, 2TJ, 2SF, 2CHI, 3BFC. More details if desired from Eric Trebilcock, Box 12, Wynyard, Tasmania.

VS1CA, ex BRS14234, is another VS looking for G's.

VS6AA hears MX2AG on practically all day, but he never gives a QTH, except Korea. Says HS1AL is in China National Aviation Corp. is ex-XZ2LY with 56 watts to a 813. QSL to Mr. Jonas Eddie, c/o C.N.A.C., Foochow, China. All our rare dx is local stuff in Hong Kong. You see it all depends on what you mean by dx!

VS7PF, ex-G8PF, is S/Ldr. Bennett, R.A.F., Negombo, c/o G.P.O., Ceylon. On 28 recently worked VS1BG, using a 60-watt bulb as aerial. Disconnected it altogether and still worked him. No other aerial in the vicinity.

Finally comes G6ZO, now in eastern Europe on business. Has worked everything, as usual. VK9BI, ex-VK4BI on 14048, VP3JM, 294 Thomas Street, Georgetown, British Guiana, MX3PA, Radio Shack, 63rd Inf., A.P.O. 6., Unit 3, c/o P.M., Sanfrancisco. VR6AA, 14125, etc. Nelson Dyett, ex-ZL2FR. G2PL was his first G. HS1LN, 14015, Bangkok, Siam. QSL via W6WLG and LA4RA, 14120, Ballstad, Lofoten Is.

QSL Bureau

Burma stations please note that the QSL Bureau for XZ is now Lt. Col. R. M. Hall, c/o Burma Police, Maymyo. Please collect your cards from him.

Ceylon stations please note that VS7JB handles all cards for that country : Mr. J. D. Burgess, c/o Box 349, Colombo.

If the users of extra long and oversize QSL cards would only revert to standard size, how happy we should be!

Congrats

● To Mr. and Mrs. R. W. Rogers, G6YR, of Southport, on the arrival of a YL Junior op.

● To Mr. and Mrs. E. C. Sutton, G8IA, of Darlington, on the arrival of a son—Peter.

LETTERS TO THE EDITOR

DEAR SIR,—It is disturbing to note the ever-increasing number of G-stations who regularly use the 14 Mc/s. Band for local "rag-chews."

Surely it is already overcrowded to a point of suffocation and the offenders in question should have more common sense than to aggravate matters.

When I was operative in the Middle and Near East, there were many occasions when local G's in QSO together were successfully obliterating a DX contact.

As I see it, justification for these hook-ups on this Band is only admissible by :

1. Complete wipe-out of incoming signals due to atmospheric conditions.
2. Extreme urgency of message to be passed.

There are three other Bands which can be used for G to G working with complete impunity and it is to be hoped the 14Mc/s. chatterers will use them in future.

Yours faithfully,
REX J. TOBY (SU1CX–ZC1AR/ZC6–G2CDN)
67, Brockwell Court, Effra Road, London, S.W.2.

GENTLEMEN,—As a radio-amateur—for the time being only receiving, but in the near future also transmitting—I beg for your help.

I am in possession of a *used* reception set, R107. The valves are rather bad by long use.

I should like to buy a new series of valves, but they are not for sale here in Holland and our Government cannot place foreign coin at our disposal.

Many Dutch hams have been adopted by hams of G.B. and of the U.S.A., who help them in rebuilding their apparatus.

Is it possible that a ham of Great Britain will lend me a helping hand by procuring a series of new valves for my R.107 reception set ?

The types are as follows :

4 valves, type ARP34—CV1053—VR53.
4 valves, type AR21—CV1055—VR55—NR48.
1 valve, type 6X5G.

I hope that you will afford your mediation.

Self-evident, I am ready to reciprocate.

Greetings from Holland,
Sincerely yours,
JOHN W. F. SCHREINER.
Westerlokade II, Voorburg, Netherlands.

NFD Film

The Official film party made a round of eleven stations during the N.F.D. weekend and obtained some excellent pictures. Owing, however, to shortage of petrol and film, it was possible to cover only a section of the area around London, extending to Southend in the East and Cambridge in the North. Next year the party intends to cover a different section. It is hoped that by then, conditons will be easier both in regard to petrol and film and that a greater number of stations can be visited.

Can You Help ?

Mr. C. Bradshaw, 34 Thirlemere Gardens, Wembley, Middlesex, is anxious to acquire a circuit of the Canadian 58 set.

Mr. J. Rose (BRS5164) 16 North Bridge Street, Sunderland, is very anxious to acquire back issues of *Electronics*, *Television* and *Short Wave World* for 1937.

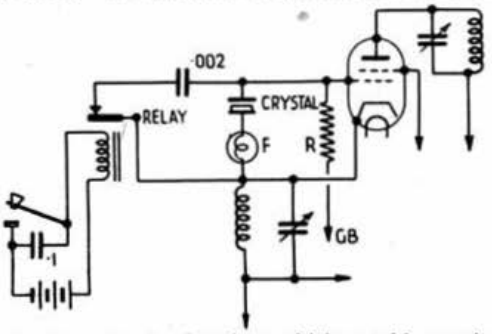
G3B1Z. Mr. L. W. Wilson-Dodd, 37 St. Mary's Crescent, Blackhill, Co. Durham, wants a 6F7 valve and the circuit diagram or any information on the American airborne R-5/ARN-7 direction- finding or homing receiver.

A. Taylor, BRS10803, of 45 Ancford Road, Northfield Estate, Leicester, with data for the 2D21 miniature valve.

CLICKLESS KEYING

By T. LAING, GM6LG.*

A NUMBER of articles describing methods of achieving, what is called, "clickless keying" have appeared from time to time in this and other journals, but one of the simplest and most satisfactory arrangements is that used by the writer since 1930. The method was found to be particularly successful on the pre-war R.N.V.(W.)R. frequencies, where "break-in" was essential. In addition it was the only



method known at the time which would permit a broadcast set to be operated free from interference even when the set was connected to the same aerial as that from which transmissions were taking place. Under such severe conditions no trace of click was heard. A small R.F. choke was, of course, connected at the junction of the two leads.

The arrangement as described can only be employed with crystal controlled transmitters, although no doubt it could be used with suitable modifications for other types of drive. The circuit diagram shows that the arrangement comprises a device for short-circuiting the crystal. This is achieved by means of a relay, placed close to the crystal holder.

In the writer's case, the relay was made up from a low resistance earpiece across the ebonite cap of which was screwed a brass bar. At the centre of the bar a hole was tapped to take a magneto contact. A similar contact was soldered to the diaphragm. The upper contact was screwed down so that it just touched the lower one. Upon applying about 4 volts (from a grid bias battery) to the windings, *via* the key, the contacts open, thus allowing normal use of the crystal.

It has frequently been argued that it is bad practice to key the oscillator stage, but by adopting the method outlined above no trouble whatever should be experienced. Before the war T9 reports were consistently received using an APP4C driving a UX210 to about 40 watts.

When relays are used for keying purposes the leads to them should be kept reasonably short, in fact it is generally advisable to fit suppressors to the operating contacts themselves otherwise considerable interference may take place, particularly if the station is located in a block of flats where a number of sensitive broadcast receivers are installed.

The newcomer would be well advised to tackle the problem of BCL interference right from the start, although the writer does not favour the practice of calling upon neighbours to ask if interference is being caused. Past experience has shown that the average BCL is prone to blame the amateur for all types of interference, however produced!

It should be borne in mind that in addition to key-clicks, interference may be caused by blanketing, harmonics and second channel. It is advisable, therefore, to employ crystals of a frequency which will clear the latter troubles if they are known to exist.

* 23 Viewfield Crescent, Aberdeen

BOOK REVIEWS

TWO-WAY RADIO. (Freedman) Ziff-Davis Publishing Company. 506 pp. Well Illustrated.

The set-up of this book is rather unusual but Commander Freedman has, in a limited space, done an excellent job of work in giving a very full idea of current MF and VHF Commercial radio technique in the U.S.A.

The chapters on specified types of equipment, such as that dealing with Carrier Induction systems as used on Railroads are of particular interest. The chapter in which the author compares the relative advantages and disadvantages of both FM and AM is extremely well set out and lucid.

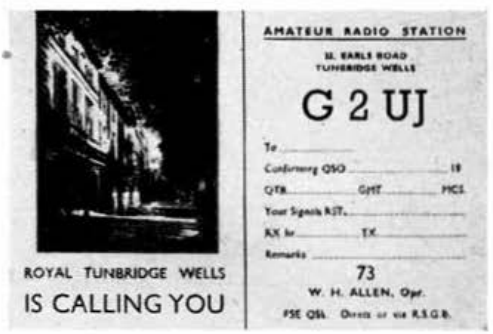
Of particular interest at the present time to "Hams" will be the Table in Chapter 19, wherein is set out the F.C.C. frequency allocations. It will, no doubt, surprise many people in this country to know that frequencies are even allocated for Radio Telephone Services to taxis!

Altogether Commander Freedman is to be congratulated on turning out a volume which gives such a mass of information on current trends in the field of Radio Communication without delving too deeply into the higher technical field.

I. D. A.

More Enterprise

In the May issue we illustrated one of the QSL cards donated to members of the Bournemouth and District Amateur Radio Club by the Bournemouth Borough Council. This month we are pleased to reproduce a photograph of the card recently supplied to amateurs in Tunbridge Wells by the Corporation



of that Royal Borough, through the good offices of Mr. Martyn Wade, the Publicity Manager.

The Radar Association

We have received from the Radar Association, a copy of the first number of its official publication, *The Radar Bulletin*. The objects of the association are to maintain and promote friendship between past and present radar personnel of the R.A.F. and the W.A.A.F. *The Radar Bulletin* contains topical and technical articles on all aspects of Radar and records the social activities of the Association.

Interested R.S.G.B. members can obtain full information from the Hon. Secretary, 31 Currey Road, Greenford Green, Middlesex.

Canadian Section I.A.R.U.

We are informed by Mr. Lovewell, G2AIS that VE2BE has been elected Manager and VE3AZ, Alternate Manager of the Canadian Section, I.A.R.U.

THE G.P. THREE

By R. Q. MARRIS (G2BZQ)

WHEN considering the design of this receiver the following points were taken into account:

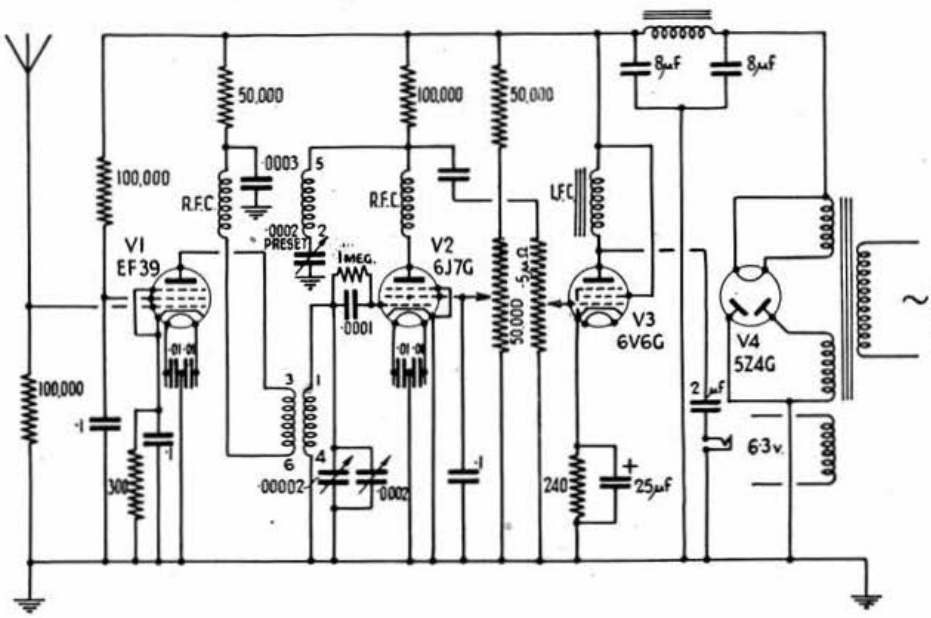
(1) It had to be made robust in order to stand up to a hard life in the Services.

(2) Due to lack of components a "straight" circuit had to be evolved which would give adequate reception.

(3) A high quality output was essential.

(4) A wave range from 9 to 550 metres was considered desirable.

A steel cabinet and chassis provided the answer to the first point; this article is an attempt to show how the other design features were achieved.



Circuit diagram of general purpose receiver covering from 9 to 550 metres.

Circuit Details

The circuit consists of an untuned R.F. stage (EF39), a detector stage (6J7G), an A.F. amplifier (6V6) and a rectifier (5Z4G). The R.F. stage is extremely simple, an R.F. pentode being used. A 10,000 ohms resistance is connected between grid and earth and the aerial connected to the grid end. Cathode bias is obtained by means of a 300 ohms resistance and ·1 μF condenser connected between cathode and earth.

The detector stage is fairly conventional. The coil is a standard 6-pin type inserted in a chassis-mounting 6-pin holder. The medium-wave coil was home-wound, the others being commercial types. A ·0002 μF tuning condenser is used with a band-spread condenser in parallel. A 100/1 ratio Eddystone slow motion dial is used to drive the tuning condenser. The band-spread dial which has an 8/1 reduction ratio is used only on the higher frequencies. This condenser is normally set at minimum capacity so that the main tuning dial can be calibrated. The calibration has proved very accurate over a long period.

For re-action a pre-set ·0002 μF condenser is used, re-action being varied by means of a 50,000 ohms screen potentiometer. A 1 μF bi-pass condenser is provided in this circuit mainly to prevent noise when the potentiometer is adjusted. An R.F. choke of the "all-wave" variety keeps excessive R.F. from the A.F. output stage.

The detector is coupled to the A.F. stage by means of a resistance-capacity coupling. The ·5 megohm potentiometer across the grid acts as a volume control. It was found desirable to use a 20,000 ohms stopper. Cathode bias to the A.F. stage is provided by means of a 240 ohms resistance and 25 μF electrolytic condenser.

Power Supply and Coils

The power pack is mounted on the same chassis as the receiver stages, but is well screened off and all heater leads are twisted.

The transformer has heater (6·3 volts and 5 volts) and H.T. windings, the latter producing an "alleged" 300 volts at 100 mA. However, when measured on load at the receiver end of the choke/condenser filter the voltage was found to be only 250 so no voltage dropping device was required.

The coils used to cover the range from 9–200 metres were purchased, as stated earlier, but the medium wave coil was home-constructed as it was anticipated that some difficulty might be experienced in obtaining good selectivity on this band if a ready-wound coil was used in connection with a ·0002 μF tuning condenser.

The coil was wound on to a standard 6-pin former with grooves cut in the sides, full winding being employed. For the grid winding 105 turns were full wound in a 1-in. long groove. Two ⅛-in. long grooves were then cut ¼ in. away from the 1-in. groove at either end. The aerial coil (25 turns) was wound into the top and the reaction coil (25 turns) into the bottom groove.

Performance

A 10" Rola speaker is used with the receiver and the quality and signal strength of the output is very satisfactory. Loud speaker reception is obtained from American and other broadcast stations on the short waves using about 12 ft. of aerial round the room. Selectivity is adequate on all frequencies.

G5KW/PORTABLE

By MAJOR K. E. ELLIS, M.B.E. — G5KW/ SU1KE/ZC4NX/ZC6NX etc.

SHORTLY before giving up his appointment as Senior Technical Officer of the Middle East Forces Broadcasting Service, the writer had to visit all the stations and also take field strength measurements in their service areas. This meant a road journey of over 3,000 miles, passing through Egypt, Palestine, Saudi Arabia, Transjordan, Iraq and Kuweit, providing an excellent opportunity for some tests with a small outfit on the amateur bands, as a lot of the apparatus required—power supplies—receivers, aerials, etc., would be available.

The vehicle used for the trip was a 15-cwt. truck with wooden cabin, generally termed a " Gin Palace." By the time the official apparatus, stoves, cooking utensils, rations, and personal kit had been installed, little space remained for the amateur band gear, and its essential spares. However, we did manage to instal a TX comprising tritet osc and 807 final. The 807 acting as a straight PA on 20 and 40 metres and as power doubler on 10. The modulator consisted of a dynamic microphone, three-stage amp, 2 6L6's plate and screen modulating the 807 in class A. The receivers were an S27 and AR88.

All the apparatus was arranged to run from 115v. AC and considerable difficulty was experienced in eliminating QRN. A rotary converter was tried at first, and although when operated outside the vehicle this was quite suitable, i.e. when stationary, it was impossible to keep the noise level low enough to receive the very weak DX stations when operating mobile. At the last minute a petrol generator was borrowed which gave 200 volt A.C. at 60 cycles; however, it meant that a combined electric cooker and heater, also an electric kettle, could be used.

A 30 ft. telescopic self-supporting mast was fitted to the front of the vehicle and a 20 ft. mast on the rear of the trailer. Between the two masts a dipole for use on 10 and 20 was erected, and a 10-metre rotary was fixed on top of the 30 ft. mast. For mobile use, a 33 ft. " fishing rod " aerial was used for reception and transmission—this was very effective when travelling across the Sinai and Arabian deserts, but not much use in built-up or badly screened areas. A Universal Avometer and portable valve tester were included.

Preliminary tests, using the call-sign SU1CX, proved satisfactory, and on November 12, a start was made. No time was available for amateur radio until 21.00 on the 15th, when G2QT provided the first contact on 14 Mc/s. CW, whilst passing through Aquaba in Hejaz. In the following 15 minutes, G5RV, 5JX and 3QD were contacted. Incoming reports of 589, 599 and 579 respectively were received.

The following day more time was available and GM2FQG provided the first 28Mc/s. CW contact. At 10.05, G6DH with Eileen at the mike, gave us our first phone contact—R5-S6 each way. For the next three hours it was a case of how many contacts could be squeezed into each hour! Many G's made their first HZ contact that day. W.A.C. was effected by night fall with LU9EV—ETIJJ—VK3VT, ZL2QM, W6ENV, VQ8AD.

ZC1

The Transjordanian Frontier was crossed at 14.00 on November 30, and G2TA provided the first ZC1 contact on 14 Mc/s. CW 559/569, followed immediately by ZL2FA, ST2AM, LU6DJK, VK2KB, W2MUM, to complete a W.A.C.—ON4ZQ was contacted at 00.15, December 1, for the first 7 Mc/s. contact (CW).

From December 2 to December 6, the official tests kept the station in ZC6. The river Jordan was again crossed at 09.00 on December 6. An elusive fault appeared on the modulator and so the CW Hams were given a chance. During a halt on the morning of the 8th, the fault was located and soon G2WW, got the first Transjordan—G-28 Mc/s. post-war 'fone contact. At 11.50 G2SY was called, but petrol ran out and it is not known if he came back.

W.A.C. from a Moving Train

The YI frontier was crossed at 06.00 on December 9, and G2WW and G6DH were worked. As a report was received that the roads between Baghdad and Basra were flooded it was decided to travel by train. This provided a novel experience. " Operating a ham rig from a moving train." Preparations were quickly made—an aerial slung 2 ft. above the roof level between two trucks and soon once again the thrills of DX under unusual conditions—0445, VE5GF on 14 Mc/s. CW, the first contact followed very soon by G5RF and G2WW on 28 Mc/s. Another disappointment was when the station was called by G4PC, but an r.f. fault developed and it was not possible to answer. VQ3HJP, ZL1HY, VS7MB, LU4DQ, W1FH, VU2TM and VK2XG, completed the " moving train " W.A.C.

The 11th and 12th were spent at the Basra Forces Broadcasting Station with little time for Amateur Radio.

Friday 13th! Kuweit

It had been hoped to spend the week-end at Kuweit, but an earlier return to Palestine precluded this. A return passage had been booked to Baghdad by train for Friday night. Only a few hours left! However, a visit to the neutral State of Kuweit could not be resisted. 04.00 found G5KW speeding along the road from Marguil to Kuweit, to be overtaken by the arm of the law! Valuable time lost giving particulars, etc. This was a bad start, and a train to catch after the return journey!

At 07.00 the undemarcated frontier of Kuweit was crossed, and during a 90 minute halt, gave the following lucky stations their first Kuweit contact on 28 Mc/s. 'fone; VK5MP, VS1BJ, VK3YS, G2AJ, G4KY and G2MI. G2FOS was heard—called, but did not reply. At 08.30 it was decided to drive on to the Persian Gulf to take some photographs for record purposes, and also as a souvenir for the stations contacted. The outskirts of the port of Kuweit were reached at 10.30 and the station soon on the air again, and in contact with G8SB, G6DH, G2CDI, W1MCW, SU1HF, G3FJ, G2WW and finally VK3YP on c.w. as the band faded out with no South American contact to complete W.A.C.

The Return Journey

Reluctantly the station was dismantled and a return made to Baghdad.

The following day, 14th, conditions were very bad and during the whole train journey to Basra only 7 'fone contacts were made. These of course, included G2WW and 6DH.

During the crossing of Transjordania on the 15th and 16th, contacts were made with 34 countries, viz. G, ZL, ST, LU, VK, ON, YR, I7, ET, ZS, I, OK, W, OZ, PR1, D4, OH, LA, SM, GI, GM, VQ6, LX, VS9, UA, HZ, PA, D2, VO, F, EI, VS7, Greece and Sardinia.

On the evening of the 16th, 7 Mc/s. opened up and c.w. contacts included G8PQ, 3QD, 2TA, 2WQ, 6RH, 2AUA, W2FQS, VE5AJ.

At 05.00 after a fine contact with D2TG, an old friend late of the Middle East, we re-crossed the Jordan and returned to Jerusalem feeling very weary but very contented after a really enjoyable and instructive journey.

FORTHCOMING EVENTS

REGION 2.

July 18 **South Shields,** 7 p.m. at St. Paul's School, Westoe.
„ 21 **Bradford** (Short Wave Club) 7 p.m. at Temperance Hall, Harewood Street.
„ 22 **Catterick,** 7 p.m. at S.T.C., H.Q. Block, Vimy Lines.
„ 23 **Harrogate,** 7.30 p.m. at Y.M.C.A., Victoria Avenue.
„ 23 **Hull,** 7.30 p.m. at 30, Princess Avenue.
„ 23 **Sheffield,** 8 p.m. at Dog and Partridge, Trippet Lane.
„ 23 **Sunderland,** 7.30 p.m. at 16, North Bridge Street.
„ 23 **York,** 8 p.m. at 29, Victor Street.
„ 25 **Barnsley,** at King George Hotel, Peel Street.
„ 25 **South Shields,** 7 p.m. at St. Paul's School, Westoe.
„ 28 **Halifax,** 7.30 p.m. at 32 Clare Road.
„ 29 **Catterick,** 7 p.m. at S.T.C., H.Q. Block, Vimy Lines.
„ 30 **Doncaster,** 7.30 p.m. at 73 Hexthorpe Road.
„ 30 **York,** 8 p.m. at 29 Victor Street.
Aug. 1 **South Shields,** 7 p.m. at St. Paul's School, Westoe.
„ 5 **Catterick,** 7 p.m. at S.T.C., H.Q. Block, Vimy Lines.
„ 6 **Harrogate,** 7.30 p.m. at Y.M.C.A., Victoria Avenue.
„ 6 **York,** 8 p.m. at 29 Victor Street.
„ 8 **South Shields,** 7 p.m. at St. Paul's School, Westoe.
„ 11 **Bradford** (Short Wave Club) 7 p.m. at Temperance Hall, Harewood Street.
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„ 13 **Sunderland,** 7.30 p.m. at 16 North Bridge Street.
„ 13 **York,** 8 p.m. at 29 Victor Street.
„ 15 **South Shields,** 7 p.m. at St. Paul's School, Westoe.

REGION 3.

July 15 **Birmingham,** M.A.R.S. meeting at The Imperial Hotel. Talk on "DX on a Land Line," by Mr. Gardner.
Aug. 10 **Birmingham,** M.A.R.S. meeting at The Imperial Hotel, at 11 a.m. when Dorothy Hall, W2IXY will be present.

REGION 5

Aug. 5 **Chelmsford,** 7.30 p.m. at 184, Moulsham Street.

REGION 7

July 2 **Hampton Court,** meeting at Carnavon Hotel. Question and answer evening. T.V.R.T.S.
July 15 **Sutton and Cheam,** 7.30 p.m. "Ye Olde Red Lion," Cheam.
„ 16 **Edgware,** Orchard Cafe, Broadway, Mill Hill.
„ 20 **Barnet Area,** 3 p.m. at Millicent Cafe, Lytton Road, New Barnet.
„ 21 **Plumstead,** 8 p.m. St. Mark's Hall, Old Mill Road, S.E.18.
„ 23 **Edgware,** Orchard Cafe, Broadway, Mill Hill
„ 24 **Barnet Area,** 7.30 p.m. at Brotherhood Hall, West Norwood.
„ 24 **Ruislip,** 7.30 p.m. 38 Ladygate Lane, Ruislip.
„ 25 **Hampstead,** 8 p.m. 2A Chalcot Gdns., off Englands Lane (Phone, G3APC if attending) PRI. 5039.)
„ 27 **Enfield,** 3 p.m. A and B Cafe, Southbury Road (Junction with Ladysmith Road.)
„ 30 **Edgware,** Orchard Cafe, Broadway, Mill Hill.
Aug. 6 **Edgware,** Orchard Cafe, Broadway, Mill Hill.
„ 13 **Edgware,** Orchard Cafe, Broadway, Mill Hill.

REGION 8

„ 16 **Southampton,** 7 p.m. at 22, Anglesea Road.
July 23 **Guildford,** 7 p.m. at T.R.S. Ltd, Woodbridge Road.
Aug. 7 **Bournemouth,** at the "Cricketers Arms," Windham Road, Bournemouth.

REGION 9

July 18 **Bristol,** 7 p.m. at Keen's Cafe, Park Row.
„ 19 **Plymouth,** Scouts' H.Q., Buckland Terrace, Millbay Road.
„ 21 **Stroud,** Clubroom, Cainscross Road.
„ 28 **Stroud,** Clubroom, Cainscross Road.
Aug. 4 **Stroud,** Clubroom, Cainscross Road.
„ 15 **Bristol,** 7 p.m. at Keen's Cafe, Park Row.
July 19 **Torquay,** 7 p.m. at Y.M.C.A.

REGION 10

Aug. 11 **Cardiff,** 7 p.m. at Park Hotel.

REGION 14

July 30 **Glasgow,** 7 p.m. in Institute of Engineers and Shipbuilders, 39 Elmbank Crescent, Glasgow.

BOOK THE DATE

LONDON MEMBERS' LADIES NIGHT

to be held in

THE SOUTH HALL SUITE
VICTORIA HALLS
BLOOMSBURY SQUARE
HOLBORN, LONDON, W.C.1.
on
SATURDAY, 20th SEPTEMBER

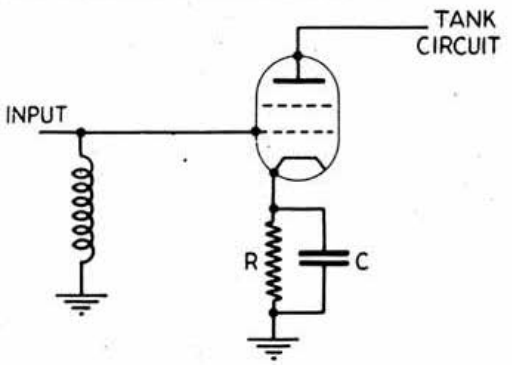
Dress Optional
Running Buffet
Licenced Bar

DANCING 7 p.m. to 11.30 p.m.

Tickets 5/- each, from Town Representatives. Members of the Social Committee, or from Headquarters

Noise Radiation.

The Hon. Editor apologises to Mr. Collins, G3AXS, whose letter was published last month. Due to an oversight the accompanying drawing was omitted. It is reproduced herewith.



E.D.R. Five Metre Field Day. 1947.

The E.D.R. has acknowledged receipt of details of the R.S.G.B. Five-Metre Field Days, 1947, which news will be published in their bulletin, "*Oz*," July issue (July 15). They are looking forward to this event with interest.

They inform us that E.D.R. has organised a Field Day in the week-end of August 2–3 (Saturday, 18.30–21.00, Sunday, 08.30–10.00 and 13.00–15.00 G.M.T.), and it is to be expected that the one period of special interest and possibilities for DX will be that on Saturday evening due to temperature inversions.

Reports and logs will be welcome and should be addressed to E.D.R.'s official address: E. D. R., Box 79, Copenhagen K., Denmark.

For all further particulars those interested should write to the leader of the Five-Metre Field Day: Mr. Erik Langgaard, OZ8O, Ordrupvej 83 B, Charlottenlund, Denmark.

London Region Meeting

The second meeting, held at the Royal Hotel on May 21 was again well attended. The main item was a talk on the Eddystone "640" Receiver by Messrs. Walker (G5JU) Technical Service Manager and Edwards (G6XJ) Commercial Manager and thanks are due to them and Messrs. Strattons Limited for affording the opportunity of a preview of the new Receiver of which a test report can be found elsewhere in this issue. Unfortunately, conditions prevented a demonstration of its capabilities, except as regards the effectiveness of its noise-limiter.

The opportunity was taken to deal with some queries on M.O.S. gear.

The next meeting will take place on September 27. Please book the date now.

NEWS FROM HEADQUARTERS

COUNCIL, 1947

President :
STANLEY K. LEWER, B.Sc., G6LJ.

Executive Vice-President : V. M. Desmond, G5VM.
Hon. Secretary : H. A. M. Clark, B.Sc.(Eng.), G6OT.
Hon. Treasurer : A. J. H. Watson, F.S.A.A., G2YD.
Hon. Editor : Arthur O. Milne, G2MI.
Immediate Past President : E. L. Gardiner, B.Sc., G6GR.

Members : I. D. Auchterlonie, G6OM, G. F. Bloomfield, Ph.D., A.R.I.C., G2NR, C. H. L. Edwards, A.M.I.E.E., G8TL, K. Morton Evans, O.B.E., G5KJ, R. H. Hammans, G2IG, J. W. Mathews, G6LL, W. A. Scarr, M.A., G2WS.

G.P.O. Liaison Officer: Arthur E. Watts, G6UN.
General Secretary : John Clarricoats, G6CL.

May Council Meeting

Resume of the Minutes of a Meeting of the Council of the Inc. Radio Society of Great Britain, held at New Ruskin House, Little Russell Street, London, W.C.1, on Monday, 12th May, 1947, at 5.30 p.m.

Present.—The Vice President (Mr. V. M. Desmond), in the Chair, Messrs. Auchterlonie, Bloomfield, Clark, Edwards, Evans, Gardiner, Mathews, Milne, Watson, Watts and Miss Gadsden (Assistant Secretary).

Apology.—An apology was submitted for the absence of Mr. Scarr.

Message from President and Secretary.

Mr. Milne conveyed President's and Secretary's greetings to Council. This was the first Council Meeting which the Secretary had missed in over 20 years service.

Committee Report.

The reports of Committees were presented.

Contests.

Resolved that in view of Fuel difficulties in this country at the time of B.E.R.U., no award be made to British stations, scores to be published without comment.

Mr. Milne's resignation from the Committee was accepted with regret.

Finance.

Resolved to accept and adopt the Cash Account for the month ending 30th April, 1947, and the Balance Sheet for the quarter ending 31st March, 1947.

Membership.

Resolved to appoint Mr. E. G. Foulkes, GW5FU as Regional Representative for Region 11.

Resolved to elect 246 Corporate Members
34 Associates
16 Junior Associates
Total elected .. 296

Two Corporate Members applied for and were granted Life Membership. Twelve Associates applied for, and were granted Corporate Membership.

Resolved to grant affiliation to the Sunderland Radio Society.

The Report of the Assistant Secretary was submitted.

Isle of Man Status.

At the request of the Society, the prefix GD had been allocated by the G.P.O.

Official Regional Meetings.

Additional regional meetings at Nottingham and Bournemouth were approved and names of Representatives agreed.

Solicitors to the Society.

Resolved that Messrs. Stanley Johnson and Allen be appointed Solicitors to the Society in addition to Messrs. Rule and Cook.

The meeting terminated at 9.45 p.m.

Staff Vacancy

A vacancy exists on Headquarters Staff for a Junior Clerk, preferably one just leaving school. Applications should be made in writing to the General Secretary (Staff).

South Birmingham

Members in South Birmingham should ignore the notice appearing last month. It is now understood that the R.R. and T.R. were not consulted in the matter. Members interested in meetings in South Birmingham should contact either G3DO, their C.R. or T.R.

Major K. E. Ellis Honoured

The many friends of Major Ken Ellis, G5KW/SU1KE/ZC4NX, etc., will learn with pleasure that His Majesty has honoured him with the award of the M.B.E. for his work in the Middle East Forces Broadcasting organisation. In offering him our congratulations, we are also interested to hear that he is once more on his way to the Middle East and that we shall be hearing G5KW/P or some similar call on the air again soon.

Return of General Secretary

As we go to Press, we hear that the General Secretary hopes to return by R.M.S. *Mauretania*, leaving New York on July 11. Members will join us in wishing him a pleasant journey home.

Our President will be staying at Atlantic City for about another fortnight and will probably leave early in August.

Can you Help ?

Mr. N. G. Thomas, BRS13995, 12 Southleigh Gardens, Dewsbury Road, Leeds, 11, who requires information on the Bendix Radio Compass Unit, BC-443-A.

Mr. A. W. Fowler, G3FR, c/o Scott Slack, Ltd., Station Road, Sutton-in-Ashfield, Notts, and Mr. A. W. Tonkyn, BRS14730, of "Trewindle," Treguna Lane, Truro, who both require details of R1147/B.

Mr. B. D. Ivory, BRS12957, 189 Blackpool Road, Deepdale, Preston, Lancs., who requires data for the 3FP7 American CRT.

Mr. G. R. Greaves, BRS6549 of 1 Chalvington Road, Chandlersford, Eastleigh, Hants., requires the sale or loan of the handbook on the Scott Model SLR-F receiver.

Via G8IG comes a request from W3EQK who wishes to trace a Mr. R. Everard, whose address before the war was "Belle Vue," Nelson Park, St. Margaret's Bay, near Dover. Anyone able to help, please write to G8IG, 76 Nightingale Lane, Bromley, Kent.

Ham Hospitality

Ham hospitality offered at new QRA of G2DHV—63 Lewisham Hill, Lewisham, London, S.E.13., any evening.

Congrats

To Mr. H. S. Marshall, M.B.E., G5IP, of Tonbridge, Kent, on being awarded the O.B.E. in the Birthday Honours List.

To Mr. and Mrs. J. Corbett Ford (GM2DWW) of Dunoon, on the arrival of a son on May 20.

To Mr. and Mrs. J. H. Macdonald, G4GJ, T.R., for Bradford, on the occasion of their marriage on June 14.

Strays

● Mr. A. J. H. Burton, G2CXB, 1 Waterbeach Road, Landbeach, Cambridge, is willing to loan a copy of Handbook on the B2 set to anyone interested. He would be grateful for any information on the following : T1133G, T3237 and TR621.

● The West Middlesex Amateur Radio Club extends a hearty welcome to all local R.S.G.B. members. Meetings are held at the Labour Hall, Uxbridge Road, Southall, every second and fourth Wednesday in the month. Plans are going ahead for the erection of a Club Hut on the grounds of the E.M.I. sports ground. Sir Ernest Fisk is President of the Club.

● Anyone contemplating the conversion of the T1131 to the amateur bands should drop a line to Mr. Ian Auchterlonie, G6OM, 4, Stand Close, Ringley Road, Whitefield, Manchester. He can give you a great deal of useful information.

BOOK THE DATE

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SATURDAY,
SEPTEMBER 20, 1947.

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BRAND new, in carton, Motor Generator, type J, weight 18 lb., input 12 v., output 6 v. 5A, 150 volts also 300 volts 240 mA/s. Continuous rating. 4,500 r.p.m. 8 condensers. Only 12s. 6d. plus 3s. carriage. Special price for quantities. S.A.E. lists.—AMATEUR RADIO SERVICE, G6HP, Canning Street, Burnley.

BRITISH European Airways are requiring Radio Mechanics conversant with ex-R.A.F. Transport Command, Bomber Command, Signals and Radar equipment, for servicing airborne equipment at Northholt Airport. Basic pay, 2s. 7d. per hour. Applications should be made to Personnel Officer, Northolt Airport, Ruislip, Middlesex.

BULLETINS, July, 1936, June, 1943 in 7 bound volumes, Excellent condition. Offers, 11A Welwyn Close, Intake, Sheffield. [*368*

CAN you hear the DX? If not, let me service your receiver. Collection from London weekly. Personal attention and your receiver will be treated like my own!—G2BB, Roza, Reading Road, Yateley. Phone 3257, Hants. [*341*

COMMUNICATION Receiver. Type R107 Immaculate. Sensitivity and selectivity, better than H.R.O. 0·8–17·5 Mc/s. B.F.O., etc. AC/DC 230 v. and 12 v. Collection from London. Offers in £45 region.—Box 331, PARRS, 121 Kingsway, London, W.C.2. [*331*

COMMUNICATION Receiver, Eddystone 504/A.C. Almost brand new, £53 or fair offer.—IVAN PENROSE, 27 Causewayhead, Penzance, Cornwall. [*359*

COMMUNICATIONS receiver, amateur bands, 10 to 160, excellent condition, £15. 1155N latest type, dual ratio S/M drive, full coverage, new, perfect, £12 10s. Modulation transformer AB2, 6L6s or 807s, £2 10s. 813, £2 15s. 866Jr., 7s. 6d. Pair matched PX25s, £1 10s. 3 in. C.R. Tube (new), £3. EF50s, 7s. 6d. Wanted: 829B.—G8WL, 11 Warwick Road, Kenilworth.

CONVERTED R1155. Noise limiter, output valve, power pack and speaker added. 10 valves, 18500 to 75 kc/s., 17 gns. Valves, components, S.A.E. List.—Box 339, PARRS, 121 Kingsway, London, W.C.2. [*339*

COULPHONE Radio "The return of Post Mail Order Service," 59 Derby Street, Ormskirk, Lancs. Coulphone deliver the goods. Have you had our latest 18 page catalogue? Send 2½d. stamp. [*187*

C.R.T., 2¾ ins., (2) £1 10s. Oscilloscope transformer, new £1 15s. 6H6 (3) 5s.—BRS8224, 28 Lancaster Gardens, Clacton-on-Sea. [*357*

CRYSTAL monitor, 1 P.M. speaker, 2 813's, 2 805's, 1 083, 6 866's, 4 6G6's, 4 12A6's (M). All new, £20 lot-J. MCCAMMONT: Brandon Place, Bothwell Hauch, Nr. Glasgow. [*173*

DC 220 volts in, 110 AC 550 watts out rotary, £15. Ditto 600 volts 200mA. DC out, £7 10s. DC 24 volts in, 1200 volts 200mA. out, £2. Motor 1/6 h.p. 220 DC, 30s. American tube tester, £12.— G5MY, "Kirkfield," Cross Street, Long Eaton, Nottingham. [*337*

D104 Mike boxed as new, £4 10s. 7100 Brooks Crystal and holder, £1 5s. 465 Bliley Crystal and holder, £1.—G3MV, 14 West Park Hill, Brentwood. [*362*

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FOR SALE.—10 watt record player, records, R1155, headsets, receiver valves, power unit, dynamotor, push button controls, with indicator lights, M/C microphone with stand, screened cable; also various components. S.A.E. for detailed descriptions, BRS12,985, Welton Manor, Brough, E. Yorks. [344

FOR SALE.—Surplus valves, new in boxes. Highest offer. PM6D, PM4DX, PH254, DL5, B4, 6K7, 6V6, GT/GRCA, NR77 (–2), NR73.—ALLEN, BRS11590, Wear Villa, Wear Head, Co. Durham. [334

GOODMANS 12 in. speaker in grey cabinet, 15 ohms speech coil, £6; 807 unused, 15s.—G. BLANK, BRS9064, 26 Colestown Street, London, S.W.11. [308

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LIBRARY of radio textbooks by Terman, Witts, Scroggie, etc. £5 or offers. Write for details.—CAWSEY, "Penryn," Trevose Crescent, Chandler's Ford, Nr. Eastleigh, Hants. [333

MILLIAMETERS 3 in. flush M/c 0–30 brand new leading makes, 25s. each. Heavy pattern Admiralty keying relays with clock filter, unused FB job, 7s. 6d. each.—G5FH, 17 Knottsall Lane, Langley, Oldbury. [335

MORSE Code Training.—Please note Candler System Company London Offices will be closed from August 2 to 11.

NATIONAL One-Ten. All coils and calibration curves, less power pack, £15 10s. Rotary converter, 12 volts to 375 volts at 300mA/s., £3. H.T. Transformer 200/250v. to 1100-0-1100, £3. HOULDSWORTH, G6NM, The Circuit, Wilmslow, Cheshire.

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PAIR of 813 new RCA, with bases, £5.—G2FYT, 12 Ednam Road, Wolverhampton. [364

PHILIPS resistance capacity bridge, perfect. ·1 ohms to 10 M. ·00005 to 10 M.F. Model G.M.4140. Highest offer over £8.—25 Albert Drive, Low Fell, Gateshead-on-Tyne. [328

QRT.—For disposal. Brand new 1155 Receiver, separate power pack, £20. CO–PA battery transmitter, Hivac vales. 2 crystals, key and meter, eliminator and accumulator, £10. 5 to 10 two-valve battery Receiver, phones and S/P. coils, £5. Transformers, coils, condensers, valves. S.A.E. for list please; A. H. VAUGHAN, 43 Cranley Road, Westcliffe. [336

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R.C.A. tubes, 9001, 9002, 10s. each; 6SK7 (3) 5s. each. Vibrapack 4v. input, 200v. output, 17s. 6d. Ericcson headphones, 7. 6d. Featherweights, 5s. Winter Callbook, 5s. Spring, 7s. 6d.—G8UA, 406 Higher Brunshaw, Burnley, Lancs. [362

RCA AR77 Communications receiver, 54 kc/s. to 31 Mc/s. continuous in 6 bands. Bandspread, 3·5, 7·0, 14·0 and 28 Mc/s. Guaranteed perfect, as new. Any trial. £40 or nearest—BM/FADF, London, W.C.1. [322

SALE.—Midwest 11 valve receiver, 1938 model recently overhauled, good condition—what offers ?—7871, 25 Pearl Street, Starbeck, Harrogate. [312

SALE.—R1132 factory converted for 60 Mc/s. Air tested, condition guaranteed. With or without power pack, offers about £15.—Box 313, PARRS, 121 Kingsway, London, W.C.2.

SALE.—R.A.F. 1155 Communication Receiver, complete with power pack and 6v6 output, £25 or offers.—Box 351, PARRS, 121 Kingsway, London, W.C.2. [351

SALE.—Transmitter, good running order. 6L6G. C.O. Tritet, link coupled 809 P.A. 500–0–500 power pack. Modulator: 6J7–6C5; pair 6L6G's. Astatic D104. Metal chassis; crackle panels; Weston meters; coils, pair Premax elements for 14 Mc. 200/240 volts. A.C. Inspection invited, £25 or near offer.—EX-G4FL, 49 Sunray Avenue, Tolworth, Surrey. [353

SALE unused tested, SP41's, 6JSG's, EF50's, EA50's, E.B. 34 4s. EC52, EF54, 954, 955, 7s. 6d. DET20's, 10s. Rotary transformer, 9–12 V. D.C. input 450v. 50mA D.C. output, with fan and reduction gearing, 12s. 6d.—WILSON, GM3AKM, Wardieburn Place East, Edinburgh, 5. [321

SALE.—Everything brand new, unused; satisfaction or money back. U.S.A. metal 6L6's, 13s. Telefunken supersensitive U.H.F. 40w. pentodes for 2 metres. (½ w. drive), 10s. 6d. Power supply 230 A.C. input, 220 V. 40 mA. D.C. output and 130 V. stabilised. Black crackle panel, teak transit case, 50s.—12B Uxbridge Road, Kingston, Surrey. KIN. 8059. [323

R1132A Receiver, modified 60 Mc/s., fitted preselector, noise limiter, speaker transformer. Offers over £16. Birmingham.—Box 324, PARRS, 121 Kingsway, London, W.C.2. [324

SALE.—100 watt Transmitter, Tritet C.O.–pp 807's, £10. 1·7 Mc/s. transmitter/receiver, with 12 volt input rotary, £10. 28 Mc/s Radiovision Expander. Offers? Valves, Components; S.A.E. for list. RK20 35s.—"Stonehaven," Horncastle Road, Boston, Lincs. [325

SALE.—Transmitter 6F6. 807 complete with modulator, coils, 2 crystals, 3 meters, 3½ ins. tube oscilloscope, monitor and power pack. All built in metal case. Mike, key and phones. Owner going abroad. £35 or near offer.—SMITH, 26 Victoria Road, Clacton-on-Sea, Essse. [375

SURPLUS gear, new. 2–S.W. dials and drives (S.M.); 2 double gang condensers, 5 radio books; 1 dual range coil; 50s. the lot.—WAKEFIELD, 36 Little Barn Lane, Mansfield, Notts. [332

TOBE 7 valve Receiver, 4 amateur bands, self contained power supply, no cabinet, £12. RCA 803, scarcely used, £2.—GM6IS, 4 Campbell Street, Greenock. [316

TRANSFORMERS.—230 v. Primary 750–0–750, 200mA. 4 v. 6a. 6·3 v., 4a, new 50s. 1 ufd 1200 wkg; 2 ufd 1000 wkg; 4 uf 500 wkg., 2s. each; 1 1000 wkg, 1s. Aluminium sheet, 18 gauge, 2s. sq. ft. Stamp for list.—FANTHORPE, 6 Hepworth's Arcade, Hull. [361

VALVES.—New and unused, 304TL, 813, VT127A. What offers. Sold separately.—G3AAL, 95 London Road, Bexhill-on-Sea, Sussex. [355

VALVES, unused, unboxed. Five raytheon 866A, £2 10s. the lot. Wanted, ECR30 and Transformer.—MURPHY, 35 Ecclesall Avenue, Liverpool, 21. [367

WANTED small wire sound recorder, suitable amateur work. G3AME, Red House, Capel, Surrey. [342

WANTED.—Hallicrafter Sky Champion, 1939/40 model, in perfect condition. Full particulars.—J. STONESTREET, G2JN, Bossingham Street, Canterbury. [317

WANTED.—A number of pre-selector tuning mechanisms as fitted R.A.F. Transmitter types 1154H, 1154M, 1154N, pay 10s. each if good condition.—Box 320, PARRS, 121 Kingsway London, W.C.2. [320

WANTED.—Coils for Eddystone 358X any or all ranges, state price. Sale: Trophy 6 v. communication receiver 10/550 metres, built in speaker and power pack, £12.—Box 358, PARRS, 121 Kingsway, London, W.C.2. [358

WANTED.—"Bug" Key–McElroy or similar make. Particulars to G3BPG, 23 School Street, Drayton, Daventry, Northants. [360

WANTED.—Power Pack for Transmitter, T1154 and Receiver R1155. 230 v. A.C. mains.—Write TOFT, 12 High Street, Knutton, Staffs. [363

WANTED.—Laboratory Hammarlund Superpro models SP400X, SP400SX, SP210SX; also National Senior H.R.O. model 5TA. Other recent models considered. Complete band spread essential, 1·7 Mc/s. 30 Mc/s. First class material only. State lowest prices.—Box 315, PARRS, 121 Kingsway, London, W.C.2. [315

WE specialise in "Ham" transformer requirements to your specification.—RADIO & ELECTRIC FACILITIES, 137A Ashton Road, Oldham.—BRS13832. [189

WHEATSTONE Tape Perforator required. State type, make and price.—HARRIS, Strouds, Bradfield, Berks. [332A

14 Mc Crystal, 25s. M.C. volt/ohms meter, 25s. Partridge 450–0–450 180 mA Transformer, 27s. 6d. 1·4–1 mod. transformer, 7s. 6d. PP5/400, 807 5U4G, 7s. 6d. each. 5Z4G, 6R7G, 89, 5s. each. Transformers, chokes, etc.—WALL, 32 Onslow Drive, Sidcup, Kent. [311

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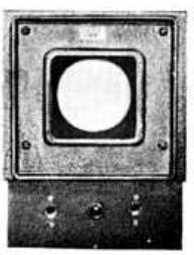

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