

R·S·G·B

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SEPTEMBER, 1947

BULLETIN

JOURNAL OF THE RADIO SOCIETY OF GREAT BRITAIN



- TELEVISION INTERFERENCE
- TELE-TEN ROTARY BEAM
- ATLANTIC CITY CONFERENCE
- B 2 TRANSMITTER RECEIVER
- N.F.D. CONTEST RESULTS

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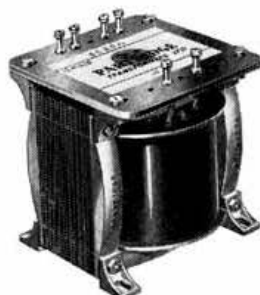
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REPRESENTATION

IN accordance with decisions reached at the Delegates Conference held in Birmingham last April, regarding the election of Regional, County, Town and Area Representatives, the Council has decided that the Corporate Members shall, in respect of all offices to be held from 1 January, 1948, have the power of nominating and electing those officers who are to serve in their own areas.

Regions

The following is a list of the Regions and the Counties or Areas forming them.

Region No. 1 (North Western): Cheshire, Cumberland, Lancashire (East), Lancashire (West) and the Isle of Man, Westmoreland.

Region No. 2 (North Eastern): Durham, Northumberland, Yorkshire (East), Yorkshire (North), Yorkshire (West).

Region No. 3 (West Midlands): Herefordshire, Shropshire, Staffordshire, Warwickshire, Worcestershire.

Region No. 4 (East Midlands): Derbyshire, Leicestershire and Rutland, Lincolnshire, Northamptonshire, Nottinghamshire.

Region No. 5 (Eastern): Cambridgeshire, * Essex, Huntingdonshire, Norfolk, Suffolk.

Region No. 6 (Home Counties): Bedfordshire, * Buckinghamshire, * Hertfordshire, Oxfordshire.

Region No. 7 (London): London North, London South, London East, London West.

Note.—The London Region covers all territory within 25 miles radius of Charing Cross.

Region No. 8 (South Eastern): * Berkshire, Hampshire and the Isle of Wight, * Kent, * Surrey, Sussex.

Region No. 9 (Western): Cornwall, Devonshire, Dorsetshire, Gloucestershire, Somerset, Wiltshire.

Region No. 10 (South Wales): Brecknockshire, Carmarthenshire, Pembrokeshire and Cardiganshire, Glamorganshire, Monmouthshire.

Region No. 11 (North Wales): * Anglesey, Caernarvonshire, Denbigh and Flintshire.

Region No. 12 (North Scotland): Aberdeenshire, Banffshire and Kincardineshire, Angus and Perthshire, Morayshire, Nairnshire, Inverness-shire, Ross-shire, Sutherland, Caithness, Orkney and Shetland.

Region No. 13 (East Scotland): Berwick, Peebles, Roxburgh and Selkirk, East Mid- and West Lothian, Fifeshire and Kinross.

Region No. 14 (West Scotland): Argyll and Dumbarton, Ayrshire, Bute, Dumfries, Kirkeudbright and Wigtown, Clackmannan and Stirlingshire, Glasgow (City of) Postal Districts, Lanarkshire, Renfrewshire.

Region No. 15 (Northern Ireland): Antrim, Down.

For the purposes of representation, the Channel Islands ranks as a County but has no Regional Representative.

*Outside the London Region

Nominations

Nominations, accompanied by a letter from the Corporate Member agreeing to serve if elected, must be submitted in the prescribed form and must reach the General Secretary not later than October 31, 1947. Nominations for the office of Regional Representative must be supported by five Corporate Members. Nominations for all other offices (C.R., T.R., A.R.), must be supported by two Corporate Members.

If more than one nomination is received for a particular office a Ballot will be conducted.

Prescribed Form

We the undersigned wish to nominate.....

(Call Sign or B.R.S.) of.....

(Address).....

as Representative for

Region No.	} Omit whichever is not applicable.
County of	
..... London District	
Town of	
Area of	

and attach hereto his letter of agreement to serve if elected.

Name Call (or BRS).

Name Call (or BRS).

Term of Office

All Representatives will be elected for a period of two years.

Vacancies

In the event of no nomination being received prior to November 1, 1947, from the members in a particular Region, County, Town or Area, the Council reserves the right to make an appointment.

Town or Area Representatives

T.R.'s will only be confirmed in their appointment if the total membership in the Town or Area they represent is in excess of 10.

In the case of certain large towns and cities it may be desirable to elect two or more Area Representatives instead of one Town Representative. Until such time as the 1948 Regional Representatives take office, any action proposed on these lines should be referred to the Council.

County Representatives

C.R.'s will only be confirmed in their appointment if the total membership in the County or Group of Counties they represent is in excess of 25.

Expenses

Representatives will be authorised to claim reasonable out-of-pocket expenses in accordance with a scale to be drawn up by the Council.

**SOUTH WALES & MONMOUTHSHIRE
— REGIONAL MEETING —**

**PARK HOTEL : : : CARDIFF
SATURDAY, SEPTEMBER 20th, 1947**

Assemble ...	...	...	...	2 p.m.
Meeting ...	...	...	...	2.30 p.m.
High Tea ...	...	...	...	5 p.m.
Station Visits ...	...	...	...	7 p.m.

Inclusive charge, 7/6
(Lunch 5/- extra)

Tickets not later than September 12th from P. JENKINS,
GW3VL, 100A, Manor Way, Whitchurch, Cardiff.

**SOUTH EASTERN REGIONAL
— MEETING —**

**TOLLARD ROYAL HOTEL,
BOURNEMOUTH
SATURDAY, OCTOBER 25th, 1947**

Lunch ...	...	...	...	1 p.m.
Meeting ...	...	...	...	2.30 p.m.
Tea ...	...	...	...	4.30 p.m.

Inclusive charge, 10/6

Tickets from F. WHITE, Chester House, Chine Crescent,
Bournemouth, or Headquarters. (Overnight accommodation
can be arranged. Terms: 13/6 bed and breakfast at hotel,
also includes admission to dance in the evening.)

**LONDON REGIONAL
— MEETING —**

**ROYAL HOTEL, WOBURN PLACE, W.C.1
SATURDAY, SEPTEMBER 27th, 1947**

Assemble ...	...	...	...	2.30 p.m.
Meeting ...	...	...	...	3 p.m.
Buffet Tea ...	...	...	...	5 p.m.

Inclusive charge, 4/- (payable at door).

**HOME COUNTIES REGIONAL
— MEETING —**

**DUJON RESTAURANT : BEDFORD
SUNDAY, OCTOBER 26th, 1947**

Assemble ...	...	...	...	12.30 p.m.
Lunch ...	...	...	...	1 p.m.
Meeting ...	...	...	...	2.30 p.m.

(Followed by a lecture and demonstration
on "Micro-waves," by Dr.
C. G. Lemon, G2GL.)

High Tea	5.30 p.m.
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Inclusive charge, 10/-

Tickets from Regional and County Representatives.

— LONDON MEETING —

**INSTITUTION OF ELECTRICAL
ENGINEERS, SAVOY PLACE, W.C.2
FRIDAY, OCTOBER 10th, 1947**

"AMERICAN JOURNEY"

S. K. LEWER, B.Sc. (G6LJ)

and

JOHN CLARRICOATS (G6CL)

Tea ...	...	...	...	5.30 p.m.
Meeting ...	...	...	...	6.30 p.m.

**EAST MIDLANDS REGIONAL
— MEETING —**

**VICTORIA STATION HOTEL,
MANSFIELD ROAD, NOTTINGHAM
SUNDAY, OCTOBER 26th, 1947**

Assemble ...	...	...	...	2.30 p.m.
Meeting ...	...	...	...	3 p.m.
Tea ...	...	...	...	5.15 p.m.

Inclusive charge, 5/-

Tickets from A. C. Simons, G5BD, Church Road, Mablethorpe,
or A. E. Clipstone, G8DZ, 77 Julian Road, West Bridgford.

**WEST OF SCOTLAND REGIONAL
— MEETING —**

**CHRISTIAN INSTITUTE,
70 BOTHWELL STREET, GLASGOW
SATURDAY, OCTOBER 18th, 1947**

Assemble ...	...	...	...	3 p.m.
Meeting ...	...	...	...	3.30 p.m.

Thereafter at

"THE GROSVENOR," GORDON ST., GLASGOW

Reception ...	...	...	...	6 p.m.
Dinner ...	...	...	...	6.30 p.m.

Inclusive charge, 12/6

Tickets from J. Hunter, GM6ZY, 20 Mansfield Crescent,
Clarkston, or local C.R.'s, not later than October 11th.

— LONDON MEETING —

**INSTITUTION OF ELECTRICAL
ENGINEERS, SAVOY PLACE, W.C.2
FRIDAY, NOVEMBER 14th, 1947**

"QUARTZ CRYSTALS"

E. A. FIELDING

(SALFORD ELECTRICAL INSTRUMENTS LTD)

Tea	5.30 p.m.
Meeting	6.30 p.m.

R.S.G.B. BULLETIN

OFFICIAL JOURNAL OF THE INCORPORATED
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TELEVISION INTERFERENCE

A major problem facing the amateur fraternity in Great Britain is that of interference to television programmes. It is not new, of course, to those who operated an amateur station prior to the war in the vicinity of a television receiver, but with the impending extension of the service it will soon be brought home to a much wider circle of amateurs than has been the case up to now.

The problem has already assumed some proportions in other countries (notably the United States) where a television service is being operated.

It must not be assumed that the R.S.G.B. and A.R.R.L. have neglected to lay plans to overcome the dangers of widespread television interference caused by amateurs—the technical publications of both organisations testify to the work already done—but the problem is still far from solved. The task is complicated by the fact that a successful cure achieved in the home of one viewer does not necessarily mean that a similar method will succeed when applied to the same type of television receiver operated in the same locality.

The problem of B.C.I. has been tackled resolutely in the past and a high degree of success achieved. The present-day problem of Television Viewer Interference must now be attacked with similar vigour and determination if we are to avoid a repetition of the skirmishes now being fought in certain parts of Southern England.

During our recent visit to A.R.R.L. Headquarters we made the suggestion that the technicians of the League and the R.S.G.B. should arrange a regular exchange of views on television interference problems. In putting forward the suggestion we had in mind the thought that a series of investigations carried out either in the U.S. or the U.K. could conceivably reach a stage which, although important in themselves, may still not be sufficiently conclusive to warrant publication. A regular exchange of views might bring about a speedier solution of the problem.

For some months a small committee, appointed by the Council, has been attempting to collect together data on television interference problems, but we believe their work would be expedited if every member who has had practical experience of the difficulties would pass on the results of that experience. This can be done by forwarding to Headquarters a brief account of how the job was tackled and the results achieved. The following points of special interest should be mentioned:—

1. Location (town).
2. Relative position of transmitter and television receiver aerials with respect to Alexandra Palace.
3. Make and type of television receiver and aerial system.
4. Detailed description of form of interference in picture and whether interference is heard on sound.
5. Transmitter frequencies on which interference is caused.
6. Brief description of transmitter including nature of output coupling and any screening employed.
7. Type and layout of transmitter aerial and feeder system.
8. Is interference caused by a steady carrier or only by keying or modulation?
9. Full details of special steps taken to eliminate interference and results obtained.

From the data received the Committee will, no doubt, be able to prepare a comprehensive technical report which should prove of great benefit to amateurs generally.

Let us tackle this problem with resolution and ingenuity before it assumes nation-wide proportions.
J. C.

FOOD FOR THOUGHT

AT this time of year every Corporate member should be giving some thought to the composition of the Council that will direct the affairs of the Society in 1948. If you feel satisfied that the existing executive has done a good job of work then your worries in this connection are at an end. If, on the other hand, you do not feel satisfied then your obvious duty is to get together, with other members, and put forward a candidate who will meet your requirements. Here are a few words of advice which may help to guide you.

Firstly you need a man of ideals—one who is not afraid to voice his opinions, and one who has the affairs of the Society at heart. Someone who does not undertake the honorary duties of a Council member just for the glory he hopes to be able to get out of it. Secondly you must make sure before you nominate him that he has the time available to attend Council Meetings and such Committees as he may be appointed to serve upon.

A Council member's job does not finish with his attendance at 12 monthly meetings. He must undertake to sit on at least one Committee, and some of these meet as frequently as twice every month. He must also attend as many of the London (I.E.E.) meetings as possible, and be prepared to find the time to represent the Society at several of the O.R.M.'s which take place each year around the country. This latter duty will involve long weekends away from home, so make sure that his wife understands the position.

These are the essentials if he is to do his job thoroughly and efficiently.

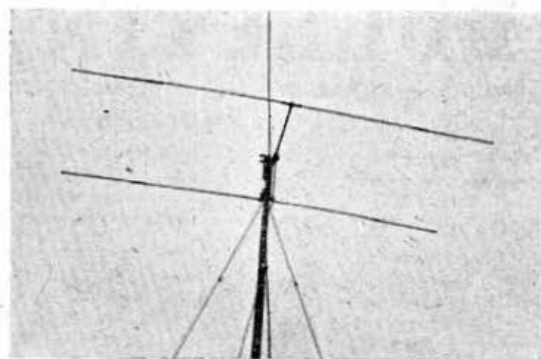
You will thus see the difficulty which faces the country member who is in business, and lives many miles away from Headquarters. That is why the majority of the Council is usually drawn from the London Region, for no matter how willing country

(Continued on page 45.)

THE TELE-TEN ROTARY BEAM

By R. W. JENNINGS, G4BY*

NO woodwork stand-off insulators or the like are used for the construction of this rotary beam. The elements are entirely self-supporting and have withstood all efforts of nature to wreck them. Incidentally, the "Tele-Ten" was the outcome of the purchase (for the modest figure of 10s.) of two damaged television aerials! It is appreciated that the possibility of repeating such a purchase is remote, but the boxes carrying the radiator and reflector are obtainable from the makers at a fraction of the cost of new television aerials, so also are the 7/16 in. dia. duralumin tubes. It is recommended, however, that this tubing be obtained through the many channels now available, such as, for example, Government surplus stores. The remaining components consist of a 7 ft. 6 in. length of $\frac{1}{2}$ in. dia. electrical conduit (screw barrel). An inspection box (cast) with side entries diagonally opposite and a back entry (centre support: see Fig. 3) to take the $\frac{1}{2}$ in.



The Tele-Ten in position at the author's station. Rotation by manual operation takes place through 360°.

As the original length of each $\frac{1}{4}$ wave element was 5 ft. 6 in. (for television) each "leg" had to be extended by 2 ft. 8 $\frac{1}{2}$ in. for operation on 28.2 Mc/s. and reduced by 5 $\frac{1}{2}$ in. for operation on 29.7 Mc/s.

Reference to Figs. 1A and 1B will make this clear.

It is recommended that measurements be carefully adhered to when drilling the two holes in the main sections of both radiator and reflector, otherwise an additional hole will be necessary in either the extensions or main sections which, in the interests of rigidity, is undesirable. Fig. 1B shows these measurements in detail.

Reflector

This is 2 per cent longer than the radiator for both frequencies, the "final" cut being calculated as follows:

For 28.2 Mc/s.: 2% of 16 ft. 5 in. = 3.94 in. or approximately 2 in. increase for each $\frac{1}{4}$ wave section; i.e. 8 ft. 2 $\frac{1}{2}$ in. + 2 in.; 8 ft. 4 $\frac{1}{2}$ in. for $\frac{1}{4}$ wave section, or 16 ft. 9 in. overall reflector length.

For 29.7 Mc/s.: 2% of 15 ft. 6 in. = 3.72 in. or approximately 1 $\frac{3}{4}$ in. increase for each "leg"; i.e. 7 ft. 9 in. + 1 $\frac{3}{4}$ in. = 7 ft. 10 $\frac{3}{4}$ in. for each $\frac{1}{4}$ section or 15 ft. 9 $\frac{1}{2}$ in. overall reflector length.

Figs. 2A and 2B show the exact drilling measurements, and if these are strictly adhered to, the above lengths for both frequencies will automatically be correct.

Element Spacing

The original spacing of 5 ft. 2 $\frac{1}{2}$ in. (television frequency) was, by experiment, found to be the best compromise between maximum forward radiation and the optimum match for the 75 ohm co-ax. feeder, which incidentally, is 130 ft. in length at this station.

Back-to-Front Ratio

This is in the neighbourhood of 2:3, sufficient to make the use of a parasitically excited element worth-while.

Rotation

The whole assembly pivots on the $\frac{1}{2}$ in. conduit and bracket-bearing clamped to the mast-head or any other suitable support. Fig 3 shows the arrangement employed. It is recommended, however, that the use of wire or cord as a "turning agent" be avoided if possible and the conduit pivot extended down the

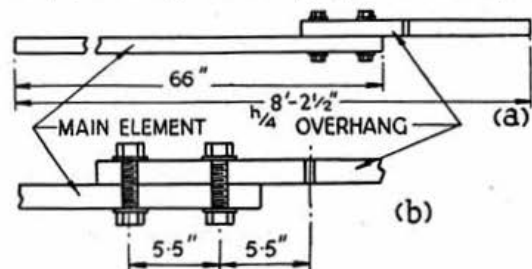


Fig. 1.
Radiator dimensions for the Tele-Ten Beam Aerial.

conduit. To provide support for the "beam" and also to afford means for rotation, a 5/16 in. iron bracket was made up quite cheaply by the local blacksmith. A pulley with sunk retaining screw was turned from aluminium to fit over the $\frac{1}{2}$ in. conduit. Two additional pulleys complete the rotating mechanism, these being of the "batten" mounting type. Eight 4BA, 1 $\frac{1}{4}$ in. threaded brass rods, with nuts and washers for clamping the "over-hang" to the elements are also required.

Radiator

The elements are adjustable for 28.2 Mc/s. or 29.7 Mc/s.

For 28.2 Mc/s. operation overall length = 16 ft. 5 in. or 8 ft. 2 $\frac{1}{2}$ in. per $\frac{1}{4}$ wave section.

For 29.7 Mc/s. operation overall length = 15 ft. 6 in. or 7 ft. 9 in. per $\frac{1}{4}$ wave section.

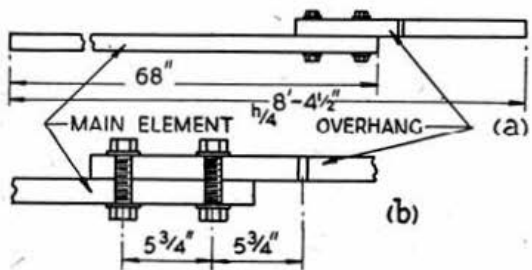


Fig. 2.
Sketch showing construction of reflector for use with the Tele-Ten Beam.

*104 Clare Road, Tankerton, Whitstable, Kent.

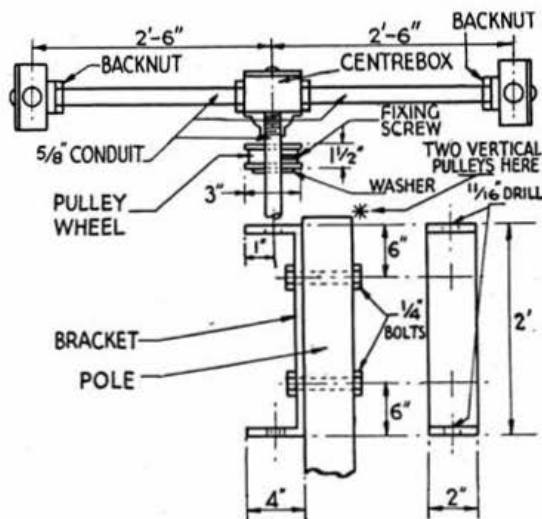


Fig. 3.
Gives details of the element supports, pivot and bracket used in constructing the Tele-Ten Rotary Beam.

support for attachment to a suitable turning mechanism, i.e. bevel gears operating through a reasonably high ratio gear-box, either hand or electrically driven. Thus, the drive is then *positive* throughout and has none of the cord, or wire, method disadvantages, such as shrinkage, which causes rotation or oscillating about the required bearing, due to tensioning elasticity.

Feeding

Extended tests were conducted to ensure efficient feeding with 75 ohm co-axial cable. The radiator (with reflector) was removed from the support or junction box and supported, so that various "gaps" might be tried together with different reflector spacing. The results left no doubt whatsoever that the best match was secured with the original television gap of $1\frac{1}{2}$ in. The co-ax. feeder is totally enclosed within the array, pivot and support arms, and is sufficiently flexible to permit rotation without "twisting" throughout 360° , provided one does not attempt continuous rotation—shades of early Radar!

An Appeal

As announced in earlier issues our friends in W.I.A. (Australia) are sending to Headquarters food parcels for distribution to members. The General Secretary would be pleased to hear from any lady living within reasonable distance of Central London who would volunteer to attend at H.Q., as required, to repack, re-address, and post the parcels to those members who were successful in the ballot announced in the April BULLETIN.

We find it difficult adequately to express our thanks to the organisers sponsoring these schemes. We can only hope that every member who is lucky in the draw will send an air mail letter to the organisation concerned.

The chief executives are:—

Major W. Mitchell, Hon. Secretary, W.I.A.
Food for Britain Patriotic Fund, 1946 Malvern Road, East Malvern, S.E.5, Victoria, Australia.
Mr. C. E. Oldham, Food for Britain Controller for Tasmania, W.I.A., University of Tasmania, Hobart, Australia.

We understand that the Queensland Division (VK4) are also entering the scheme.

Stray

Mr. K. B. Orton, BR813539, 26 East Goswote Street, Highfields, Leicester, who will shortly be leaving for Toronto, would like to contact members living in that city.

BOOK REVIEWS

RADIO SERVICE TEST GEAR. By W. H. Cazaly. Pitman & Sons. 90 pp. 6s. net.

This little book gives an admirable survey of the needs for, and the methods of, checking receivers of all kinds. It is obviously essential that, before undertaking any sort of receiver adjustment, some knowledge is very necessary of the apparatus employed for making the various measurements. The author first sets out clearly the five main checks, the figures of which indicate the performance of a receiver. In the case of communication receivers, we suggest a sixth very important test, that of signal-to-noise ratio, should also be included. The author then proceeds to deal in more detail with the apparatus used and methods involved. Standard signal generators, output meters, attenuators, valve voltmeters, bridges for the measurement of inductance and capacity at A.F. and R.F., and the testing of electrolytic condensers are neatly covered.

Later chapters deal with B.F.O.'s and valve testing. Details of a simple tester are also included. The final chapter contains some very lucid and helpful information on multivibrators, a subject which is only too frequently dealt with rather sketchily.

In all, this book will appeal to most serious-minded amateurs as well as to the professional serviceman. J.W.M.

THE CATHODE RAY TUBE HANDBOOK (2nd. Edit.). By S. K. Lewer. Pitman & Sons. 103 pp. 6s. net.

The author of this book is well known to Society members as an authority on the subject he has chosen, and as a result we have an admirable survey of the underlying principles of the C.R.T., preceding a discussion of the complete oscillograph with considerable detail of its many applications.

An extremely useful list of references is given which will enable the reader to follow up any of the special sections or applications in greater detail. A very comprehensive index is also included.

In view of the present interest in this subject this book should find a place on the bookshelves of all who aspire to keep in touch with modern trend and development, as well as of those who already have some knowledge of the principles and applications of this rapidly growing scientific aid. J.W.M.

Can You Help?

Capt. E. Clarke, G8AO, 175 Marsden Road, South Shields, requires details of the type 208 set.

SEE YOU AT THE LONDON MEMBERS' LADIES' NIGHT
to be held in
THE SOUTH HALL SUITE
VICTORIA HALLS
BLOOMSBURY SQUARE
HOLBORN, LONDON, W.C.1.
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Tickets 5/- each, from Town Representatives, Members of the Social Committee, or from Headquarters

THE B2 TRANSMITTER RECEIVER

By C. H. L. EDWARDS (G8TL)

THE majority of members who obtained a B2 Transmitter-Receiver from the recent Ministry of Supply allocation found that no power pack was included. In this article it is proposed to give brief details of the power supply arrangements together with details of the coils.

Normally the coils are carried in a spare container associated with the power pack container unit but both containers were generally missing, having been withdrawn in advance by the Ministry.

Coils

Four standard coils (marked 1A, 2A, 3A and 4A) are used with the transmitter. As these are reversible it is only necessary to pull out a coil and reverse it in its socket to obtain different frequencies. The coils are marked 1B, 2B, 3B and 4B on the reverse side.

All coils are spaced approximately one thickness of wire and wound on $1\frac{1}{4}$ in. formers. The frequencies covered are as follows:—

1A ..	3-4	Mc/s.	3A ..	6.5-9	Mc/s.
1B ..	3.75-5.25	"	3B ..	7-10	"
2A ..	4.5-6.25	"	4A ..	9-13	"
2B ..	5.5-7.5	"	4B ..	12-16	"

Coil winding data is as follows:—

- 1A.—31 turns, 22 S.W.G., $\frac{1}{8}$ in. space, then 8 turns continuous.
 2A.—22½ turns, 20 S.W.G., $\frac{1}{8}$ in. space, then 6½ turns continuous.
 3A.—15½ turns, 18 S.W.G., $\frac{1}{8}$ in. space, then 4½ turns continuous.
 4A.—9½ turns, 17 S.W.G., $\frac{1}{8}$ in. space, then 3½ turns continuous.

Details of the coil connections are given in Fig. 1.

Power Pack

The connections from both the transmitter and receiver are brought out through two 6-pin plugs, which fit into two 6-pin sockets in the power pack. If a power supply is made-up and the ends are terminated in two sets of sockets, as shown in Fig. 2, no alterations to the plugs will be required.

Receiver Calibration

As all receivers were separately calibrated the dial readings may not be "spot on" in all cases. The readings given below will, however, serve as a useful guide to locating the amateur bands.

Receiver Dial.	Band 1.	Band 2.	Band 3.
0	3.03	5.10	8.52
20	3.16	5.30	8.90
40	3.31	5.56	9.32
60	3.48	5.85	9.82
80	3.70	6.20	10.44
100	3.95	6.60	11.18
120	4.25	7.13	12.15
140	4.65	7.80	13.38
160	5.20	8.63	15.00
180	5.42	9.02	15.75

Receiver Colour Code

Details of the code are:—

White ..	L.T. +
Black ..	L.T. — and chassis.
Red ..	H.T. + (230 volts).
Yellow ..	G.B. —

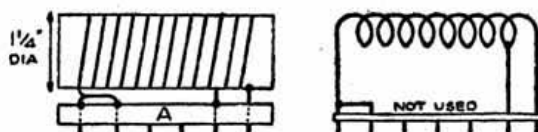


Fig. 1.
Coil connections for the B2.

Metering Positions

The following tabulation will be useful in checking the continuity of circuits.

Pos.	T.S.R. SWITCH IN "T" OR "S" POSITION.			T.S.R. SWITCH IN "R" POSITION.		
	Circuit Measured.	Full Scale Reading.	Normal Reading.	Circuit Measured.	Full Scale Reading.	Normal Reading.
1	Oscillator Voltage	600 v.	230 v.	Receiver Voltage	600 v.	230 v.
2	P.A. Voltage	600 (x2)	230 (x2)	P.A. Voltage	600 (x2)	260 (x2)
3	P.A. Grid	6 mA.	1-3 mA.	—	—	—
4	Oscillator Grid	1.5 mA.	.25-.75 mA.	Receiver Current	15 (x2) mA.	12.5 (x2)
5	Current Off	—	—	—	—	—
6	P.A. Total Current	120 mA. 600 v. Scale	65-70 mA. 325-350 mA.	—	—	—

An Explanation

As so many letters have been received regarding the missing power packs and coil containers it should be explained that due to demands from the Services and experimental stations only 88 (and not 300 as advertised) complete sets were made available to members. The Ministry subsequently located another stock of receivers only and offered to include them in

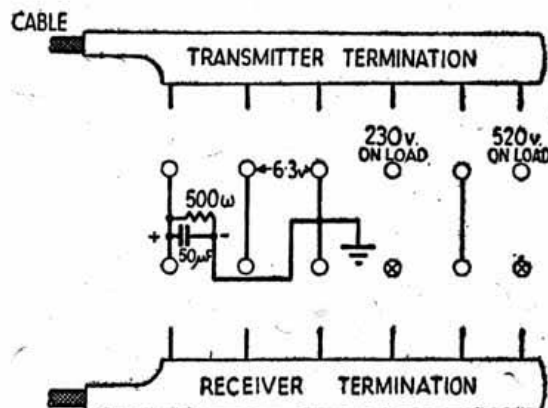


Fig. 2.
Power supply terminal connections for the B2 equipment.

the scheme at £2 each less power pack and coils. As the original agreed price for the transmitter alone was £2, the offer was accepted, consequently those who ordered B2's at £3 complete and obtained the receiver only will receive a refund of £1. The new offer is still an excellent bargain.

Coil Supplies

Upon making enquiries a quantity of 1,500 B2 coils were located. These have been purchased privately by G8TL and G2BRH, the deal involving a personal expenditure of £18 15s. on the basis of 3d. per coil. Bearing in mind that a number of members may already have made-up their own coils it is assumed that only 100 sets (viz. 400 coils) will be sold. To recover the initial outlay and to offset collection, packing and dispatching charges, it has been decided to make a charge of 5s. per set of coils, but if more

than 100 sets are sold this figure will be proportionally reduced.

Members who require coils should place an order at once with their C.R. (who has already been notified of the above arrangements). The sponsors of the scheme have neither the time, staff nor packing facilities to deal with orders from individual members. Despatches will be made in bulk to C.R.'s, but the final selling price cannot be fixed until all orders have been received. For this reason members are urgently requested to place their order at once.

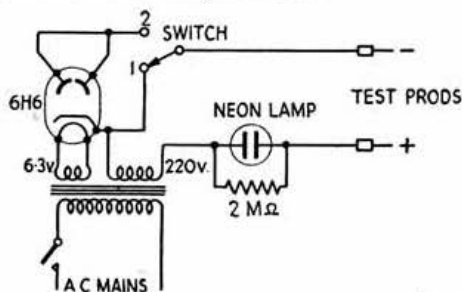
No intentional profit will be made by the sponsors, but if there is a small surplus at the finish it will be placed to the credit of the East London District Fund.

Remember this is a free service to members with a chance that the sponsors might not even recover their outlay.

A Handy Circuit Checker

By R. MENZEL (FRS108)

The circuit diagram of this useful little instrument is almost self explanatory, but the following notes will help to show its many uses. To test a condenser, the switch is set to position 2. If the neon lamp glows the condenser is leaky, if not, then it is O.K. When the switch is turned to position 1, the condenser capacitance can, with a little experience, be roughly estimated by observation of the degree of glow in the neon lamp. If in this position there is no glow, then the condenser is open circuit.



To test electrolytic condensers switch position 2 should be used and the polarity observed.

Since the current used is very small, the 6H6 valve will serve adequately as a rectifier and if used in conjunction with one of the dwarf type neon lamps, the whole instrument can be made compact and handy.

Many other components, such as chokes, resistances, etc., can also be tested.

S. F. and S. T. S.

During the war many amateurs served, under the direction of Brigadier F. W. Nicholls, G3BEK, with the Special Forces, maintaining secret radio links to Allied agents working within the enemy lines. Amateurs at home or abroad, who have not already done so, are invited to contact Stanley Ingram, G6ZY, 2 Shepherd Street, London, W.1, as a list of such S.F. members is now being compiled.

S.F. QSO Parties are being organised, and it is hoped soon to have a station at the S.F. Club, 8 Herbert Crescent, London, S.W.1. Membership is open to all who served with such types of unit as Stations 53, S.T.S. 54, Force 139, No. 1 S.F., etc.

Held Over

Due to pressure on our very limited space the second part of "Atlantic Journey," as well as an account of the two recent D/F. contests, have been held over from this issue.

More Publicity

The Jersey States Tourism Committee have, at the request of Mr. E. Banks, GC2CNC, agreed to



present special QSL cards to local amateurs. We illustrate one of the cards which shows Mount Orgeuil Castle, or Gorey Castle as it is better known to visitors.

Battery-Operated Receivers

The Editor will be pleased to consider for publication articles dealing with the construction of battery-operated T.R.F. and superheterodyne receivers. Intending contributors should communicate with Headquarters prior to commencing work on a manuscript.

EDITORIAL—(continued from page 41).

members may be few can find time to run both their own business affairs and those of the Society. So before you saddle someone with these responsibilities, think carefully and ascertain that he has the free time available to undertake the onerous duties the job demands.

As a matter of interest and for the information of intending nominees, the writer devoted more than 250 hours to R.S.G.B. official business during the first eight months of 1947. This time was spent at Council meetings, Committee meetings and O.R.M.'s and was exclusive of many additional hours given over to the M.O.S. Scheme.

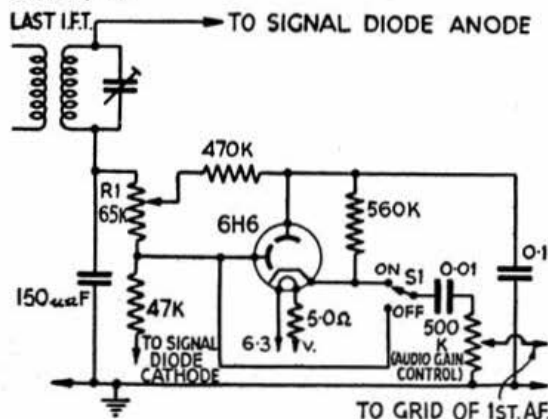
Refrain therefore from rushing headlong into nominating your best supporter until you are certain that he can qualify for those extenuating requirements called for by becoming a Council member. Otherwise you may be doing him, yourself, and the Society an injustice by keeping out a more suitable candidate who has both the necessary qualifications and the time available.

C. H. L. E.

The AR88 Noise Limiter Circuit

By EDWARD W. NIELD (GW3ARP)*

THE following is a description of the RCA AR88 noise limiter with circuit details suitable for incorporation into any communications receiver, commercial or home-built, which is not fitted with such a device or which is fitted with one of inferior performance. The circuit values shown are slightly different from those used in the AR88 but the performance is substantially the same. This circuit has been built into the writer's home-built receiver (as described in the issue of the *Bulletin* dated October 1946) and found to be infinitely superior to that previously described. The fame of this circuit, which is a modification of the Dickert and Bacon series limiter, is rapidly spreading, owing to the fact that it *really works*. It does much more than reduce interference, it practically eliminates it in the case of car ignition interference, and does a good job with the more continuous type set-up by vacuum cleaners, etc.



With the potentiometer R1 set to minimum (i.e. slider to top), limiting action begins at 100 per cent. modulation, and, as R1 is advanced, the threshold is reduced from 100 per cent. to any desired level. In practice, this control is rarely needed and may quite well be omitted without impairing the normal working of the limiter. The other great feature of the circuit is the fact that the limiting action is automatically adjusted to the instantaneous carrier level. If set at say 75 per cent. modulation, it will remain effective at this level no matter whether the signal is S3 or S9+. The switch S1 puts the limiter out of circuit if desired, though again, this may be omitted since the signal itself is not in the least attenuated by the limiter, and no advantage is to be had by switching it out of circuit (except to convince oneself of its effectiveness!).

Little need be said about constructional details save that it has been found slightly advantageous to cover the connecting leads with screened systoflex in order to minimise hum and to avoid stray signal pick-up between contiguous leads which might tend to bypass the limiter valve and so reduce the effectiveness of the circuit.

The writer recommends anyone who has lost faith in the efficacy of noise limiters (as he himself had) to give this circuit a trial, with the assurance that his faith will be immediately restored and even strengthened!

* 6 Hazel Road, Uplands, Swansea.

Silent Keys

JACK WYLLIE, GM5YG

The sudden death of Jack Wyllie, GM5YG, on August 3 last, has removed from our ranks one who may well be called the founder of the Society in Scotland. "YG," as he was affectionately known to many members, began his official connection with the Society when the entire membership in Scotland numbered only four. From these small beginnings he built up the membership until there was a full organisation in the country. He never spared himself in furthering the cause of Amateur Radio, and in particular the Society. Many Scottish amateurs owe their progress to his interest and encouragement which was always so freely given. His station was open to all, and many members saw their first transmitter when visiting his home. Upon his resignation from the position of Scottish Manager in 1935 he was elected a Vice-President of the Society.

Jack Wyllie was a very keen experimenter, and in contests he was always an active participant, taking a leading position on many occasions. His passing is a great loss to Amateur Radio and the sincere sympathy of his countless friends is extended to his widow and son.

GM6ZV.

* *

PETER MODRIDGE, G6PM

On Friday, August 1, 1947, Peter Modridge, G6PM, was drowned after getting into difficulties whilst bathing in a lake near his home, and Amateur Radio lost one who upheld in every way the highest traditions of the amateur spirit.

Peter possessed a very acute brain and abundant energy, both of which he brought to bear on any problem, whether it be his own or that of another "ham," for he was always helpful to those whose pleasure and privilege it was to meet him.

The holder of a first class P.M.G. certificate, he had worked on all bands, but latterly confined his activity to 1.7, 3.5 and 14 Mc/s.

In the early years of the war he gave freely of his time and skill on important Government work and later served in the Royal Signals, where his particular abilities were fully utilised in the service of his country.

His passing at an early age is a sad loss to Amateur Radio, and to his widow and small daughter we extend our deepest sympathy while our recollections of many happy days in the past will continue to live with us.

G6CY.

* *

LT.-COL. R. M. HALL, XZ2EM

The death in Burma, last July, of Lt.-Col. Ridley Martin Hall, XZ2EM, has removed from our ranks yet another well-known amateur. In the years before the war XZ2EM gave many G's their first QSO with Burma. Heartfelt sympathies are extended to his widow, who is resident in Byfleet, Surrey.

ATLANTIC CITY, 1947. ACT IV

By JOHN CLARRICOATS (G6CL), GENERAL SECRETARY

SINCE the appearance of our last issue the President (Mr. S. K. Lewer, G6LJ) has returned to England, therefore much of the information here has been obtained from documents which have been forwarded to us by the Conference Secretariat.

No Further Moves on 3.5 or 7 Mc/s.

The position in regard to these two bands remains unchanged, except that there now appears a very reasonable chance of European amateurs holding 300 kc/s. at 3.5 Mc/s. on a shared basis as at present.

The 7 Mc/s. band is, as reported previously, still under discussion, but it would seem that the proposal to reduce the band to a width of 100 kc/s. with another 50 kc/s. shared with broadcasting is the only one that will enable full agreement to be reached in Europe.

The demands for Broadcasting are so great at this part of the spectrum that the chances of holding our present allocation seem small.

Deadlock on 14 Mc/s.

Up to the middle of August the deadlock in regard to the 14 Mc/s. band continued. Piecing the story together from Conference reports it now seems clear that the U.S.S.R. and France were originally responsible for the proposal that amateurs should lose some portion of this valuable band.

On July 30 the Working Group (France, U.K., U.S., and U.S.S.R.) reported to Committee 5 that "there appeared to be considerable weight of opinion both for retaining the present amateur allocation and for making a reduction." The Working Group stated they had discussed various compromise figures without finding an acceptable solution, but agreed that some reduction in the amateur band appeared to be the only possible solution in order to obtain world-wide agreement.

All this comes down to the fact that Russia, having seen that she could not obtain all the frequencies she requires for her fixed services in other parts of the spectrum has pressed for a portion of the amateur band at 14 Mc/s.

The U.S.S.R. proposal was that amateurs should either be given 300 kc/s. on a world-wide basis or 250 kc/s. exclusive, plus 100 kc/s. shared with the fixed service.

It is quite certain that any sharing arrangement in this band will lead to great difficulties.

The French plan called for a reduction of 50 kc/s. (to 14,350 kc/s.), but her need is for more frequencies for the maritime mobile service.

As we stated earlier the deadlock continued at least up to August 19.

The 21 Mc/s. Band

We have no reason at present to think that any change from the earlier proposal to allocate 450 kc/s. to amateurs is contemplated.

The 28 Mc/s. Band

It appears from the latest reports available that a substantial measure of agreement has been reached in regard to this band, which it is proposed shall be 1,700 kc/s. wide (28-29.7 Mc/s.).

I.S.M. Band

During the early part of August a move was made to obtain international agreement for the use by amateurs of a small band around 11 metres. This band is normally used for industrial, scientific, and

medical purposes, and for the past two years amateurs in the United States have been permitted to make what use they can of the frequencies available in that band.

So far, the U.K. delegation has not stated that it will permit British amateurs to use these frequencies, but we are optimistic enough to use the old phrase "wait and see."

The V.H.F.'s

As every member interested in 5 metre work is aware the society has made every effort to hold some territory around 60 Mc/s. We cannot yet state definitely that our efforts have been successful, but as in the case of the 11 metre band we are hopeful that when the U.K. delegates return it will be possible to reach an agreement with the G.P.O. whereby British amateurs can continue their experiments at this part of the spectrum.

As a matter of interest, France and Russia have proposed that 800 kc/s. shall be assigned to amateurs between 72 and 72.8 Mc/s. The U.K. delegation is not in favour of this proposal.

On August 14th the Working Group submitted to Committee 5 its proposals for frequencies between 31.7 and 10,500 Mc/s. During the subsequent discussions it became clear that an amateur allocation around 150 Mc/s. would finally mature. For the European region the band 154-156 Mc/s. is proposed, whilst for the American region the figures are 144-148 Mc/s. The Australian region proposes 166-170 Mc/s. There appears to be little hope of obtaining an amateur band between 220-225 Mc/s. for Europe, although these figures are suggested for the American region. On the other hand a band 40 Mc/s. wide between 420-460 Mc/s. is proposed for Europe whereas for the American region the proposal is 420-450 Mc/s.

The Working Committee proposed that the bands 1,215-1,300 Mc/s., 2,300-2,450 Mc/s., 5,650-5,850 Mc/s. and 10,000-10,500 Mc/s. be assigned on a World-wide basis to amateurs with 3,300-3,500 Mc/s. as an American regional assignment only. The Group also proposed that the band 5,650-5,850 Mc/s. be extended up to 5,925 Mc/s. in the American region.

14 Mc/s. BAND TO BE REDUCED BY 50 kc/s.

JUST before this issue closed for press, news was received from Atlantic City that the present 14 Mc/s. Amateur Band will be reduced by 50 kc/s. when the Convention becomes effective. The limits of the new band will be 14,000-14,350 kc/s.

During the period of deadlock a number of nations had pressed for a reduction of 100 kc/s., whilst others resisted every such suggestion. Finally, on August 23, the U.K. spokesman, in a speech which emphasised the importance of Amateur Radio, proposed, in order to achieve world-wide agreement, that a compromise figure of 50 kc/s. should be accepted. The U.K. proposal was adopted.

Many delegates drew attention to the fact that, although amateurs would be losing 50 kc/s. at 14 Mc/s. they would be gaining an entirely new DX band around 21 Mc/s.

General

A provisional report of Sub-Committee 7A (which has dealt with definitions, terms, services and stations) dated July 25, contains in final transactional text form the definitions of "Amateur Service" and "Amateur Station." The English text is precisely as given in early reports.

From information which has come to hand we understand the Radio Conference is scheduled to finish on September 15, but it seems doubtful, at this writing, whether final agreement on frequency allocations will have been reached by that date.

Q Code

Throughout the Conference a Committee sat to consider revisions to the existing Q Code. Preliminary examination of the draft proposals show that a number of changes have been recommended, but it does not appear likely that these will materially affect our own particular use of the code.

New Q Code signals which may interest amateurs include:

- QRE .. "What is your estimated time of arrival at?"
QRF .. "Are you returning to?"
QSK .. "Can you hear me through my signals?"
QSN .. "Did you hear me (or) on kc/s.?"

Numerous editorial changes to the existing Q Code have been made and a complete list will be published as soon as the recommendations have been finally approved.

Miscellaneous Abbreviations and Signals

For the first time the signal \overline{AR} (end of transmission) appears in the official Convention table whilst \overline{AS} now means "waiting period" instead of "wait." CP is proposed as a "General call to two or more specified stations," whilst CQ means "General call to all stations," K ("invitation to transmit"), and R ("received") are new additions to the table, although both have been in common use for years.

* * *

Although nothing has yet appeared in writing it seems improbable that the new Convention will, become operative before January, 1949.

Stop Press

We now learn that Australia, New Zealand, South Africa, China and the Netherlands have intimated their desire to allocate the band 50-54 Mc/s. to amateurs, which is, of course, the American regional proposal. The Dutch proposal is significant as the rest of Europe have declined to permit an amateur allocation to appear in the frequency table at this part of the spectrum.

Around the Trade

Messrs. Wright & Weaire of Great Peter House, Lord North Street, London, S.W.1., have published a new Wearite components catalogue, containing detailed descriptions (illustrated with circuit blueprints) of various components now obtainable from stock. The catalogue will be sent free to members, on request.

* * *

The new Belling & Lee, Ltd., catalogue, one of the most comprehensive issued since before the war, is available to members at the special price of 6s. 6d. Printed on art paper the descriptions are very detailed. This publication will prove invaluable to engineer designers in the radio and electronic industries.

Multicore Model Radio Factory at Radiolympia

An outstanding feature at Radiolympia, 1947, is being staged by *Multicore Solders Limited*. Their island stand, No. 23, in the Grand Hall, will virtually be a model factory, where operatives from radio concerns in the London area, will show how Ersin solder is used in the production of components and accessories.

A 27-ft. prefabricated flowline conveyor is being installed, at which girls from the Bush Radio Works, Chiswick, will assemble and solder coil units. In addition, staff from the works of A. H. Hunt Limited will show how Ersin Multicore solder is used under production conditions.

The centre section of the stand will be occupied by equipment from the Multicore Research Laboratories, which is used to determine instantaneously speeds and spread of fluxes and alloys.

Belfast Harbour Board use Eddystone Equipment

Eddystone short-wave radio telephonic equipment, which enables the Marine Superintendent of the Belfast Harbour Board to keep in constant touch with all official craft in the harbour, has just been installed by Messrs. Stratton & Co., Ltd., Birmingham.

The time- and money-saving efficiency of this unique equipment is becoming widely recognised as is evidenced by the number of enquiries which have been received from diverse undertakings.

As a matter of historic interest, Stratton's supplied much of the short wave telephonic equipment for the D-Day landings in 1944.

W.I.A. 1947 International DX Contest

Abridged Rules and Conditions

1. There will be three contests:—
 - (a) Transmitting C.W.
 - (b) Transmitting Phone.
 - (c) Receiving.
2. Contestants may compete in the "open" events, that is, on all licensed amateur bands, or, in any one or more individual bands by submitting a log for each band. There will be awards for the "open" section as well as for the winners of each band.
3. The Wireless Institute of Australia Contest Committee will be the sole adjudicators, and their decision will be binding in the case of dispute.
4. The nature of the contest requires the world to contact all States of Australia.
5. The contest is to be held from 14.01 G.M.T., October 3, until 13.59 G.M.T., October 5, and will continue over the following three weekends in October at the same times.
6. The first two weekends are to be devoted to phone operation, the latter two for C.W. The receiving contest is open throughout for both phone and C.W.
7. The contest is open to all licensed fixed transmitting amateurs and receiving stations in any part of the world.
8. Each entry must be signed by the competitor.
9. Each participant will assign himself a serial number of three figures, as detailed in the contest description.
10. All amateur frequency bands will be used.
11. Only one contact with a specific station on each of the bands during each weekend will be permitted.
12. Contacts may be repeated on each of the succeeding weekends with the same stations in accordance with Rule 11.
13. Each contact must be accompanied with an exchange of serial number and signal strength reports, including readability, strength and tone, e.g. 444569.
14. The judges reserve the right to disqualify any station whose tone report is consistently less than T8.
15. Scoring. Three points will be allotted for every contact completed with an exchange of serial numbers and signal reports.
16. Stations will multiply their total points by the number of VK districts worked on each band.
17. No prior entry need be made for the contest, but each contestant is to submit a log at the conclusion of the test showing: date, time (in G.M.T.), band, station worked, in and out serial numbers, in and out signal strength reports, and points claimed for each QSO. Finally, a summary of points and multipliers claimed must be shown at the conclusion of the log.
18. Overseas logs should reach W.I.A., 191 Queen Street, Melbourne, C.I., by December 31, 1947.
19. Certificates will be awarded to the stations returning the highest total in each State of each participating country. There will be no world winner.
20. Overseas stations should call CQ VK.

Receiving.

1. The rules for the receiving contest are the same as for the transmitting contest.
2. The dates, scoring of points, and logging of stations once on each band per weekend are subject to the same rules as for the transmitting contest.
3. To count for points, the call sign of the station being called, and the strength and tone of the calling station, together with the serial number and signal strength report sent by the calling station, must be entered on the log.
4. Overseas stations will enter up VK stations heard only.
5. The awards for the receiving contest will be similar for the winners in the transmitting tests.
6. Receiving logs are to be similar to transmitting logs.

NATIONAL FIELD DAY, 1947

SOUTHGATE (LONDON) THE WINNERS

THE first post-war National Field Day, and the eighth since its inauguration by Mr. T. A. St. Johnston, G6UT, in 1933, was held on June 7 and 8, and proved, once again, to be the best supported of all R.S.G.B. Contests. Nearly 200 individual portable stations were in the field, and these were manned by probably upwards of 1,500 operators and helpers. The weather in London over the weekend was rather squally, and it appears that most Regions experienced similar conditions.

Reference to the accompanying table of results records the scoring of individual stations, and a few notes on the equipment used at the leading stations may now be made.

Southgate the Winners

Southgate amateurs are to be congratulated on winning the contest with G5FA/P ("A" Station) and G6ZO/P ("B" Station). The latter station also heads the list of "B" Station scores. G5FA/P used a VFO-BA-PA on 3.5 Mc/s., and an ECO-PA on 1.7 Mc/s., both feeding a 264 ft. inverted L aerial running in a north-east to south-west direction. The site, near Barnet, was well surrounded by trees but fairly high for the London area. In spite of slight technical difficulties which had the team worried and kept them off the air for two hours, a score of 244 was made. G6ZO/P, operating from a similar site at Totteridge, ran a type 145 VFO into a FD-BA-PA, the final input never exceeding 20 watts, and for most of the time it was nearer 15 watts. A "long wire" approximately 400 ft. long supplemented the 7 and 14 Mc/s. dipoles at this site, and an HRO was used as receiver. Apart from a minor aerial casualty, following a heavy squall, the five operators were kept very busy and scored 339 points.

Coventry Runners-up

Runners-up were G2YS/P and G5PP/P of Coventry, who fed their R.F. into a 170 ft. inverted L in the case of the "A" Station, and a Zepp and two dipoles in the case of the "B" Station. The Worthing group, running G4NY/P ("A" Station) were unlucky in not having a supporting "B" Station in the field. Their score of 275 points,

however, put them at the top of the list of "A" Stations.



NORTHERN IRELAND N.F.D.
GI2FDL, GI6TK and GI3AIT operating the Belfast station at Ballynichol, Comber, Co. Down.

Conditions

It was felt generally that conditions on the higher frequencies were only fair; DX was certainly more scanty than had been the case even a few days before the Contest. Most points were scored on the 3.5 Mc/s. and 7 Mc/s. bands, but it is worth noting that DX worked on 14 Mc/s. included ZL, VK, W6, PY and VE7. Many contestants commented on the method of scoring, which seems to have met with general approval.

Participants expressed disappointment that more Empire portables were not active; it has been pointed out that the A.R.R.L. Field Day event and our N.F.D. could well have coincided in the date, and this will certainly be considered for future years.

(A.R.R.L. Field Day as at present constituted is an inter-U.S.A. event and no attempt is made to work stations outside North America.—Ed.).

Several European countries operated portable stations in the field; the Swiss, as usual, showed the keenest interest. HB1J submitted an excellent log, working in all 114 G portables, and this station will be awarded the appropriate certificate.

Operation

V.F.O.'s were, of course, in use at many sites and, although the quality of the signal emitted from several well-known stations left something to be desired, no reports of off-frequency operation have been received.

An innovation at this post-war field day was the use by several stations of "inter-com." systems



COVENTRY N.F.D.

Fred Miles, GSML, with Bob Palmer, G5PP, at the Coventry N.F.D. station at Allesley. This was the first occasion that GSML had taken part in amateur activities since his recent illness.



NORWICH N.F.D.
Station G2MNP operated on 1.7 and 3.5 Mc/s.

between "A" and "B" sites, and even between the operators of different receivers on the same station.

The almost universal use of commercial receivers was another sign of the times. An interesting suggestion has been put forward to the effect that a really "portable" low power field day would be appreciated by some members—an event where *real* portability was the criterion. Further views are invited by the Contests Committee.

In the submitted logs, there are still many cases of R.S.T. reports which do not tally, evidence of too much haste in logging, unfortunate carelessness or insufficient checking of transmitted reports, resulting in many claimed points being rendered invalid.

The several check logs sent in by helpful members were well used by the Contests Committee, and the donors are thanked for their co-operation, as are the majority of contestants whose neat logging (in spite of outdoor difficulties) made the task of marking and checking less formidable.

A complete list of entrants in order of merit is as follows:—

Pn.	Town or Area.	"A" STATION.		"B" STATION.		Combined Score
		Call Sign.	Pts.	Call Sign.	Pts.	
1	Southgate..	G5FA/P	244	G6ZO/P	339	583
2	Coventry..	G2YS/P	229	G5PP/P	316	545
3	Cambridge	G5JO/P	290	G5DQ/P	254	544
4	Birmingham	G2AK/P	257	G4OI/P	216	473
5	County Down	G15UR/P	227	G16TK/P	242	469
6	Stirling and Falkirk	GM3OM/P	187	GM6XW/P	281	468
7	Hull	G3CC/P	253	G6OS/P	209	462
8	Leicester	G2IX/P	234	G2RI/P	219	453
9	Edinburgh	GM6H/P	221	GM6LS/P	227	448
10	Guildford	G6NA/P	222	G2BYA/P	224	446
11	Slough	G3XH/P	187	G6PR/P	245	432
12	Huddersfield	G8NF/P	252	G8CD/P	175	427
13	Edgware	G3HT/P	145	G4KD/P	274	419
14	Rhyl and Prestatyn	GW5FU/P	234	GW4CX/P	182	416
15	Croydon	G2FWA/P	177	G5BT/P	231	408
16	Cheltenham	G3LP/P	268	G8ML/P	133	401
17	Dundee	GM3NH/P	148	GM5SC/P	244	392
18	Neath	GW6BI/P	229	GW2FRB/P	155	384
19	Ashford, Kent	G2JF/P	201	G2QT/P	182	383
20	Aberdeen	GM6LG/P	122	GM3RL/P	260	382
21	Nottingham	G8DZ/P	127	G8DD/P	255	382
22	East Molesey	G8SM/P	259	G6NB/P	121	380
23	Sheffield	G3FN/P	168	G5TO/P	211	379
24	Bristol	G5UH/P	162	G6GN/P	216	378
25	Swansea	GW5ZL/P	204	GW3AX/P	174	378
26	Berwick	G8SG/P	207	G2YY/P	151	358
27	Sutton and Cheam	G6KP/P	199	G4DH/P	158	357
28	Cardiff	GW2BG/P	233	GW3VL/P	121	354
29	Chingford	G2XG/P	147	G3YF/P	206	353
30	Ilford	G8TL/P	199	G2QI/P	152	351
31	Bromley and Beckenham	G6HD/P	259	G2NK/P	89	348
32	Portsmouth	G6NZ/P	204	G5FF/P	142	346
33	Glasgow	GM2LQ/P	123	GM6MS/P	213	336
34	St. Albans and Welwyn	G5UM/P	151	G8PM/P	182	333
35	Mansfield	G3AF/P	227	G8SA/P	101	328
36	Rugby	G8RL/P	182	G3DI/P	146	328
37	Hayes, Middx.	G2RF/P	198	G3XD/P	127	325
38	North Angus	GM6H/P	179	G3MKC/P	145	324
39	Maidstone	G4HG/P	157	G6NU/P	164	321
40	Plymouth	G6RF/P	186	G3TX/P	134	320
41	Manchester	G2OI/P	219	G2WQ/P	94	313
42	Malvern	G6DX/P	197	G8QX/P	112	309
43	Coulsdon	G2KU/P	184	G2DN/P	121	305
44	North Kent	G4CW/P	168	G4MB/P	137	305
45	Brighton	G8HV/P	148	G5ZQ/P	156	304
46	Accrington and Burnley	G8TD/P	202	G2PB/P	101	303
47	Wirral	G8NH/P	196	G3CK/P	104	300
48	Brentwood	G3LA/P	152	G8RC/P	147	299
49	Swindon	G8HI/P	181	G3HS/P	111	292
50	Exeter and Torquay	G5QA/P	146	G2GK/P	146	292
51	Bedford	G5PA/P	192	G2HK/P	98	290
52	Galashiels	GM5FT/P	149	G6RG/P	138	287
53	Reading	G2YI/P	157	G2BHS/P	122	279
54	Barnsley	G2BH/P	182	G5IV/P	95	277

Pn.	Town or Area.	"A" STATION.		"B" STATION.		Combined Score
		Call Sign.	Pts.	Call Sign.	Pts.	
54	Worthing..	G4NY/P	275	—	—	275
55	Great Yarmouth	G3RW/P	172	G2FAO/P	102	274
56	S. Shields and Sunderland	G3IV/P	167	G8KK/P	106	273
57	Northampton and Daventry	G3BA/P	181	G4MU/P	92	273
58	Heathfield	—	—	G5JZ/P	267	267
59	Gloucester	G3MA/P	213	G3PZ/P	48	261
60	Chelmsford	G3AGH/P	181	G5RV/P	77	258
61	Grimsby and Cleethorpes	G8KH/P	73	G3TZ/P	179	252
62	Burton-on-Trent	G2RH/P	166	G2DAN/P	82	248
63	Farnham	G8TS/P	246	—	—	246
64	New Cross	G2HP/P	138	G4DC/P	104	242
65	West Cornwall	G2JL/P	159	G8AW/P	77	236
66	Llandudno	GW5UO/P	141	GW2BVA/P	94	235
67	Oswestry	G2AUZ/P	96	G6US/P	138	234
68	King's Lynn	—	—	G2JS/P	227	227
69	Southend-on-Sea	G6CH/P	102	G5QK/P	122	224
70	Bradford and Halifax	G3BAK/P	141	G3FX/P	71	212
71	Liverpool	G6KS/P	159	G8AZ/P	49	208
72	Jersey, C.I.	G6SNO/P	202	—	—	202
73	Stroud, Glos.	G5WA/P	168	G5HC/P	30	198
74	Barnes, Putney and Richmond	G2BHR/P	123	G5CI/P	73	196
75	West Cumberland	G6WR/P	169	G3BW/P	26	195
76	Hawick	—	—	GMSRV/P	184	184
77	Ipswich	G5WW/P	183	—	—	183
78	Morayshire	—	—	GM3UU/P	180	180
79	Bournemouth	G2DBF/P	67	G3AYG/P	112	179
80	Bury	G3BRS/P	119	G8NL/P	60	179
81	Preston	G2NY/P	177	—	—	177
82	Luton	G2MD/P	77	G2LS/P	95	172
83	Boston	G2UK/P	34	G8BQ/P	134	168
84	Ayrshire	GM2BUD/P	160	—	—	160
85	Blackburn and Darwen	G2HW/P	158	—	—	158
86	Darlington	—	—	G3DT/P	154	154
87	Grays	G3GF/P	153	—	—	153
88	Stourbridge	G8GF/P	114	G8PR/P	29	143
89	Kirkcaldy	—	—	GM4AN/P	140	140
90	High Wycombe	—	—	G4NT/P	123	123
91	Warrington	G8TR/P	50	G3FM/P	70	120
92	Blackpool	—	—	G8GG/P	110	110
93	Ealing	—	—	G8IH/P	108	108
94	Southport	—	—	G2IN/P	106	106
95	Bolton	—	—	G2BTO/P	104	104
96	Finsbury Park	—	—	G8PP/P	103	103
97	Norwich	G2MN/P	81	—	—	81
98	York	—	—	G5KC/P	64	64
99	Middlesbrough	G5QU/P	57	—	—	57
100	Oxford	—	—	G8PX/P	55	55
101	Dunfermline	—	—	GM8BO/P	32	32
102	Enfield	—	—	G2DGW/P	25	25
103	West Hartlepool	—	—	G3TO/P	21	21
104	Stockport	G4HK/P	15	—	—	15

* Disqualified. Entry received four weeks late. Score as claimed, unchecked.

Overseas Logs

Entries received from overseas portable stations appear below, together with the total points which were contributed to British portables operating in the event:—

Station.	Points.	Station.	Points.
HB1J ..	449	EI3G/P ..	99
D2KW/P ..	280	OZ2NU/P ..	88
HB1AW ..	209	EI3L/P ..	85
		HB1EI ..	68

Check logs were received from the following stations: G2FJD, LC, XG, ZC, 3AKF, AZD, NT, 5AO/A, DZ/P, JL, 6UT/P, 8LN, GW6AA/P, D2DW, PA0BK, DA, LU, NW.

THE MONTH ON THE AIR

By A. O. MILNE (G2MD)*

Wolf Pack

PART of M.O.T.A. has been written for us this month. Here it is; a letter from one of our oldest and best known DX men. His remarks need no amplification or comment.

"It is not often that I lose patience but some recent happenings on 14 Mc/s. are enough to make anyone's blood boil. I have been on that band these last few evenings and some of the operating by the 'wolf pack' does no credit to Amateur Radio, and that is putting it mildly.

"Take the case of G26DT in contact with a GM. During the whole of the time the 'wolves' (including G's), called him continuously. The QRM they caused eventually resulted in the contact breaking down.

"Another case was AC4BR (who has no QSL's and says so). He came on and called 'CQ ZL,' interspersed with 'CQ New Zealand.' His reward was the usual crowd—nearly all G's. Exasperated he called ZL and finished up by saying 'No QSL.' Then he called 'CQ ZL' again only to be greeted by another pack of silly idiots.

"Now one can understand a raw recruit doing such things but a large number of those calls were from well-seasoned hams. We are all after DX and, naturally, want to contact the rarer countries, but there is a limit at which to draw the line!

"One wonders if some people are able to read Morse properly, or can it be that they don't trouble what happens to the other fellow as long as they get the station they are after? Surely there is some way of making these people see how their actions cause endless unnecessary QRM and will eventually bring Amateur Radio into disrepute.

"As always there are faults on both sides, some rare DX ask for it by their own operating. It is nothing to hear them sign SK three times for one QSO, but that does not condone the instances I have pointed out.

"Forgive this outburst but there is reason in all things, even in trying to hook DX!"

Well chaps, there you have it, straight from an old-timer's shoulder. It makes yer fink!

Notes and News

BRS11494 has heard YN1HP on 14,200 and YN1HB on the H.F. end of 14 Mc/s. We have no authentic information on OY2NL on 7,010. G3BRT has raised OX1AA on 3.5 Mc/s. Nice work o.m.

From VR6AA we hear that ZK1AA is in charge of the Ionosphere Research Station at Raratonga. He is very active and looking for G's. He will shortly be going to Penrhyn Island. W0NUC kindly supplies some information on the VR5's. VR5IP and VR5PL will be using 500 watts and are especially looking for European contacts. Both stations are in Tonga.

LI stations are now using the new MD1 or MD2 calls. The new series being: MD1, Cyrenaica; MD2, Tripolitania; MD3, Eritrea; MD4, Italian Somaliland; MD5, Suez Canal Zone; MD6, British Forces in Iraq; MD7, British Forces in Cyprus. We see no reason for this later prefix as Cyprus is a British colony and has an official prefix—ZC4.

MD2A has come through with a nice wad of cards and says the MD-calls seem to have been regarded with suspicion but are quite O.K.

LI2CL is now MD1D and is handling the QSL Bureau for MD1. QTH is F./O. D. E. R. Lockyer,

R.A.F., El Adem, M.E.F. 7. LI2JC is now MD1E and LI2BO is MD1F.

G6CU is closing his G6CU/ZC2 file. Anyone who still awaits a card should write to him. Correspondence regarding ZC2CU should go to Mr. K. Frost, 45 New Road, Sawston, Cambridge.

RAEM will shortly be operating as RAEM/MM and will be visiting Zones 18 and 40. ZC6SX, much in demand, uses a 6V6 V.F.O. and 6V6 buffer to an 807 final with 25-30 watts. Seems to be all he needs judging by the cards he receives!

G6RH offers the following choice items: VP5FR, 14,180, 'phone; PK5LK, 14,095, T9; KS4AE and KS4AC, 14,040, UL7BS, 14,105, T6; HP4Q, 14,095, T9; W6YAN/J8, 14,052, T9; OY7NL, 6,995, T9; and FU8SQ, 14,050, at 17.00 G.M.T.

G2CHI has worked DF3AA on 'phone. He said he was over 3,000 miles away and will QSL via R.S.G.B. He speaks good French but does not pronounce English words like a Latin. There the mystery rests at present.

VS1BPF and VQ9IW were O.K. but on board ship so they won't count for countries. Cards are in from AR8AB and FT4AN—the latter being Georges Solet, 14 Rue Hersent, Bizerte, Tunis. ZE2JO is now on the air on 28 Mc/s. G8VR gives VP3TR, 14,050, A.P.O.857, c/o Postmaster, Miami, and EQ2L, 14,100, Ray Ball, c/o U.S. Embassy, Tehran, Persia. G8IA says OX3BG is via U.S. Navy, F.P.O. No. 26, New York. G5CI has the usual list of nice ones. ET3Z, 14,055, Box 1636, Addis Ababa. HZ2HV, 14,100, Box 14, Medina, Saudi Arabia, and many others previously reported.

To our surprise, cards have arrived from ET1IR. Very smart cards too. Says QSL via A.R.R.L.

MD7RH is active so we are informed by G3BLT.—QTH is R. C. Honey, R.A.F. Station, Nicosia, Cyprus. He is using 50 watts to a long wire. Works between 10.00 and 18.00 G.M.T. on 14 and 28 Mc/s. He was previously BRS14614.

G6CJ gives us UA0PA, Baikal, 14,120, T3, in Zone 18; ZK1AK, 14,135; PK6HR, 14,020, using 3 watts; ZS3F, 14,100; ZM6AF, 14,105, T7; and ZM6AC, 14,125. XAGW is a new one. QTH, 14960577, Signm. R. Whorwell, H.Q. 3 Agra (Fd.) Signal Sqdn., C.M.F.

In answer to G8PO's note last month G8AO tells us he worked several J's last year on 'phone, also G6LX worked several. Sorry, Ted! G3AEW worked J4AAS last July using 24 watts.

Has anyone worked KX6USN on Bikini Atoll? Active on 14 Mc/s. around 08.30 G.M.T.

BERS195 casts doubt on YT1LB. Says he is S9 plus in Tasmania when no other Europeans are audible.

SV1WE is the only genuine SV call on the air at present except for the Service personnel, all of whom use SV0 calls. G8JO and G8KK are hearing the G DX on 58 Mc/s. Both are in South Shields. How about swinging your beams round that way chaps? Frequencies are 59 and 58.7, respectively. G8OJ has raised some nice ones on 7 Mc/s. recently, including LU3FP on 7,130, F9ABC on 7,010 who says he is in Corsica, and a station signing VS6POR. ST2MP is on daily from Khartoum on 28 Mc/s. 100 per cent. QSL.

G6ZO worked VK3YP (Melbourne) for 30 minutes on 28 Mc/s. on August 12 at 00.10 hours. The band was virtually dead. He was radiating in a southeasterly direction and was, therefore, working the long route. Reports both ways were R5 S5.

From latest information it seems that the only genuine OY is OY3IGO.

* 29 Kechill Gardens, Hayes, Bromley, Kent.

(continued on page 52)

THE EMPIRE DX CERTIFICATE

The Council takes pleasure in announcing that a new certificate—to be known as the Empire DX Certificate—is to be issued to those who submit evidence of having established:—

- Two-way contact on 14 Mc/s. with amateur stations situated in 50 Empire countries or call areas; and
- Two-way contact with amateur stations in 50 different Empire countries or call areas irrespective of the band used other than 14 Mc/s.*

A list of Empire countries and call areas upon which claims are to be based appears below as an Appendix.

When the new 21 Mc/s. band becomes available to amateurs a special Empire DX Certificate will be issued to those who submit proof of two-way contacts with (a) 50 Empire countries or call areas on that band, and (b) 50 Empire countries or call areas irrespective of the band used, other than 21 Mc/s.

Up to now the British Empire Radio Trans-

mission Award (B.E.R.T.A.) has been the only R.S.G.B. certificate that compares with the well-known A.R.R.L. DX Century Club Certificate. The requirements for B.E.R.T.A. are, however, rather less stringent than those for the DX C.C.

It is hoped that the Empire DX Certificate will become a yard-stick for measuring the achievements of amateur stations.

The General Rules governing the issue of the Empire DX Certificate are the same as those set out in the March, 1947, issue of the BULLETIN, copies of which are available free of charge from R.S.G.B. Headquarters.

Periodically we shall publish lists of Empire DX Certificate holders. Will your name and call be in the first list?

* Only one station in each call area may be entered irrespective of band, i.e. if VK2 on 7 Mc/s. is claimed a card from VK2 on 28 Mc/s. cannot be entered. In such a case it is, of course, in order to enter a card for VK2 under (a) for 14 Mc/s. and one for VK2 under (b) for one of the other bands.

APPENDIX.

List of Countries and Call Areas eligible for the Empire DX Certificate.

Dominions.		Dominions:		Colonies.	
England G		New Zealand, South		Gambia ZD3	
Channel Islands .. GC		Island ZL3		Gibraltar ZB2	
Isle of Man .. GD		New Zealand, South		Gilbert and Ellice	
Northern Ireland .. G1		Island ZL4		Islands VR1	
Scotland GM		Cape Province .. ZS1, ZS2		Gold Coast ZD4	
Wales GW		S.W. Africa .. ZS3		Grenada VP2	
Eire EI		Orange Free State ZS4		Hong Kong VS6	
Maritime Provinces VE1		Natal ZS5		Jamaica VP5	
Quebec Province .. VE2		Transvaal ZS6		Kenya VQ4	
Ontario Province .. VE3				Kuwait	
Manitoba Province VE4				Malaya VS1	
Saskatchewan				Maldives Islands .. VS2	
Province .. VE5		Aden VP9		Malta ZB1	
Alberta Province .. VE6		Andaman Islands .. VU5		Mauritius VQ8	
British Columbia		Antigua VP2		Montserrat VP2	
Province .. VE7		Ascension ZD8		Nauru	
Yukon Territories .. VES8A-L		Bahamas VP7		Nigeria ZD2	
N.W. Territory .. VESM-Z		Bahrein VU7		N. Rhodesia VQ2	
New South Wales .. VK2		Barbados VP6		Nyasaland ZD6	
Victoria VK3		Basutoland		Pitcairn VR6	
Queensland and		Bermuda VP9		Palestine ZC6	
Papua VK4		Bechuanaland		St. Helena ZD7	
South Australia .. VK5		British Guiana .. VP3		St. Kitts VP2	
Northern Terri-		British Honduras .. VP1		St. Lucia VP2	
tories VK5		British Somaliland VQ6		St. Vincent VP2	
Western Australia VK6		British North Borneo		Sarawak VS4	
Tasmania VK7		and Labuan VS4		Seychelles VQ9	
New Guinea VK9		British Solomons .. VR4		Samoa ZM	
Newfoundland .. VO1-5		Brunei and Labuan VS5		Sierra Leone ZD1	
Labrador VO6		Caymans VP5		S. Rhodesia ZE1	
North India (above		Ceylon VS7		Sudan ST	
15° Lat.) VU		Chagos Island VQ8		Swaziland	
South India (below		Cocos Island ZC2		Tanganyika VQ3	
15° Lat.) VU		Cook Islands ZK1		Trinidad and	
Burma XZ		Cyprus ZC4		Tobago VP4	
New Zealand, North		Dominica VP2		Turks and Caicos	
Island ZL1		Falklands VP8		Islands VP5	
New Zealand, North		Falklands Depend-		Tristan da Cunha.. ZD9	
Island ZL2		encies VP8		Uganda VQ5	
		Fanning Island .. VR3		Zanzibar VQ1	
		Fiji VR2			

MONTH ON THE AIR (continued from page 51)

QSL News

The QSL Manager for D2 is now Capt. J. S. Howe, R. Sigs. E. and E. Branch, C.C.G., Bad Salzuffen, 100 H.Q., B.A.O.R. Will any D2's now returned to this country, please send some stamped envelopes to G2MI.

The new QSL Manager for India is Mr. J. Nicholson, VU2JP, Nadiar Estate, Munnar P.O., Travancore.

Low Power

If there is sufficient support, it is intended to devote a part of this feature to low power work. By this we mean 5 watts and less. Anyone interested please

write to Mr. F. Smith, GW2DDX, 11 Llewellyn Street, Cadoxton, Barry, Glam., who will collate the information received.

I. E. E. Lectures

The General Secretary would be glad to hear from any member who has had experience of converting ex-Government equipment to amateur use and who would be willing to deliver a lecture on that subject at a forthcoming I.E.E. meeting.

Congrats

- To Mr. A. Johnson, G3ACJ, and his wife, of Nuneaton, on the birth of a son.
- To Mr. Harry Lowe, G2HPF, on the arrival of a second junior op., Christopher James, on August 7, 1947.

THE MONTH ON FIVE

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

ALTHOUGH holidays in many cases reduced activity on the band during August, conditions generally remained at a very high level both for Continental work and G-DX.

With no immediate prospect of the withdrawal of the 5-metre band from our licences, new stations are coming on the air and providing new contacts. Increased activity in the North is especially welcome, but the enthusiasts from Durham and Northumberland insist that the Southerners are not turning their beams in their direction.

PREDICTION

It is predicted that during October and November 1947 the M.U.F. will be higher than at any time since 1936. Can we expect a trans-Atlantic contact on 58 Mc/s. this year?

G8JO (South Shields) sends a list of QSO's in August which includes G2HMI (Sunderland), G5GI (Sunderland), G5BD (Mablethorpe), G8JV (Nottingham), G8KK (South Shields), F8CT and HB9CD. G5BY and G6DH have also been heard.

G5BD (Mablethorpe) was prevented from reporting last month owing to "holiday QRM." By the end of July his nightly sked with G8JV (Nottingham) had run for a full year and produced a total of 350 contacts, the only "misses" being due to absence from home. Amongst 5BD's best contacts at the end of July, were G5BY (Devon) and GW6OK. His foreign QSO's included ZB2A, SM5FS and numerous ON's and PA's.

G3ASC (Oswestry) whose activities with a $\frac{1}{2}$ watt Walkie-Talkie were reported last month, now reports a real DX contact with the same gear. IIRA was worked on August 3 on both C.W. and 'phone, Q5 reports being obtained both ways. This is a real achievement as one often feels that substantial power

is essential for contacts by reflection from the "sporadic-E" layer.

G5JU (Birmingham) reports consistently good G-DX conditions during August. Up to August 18 the following new stations were contacted: G3BXE, 3ASC, 3BLP, 3ZK, 4BI, 4IG, 6OS and 6XM. Others heard for the first time included G2AOK, 3AAT, 3BW, 3DA, 4KV, 5AS, 5RS, 6DH, 6LC, 8QM/A and 8WV.

Some of the above contacts were made when G5JU was portable. His mobile station has two aeriels, a two-element beam and a vertical whip aerial attached to the car bumpers. The transmitter uses a 14 Mc/s. crystal with an EF50-EF50-QVO4/7 line up and between 6 and 10 watts input. A "straight-3" is used for reception with EF54, EF50 and EF37.

We are indebted to HB9EY, of Chatonnaye, Fribourg, Switzerland, for a list of G stations heard on July 27. These were as follows: G2TQ, 2XC, 3ABA, 3AF, 3DA, 3YH, 5MQ, 5PY, 5RP, 5WP, 6XM, GM8MG. Further details were included in HB9EY's letter and can be supplied for checking purposes if required.

* 8 Beckenham Grove, Shortlands, Kent.

Result of Five Metre Field Day July 20, 1947

The leading stations were:-

1st: Mr. J. Spragg, G3APY/P	... 283 points
2nd: Mr. N. H. R. Munday, G5MA/P	253 "
3rd: Mr. E. A. Dedman, G2NH/P	242 "
4th: Mr. J. J. Curnow, G6CW/P	214 "

Full details will appear next month.

Public Schools Exploring Society Expedition.

The Signals Section of the Schools Exploring Society Expedition to Southern Newfoundland will be operating from 9th September to 15th October, under the call signs G8XY/P (for local and communications work) and G8XY/VO (for international amateur work).

For communications work frequencies of 3,520 and 12,685 kc/s. will be used, as well as frequencies in various amateur bands. Input power will be 40 watts for telegraphy and 10 watts for telephony on 3,520 kc/s.

For international work a variety of frequencies in the 3.5, 7 and 14 Mc/s. amateur bands will be used with an input power of 40 watts (C.W. only). The main operating frequencies will be 3,520, 3,597, 7,050 and 14,100 kc/s. One aerial system will be directed towards the U.K. for 14 Mc/s. work.

A special QSL card will be sent to confirm all contacts with amateur stations and to acknowledge useful listener reports. Cards can be sent via R.S.G.B., or direct to Mr. M. A. Pyle, G2BLA, White Barn, Old Oxted, Surrey. Mr. Pyle who is Assistant Leader of the Expedition and Signals Officer, warns amateurs who use V.F.O.'s that no stations will be worked within 5 kc/s. of the carrier frequency in use by the Expedition.

Radio Amateurs' Examination

A course covering the syllabus of the Radio Amateurs' Examination of the City and Guilds of London Institute will be held during the 1947-48 session at the Brentford Evening Institute. The Institute is situated in Boston Manor Road, at the rear of Brentford Library and is on the 97 Bus and 655 Trolley Bus Routes.

Classes commence in the week beginning September 22, but the enrolment week begins on September 15 when, from Monday to Friday, 7 to 8.30 p.m., the head of the Institute and his staff will be present to advise and enrol intending students.

The course will continue up to the date of the examination (which is probably in May, 1948), and the fees are: students under 16 years of age, 2s. 6d., students over 16 years of age, 5s. Full details of this and other technical courses may be obtained from the prospectus which is available on application to the Principal, Chiswick Polytechnic, Bath Road, Bedford Park, London, W.4.

Can You Help?

Mr. H. Barnett, 14 Common Road, Evesham, Worcs., requires details, or loan of the instruction manual, of the U.S. Signal Corps Radio Receiver, Type BC794B. He has the receiver, but no power pack.

HIC ET UBIQUE

I.E.E. Lecture Programme

The I.E.E. lecture programme for the season, 1947-48, will be issued next month. Members are asked to note that the first meeting will take place on October 10 when the President and General Secretary will describe their recent visit to the United States. Tea will be served at 5.30 p.m. and the meeting will commence at 6.30 p.m.

M.O.S. Surplus Transmitters

Tentative agreement has been reached with the Ministry of Supply for a third issue of surplus transmitters to be made available to members before the end of the year. As soon as the Ministry has ascertained what quantities and types are available in the various depots, an inspection of the equipment will be made and prices agreed. Members who were not successful in the first and second issues will take preference in the third distribution.

Interested members would be well advised to attend local meetings during the next few months, in order to avoid disappointment.

Walkie-Talkie.—A Warning

A conviction was obtained recently against a person using Walkie-Talkie apparatus without a licence. The Postmaster-General states that the use of Walkie-Talkie sets or any other form of wireless transmitting apparatus except under the authority of a sending licence issued by the Postmaster-General (the ordinary £1 Broadcast Receiving licence authorises only the reception of messages from broadcasting and amateur stations) renders the user liable to prosecution under the Wireless Telegraphy Act, 1904.

N.F.D. Film

An announcement will appear in the BULLETIN as soon as the N.F.D. film is available for loan to groups of members. The film, which is 16 mm. silent, is at present being processed and titled.

Bournemouth O.R.M.

Mr. F. C. White, G3XP, Chester House, Chine Crescent, Bournemouth West (C.R. for Hants and Isle of Wight), who is organising the O.R.M. to be held at the Tollard Royal Hotel, Bournemouth, on Saturday, October 25, advises us that the management of the hotel have quoted special terms of 13s. 6d. for single room and breakfast for those who wish to stay overnight. Hotel guests will be welcomed at a dance to be held during the Saturday evening. Members desirous of taking advantage of these amenities should advise the Manager or Mr. White *at once*.

Tickets for the O.R.M. should also be booked immediately as accommodation will be limited to 150 members and their ladies. When writing please state whether you intend to stay overnight, and if so, whether you wish to visit a place of interest on the Sunday morning.

Propagation Group

To enable a more comprehensive study of propagation phenomena to be made, overseas members of the R.S.G.B. interested in this aspect of radio, are invited to join the Propagation Group. Both licenced and B.E.R.S. members are welcome. All enquiries should be addressed to the Group Leader,

Mr. L. Blagbrough, Risley Club, Risley, near Warrington, Lancashire.

B.R.S. members who are willing to act as observers on the amateur bands on certain commercial stations are also required. Those interested are asked to contact the Group Leader.

Radio Amateurs' Examination

Several members have written to complain that only one examination is to be held this year. We feel that it is desirable to point out that the Council is making every effort to induce the City and Guilds Institute of London to hold two examinations each year. At the moment, however, the Institute cannot see its way to accede to the Society's request on the ground that the examination schedule is already heavily overloaded.

GBIRS — Another Warning

A further instance of the unauthorised use of the Headquarters station call sign is reported by Mr. A. Welling, G3BXN, of Harrow, Middlesex, who worked a station signing GBIRS on 7 Mc/s. on August 5, last.

As soon as GBIRS is ready for operation an official announcement will be published in the BULLETIN. In the meantime the Council will be glad to receive information which will enable them to take action through the G.P.O. against the person or persons using the call sign allotted to Headquarters.

"Radio Constructor"

This new 28-page monthly publication is, as its title implies, designed to appeal to those who require information on the constructional side of radio.

The first issue describes a decade resistance box, an A.C./D.C. broadcast band, TRF 3 valve receiver, a simple output meter, an aerial change over switch and a versatile 150 watt transmitter. There are also several theoretical articles and a review of the new Eddystone 640 receiver.

The journal is nicely produced with clear half tones and diagrams.

Radio Constructor follows the style of its associated publication, *Short Wave News*.

Kon-Tiki Expedition

We understand that the Kon-Tiki raft has been wrecked on the uninhabited island of Raroja, only a short distance from Tahiti, and that the crew of five are safe. This news was received by an American amateur. As far as is known signals from the raft were not heard in the U.K.

REGIONAL SCHEME EXPENSES

R.R.'s, C.R.'s and T.R.'s who wish to claim expenses for the current quarter are required to submit their claims to Headquarters by **not later than 10th October** to enable the Society's Accounts for the current financial year to be closed. No claims can be accepted after the date stated.

JUNK BOX BUREAU

By E. J. VALENCIA (G3BFO)

THERE is little doubt that the scheme proposed in the May BULLETIN will be welcomed by many members. Thanks are extended to those who have submitted ideas on how the Bureau should be run and for their words of encouragement.

All who have gear lying idle are strongly urged to participate. One may be harbouring the very thing for which another has searched without result. Conversely, those in need are almost certain to find what they want in another's Junk Box.

The plan is to provide printed filing cards at cost price for members with gear for disposal. Each item of gear will be entered on a separate card. Cards will have spaces for all necessary description of gear, including price, name and address of seller.

When an enquiry is received for an item which agrees with the description on a card, that card is sent by the Bureau to the enquirer, who fills in his name and address and sends it, with the money asked for, to the seller. If the item is unsuitable he returns the card to the Bureau.

Upon receipt of the card and money the seller sends off the gear to the buyer, completes the last section of the card and sends it back to the Bureau with a 6d. P.O. to cover expenses.

General Rules and Instructions

- (1) All correspondence should be addressed to: G3BFO, "Nascott," Aspley Guise, Bletchley.
- (2) A stamped and addressed envelope must be enclosed for replies.
- (3) The Bureau will function purely in an introductory capacity and will not handle actual gear or be in any way responsible for it.
- (4) Members with gear for disposal should write to G3BFO for filing cards. These cards are available at 1d. each, and the minimum quantity that can be supplied is one dozen. Postal orders should be crossed and made payable to "E. J. Valencia."
- (5) Upon receipt of cards, the first half of each should be completed in respect of every item for sale.* The cards so completed should then be returned to G3BFO for filing. The price quoted should be definite and reasonable, and the word "offers" should not be inserted in the price space.
- (6) A note of the serial number of the card should be attached to the item by a suitable means.
- (7) If any item ceases to be available, it is important that the Bureau be notified immediately, quoting the serial number of the card and the title of the gear as entered under "Component."
- (8) Members in need of gear should write to G3BFO giving full details of requirements.
- (9) Enquirers should state, in case the item is not immediately on file, how long the request should be held.
- (10) If a card, agreeing with the wanted item, appears in the files, this card will be sent to the enquirer.
- (11) If the item is not wanted, it is important that the card be returned immediately to G3BFO.
- (12) If the item is wanted, the enquirer should enter his name and address in the space provided on the card and send it, with the money asked for, to the seller.
- (13) The enquirer should also make a note of the

serial number of the card and the title of the gear, as entered under "Component."

- (14) Upon receipt of the card and money, the seller should send off the gear to the buyer. He should also return the card (completed in the final space), to G3BFO together with a 6d. Postal Order to cover expenses.
- (15) As soon as the gear arrives, the buyer should inform G3BFO, giving the details noted under instruction (13).

Layout of Card

COMPONENT :	MAKE :	TYPE :
CARD No.: A 73	QUANTITY : (If sold by measure)	SIZE :
FULL DESCRIPTION		
EXTERNAL DIMENSIONS :		
CONDITION :	PRICE INCL. CARRIAGE :	
SELLER'S NAME.....		
ADDRESS.....		
Date		
To SELLER FROM BUYER, NAME		
ADDRESS		
Please send the above gear to me. I enclose P.O./Cheque for the amount indicated.		
(Signed)..... Date		
To G3BFO, "Nascott," ASPLEY GUISE, BLETCHLEY from SELLER.		
The above gear has to-day been sent to buyer per Rail/Post. I enclose a 6d. P.O. to cover cost of this service.		
(Signed)..... Date		

Full instructions are printed on the reverse of card.

[Note.—Whilst we are glad to give publicity to the above scheme it should be clearly understood that the Council do not hold themselves responsible in any way for the functioning of the Bureau and cannot enter into any correspondence concerning it.—Ed.]

Good Luck

Norwich members wish the ex C.R. for Norfolk, Mr. M. Nicholson, G2MX, the very best of luck and success in his new appointment at Portsmouth.

Congrats

● To Mr. and Mrs. G. M. Whiteley, G5IA, of Shipley, Yorks, on the arrival of a daughter—Valerie.

OUR FRONT COVER

ONE of the most important reasons for the long life and dependability of Mullard mercury vapour rectifiers is the close control exercised during manufacture. One of the special processes employed is illustrated in this month's picture. The operator is coating RGI-240A cathode hoods with zirconium, the purpose of which is to eliminate "foreign" gases and so reduce positive ion bombardment of the cathode.

* Except in the case of inseparable gear, such as a pair of matched valves, when one card only can be used.

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. Hamman, 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.

July Council Meeting

Resume of the Minutes of a Meeting of the Council of the Inc. Radio Society of Great Britain, held on Monday, July 14, 1947, at New Ruskin House, Little Russell Street, London, W.C.1.

Present.—The Vice President (Mr. V. M. Desmond), in the Chair, Messrs. Auchterlonie, Bloomfield, Clark, Edwards, Evans, Hamman, Mathews, Milne, Scarr, Watts and Miss Gadsden (Assistant Secretary). Mr. S. Howard was present by invitation for discussion of Social matters.

Apology.—An apology was submitted for the absence of Messrs. Gardiner and Watson.

International Telecommunications Conference.

Mr. Watts read progress reports from the Society's Representatives at the Atlantic City Conference. (The gist of the information contained in these reports appeared in the July issue of the BULLETIN.)

Amateur Radio Exhibition.

Resolved that the forthcoming Amateur Radio Exhibition shall remain open to as late an hour on the evening of Saturday, November 22, as circumstances will permit. The Chairman of the Social Committee was asked to discuss with the Royal Hotel the possibilities of arranging a social function.

Resolved that the general public shall not be admitted to the Exhibition but that complimentary tickets shall be made available to Exhibitors and other interested parties.

Film Unit.

Resolved to defer for consideration later a proposal from the Social Committee that a film-unit shall be set up.

Contests Committee.

Resolved

(a) That greater publicity than hitherto be given to Contests by printing the dates in bold type in the "Forthcoming Events" section of the BULLETIN.

(b) That in future no member of the Contests Committee, Council or Headquarters' staff shall divulge the results of any contest, prior to the publication of the results in the BULLETIN.

Technical Manager.

Upon the recommendation of the Staff Committee

Resolved to make an appointment to the position of Technical Manager. (Since the Council Meeting was held the candidate has withdrawn his application.—Ed.)

Mr. Milne appealed to Council to defer the whole scheme indefinitely in view of accommodation difficulties and other more important staff considerations, but was not supported.

Membership.

Resolved to elect

312 Corporate Members.

38 Associates.

14 Junior Associates.

Resolved to grant affiliation to the Harrogate and District Short Wave Radio Society, Kynoch Social and Recreation Club, Pye Sports and Social Club, North-East Amateur Transmitting Society, and the Torbay Amateur Radio Society.

Region 8.

Upon the recommendation of the Membership Committee, resolved to ask the two C.R.s covering the towns of Farnham and Farnborough to agree between themselves to which one the T.R. for Farnham and Farnborough shall be responsible. In the absence of agreement the T.R. be asked to relinquish his responsibility for one town, the members in which town to be asked to appoint an independent T.R.

Ex-Enemy Nationals.

Resolved to reaffirm that ex-enemy Nationals cannot be accepted for membership until Peace Treaties have been signed.

Technical Booklets.

Resolved

(a) To authorise the reprinting of 5,000 copies of the Transmitting Licence booklet and 5,000 copies of the Service Valve Equivalents booklet.

(b) To authorise the printing of 10,000 copies of a new booklet, "Microwave Technique."

(c) To make payment to contributors to the new series of booklets on the same basis as for BULLETIN articles.

Empire DX Certificates.

Resolved to publish the rules of the Empire DX Certificate and to arrange for each certificate to be hand produced.

"Junk Box Bureau."

Resolved to publish in the BULLETIN details of this project.

The meeting terminated at 10 p.m.

British Sound Recording Association

Meetings, to which Society members will be welcomed, are due to take place at the Royal Society of Arts on the following dates:—

September 26.—Presidential Address by L. E. C. Hughes, Ph.D., B.Sc., A.M.I.E.E. "Sound and its relation to Recording."

October 24.—M. J. L. Pulling, M.A., M.I.E.E. "Sound Recording as applied to Broadcasting."

November 21.—M. G. Scroggie, B.Sc. "What is High-quality Reproduction?"

The Hon. Secretary of the B.S.R.A. is Mr. R. W. Lowden, Napoleon Avenue, Farnborough, Hants.

The Royal Commission on Awards to Inventors

The Royal Commission on Awards to Inventors has been set up under Royal Warrant to investigate what awards should be paid to inventors in respect of the use of their inventions, designs, drawings or processes on behalf of His Majesty's Government Departments in connection with the war.

The Commission's Terms of Reference, Rules of Procedure and instructions to intending claimants are contained in a pamphlet entitled "Royal Commission on Awards to Inventors, 1946," price 2d. (by post 3d.), and obtainable from H.M. Stationery Office, York House, Kingsway, London, W.C.2, or through any bookseller. A further pamphlet entitled "Statement of Principles Governing Assessment of Compensation adopted by the 1919 Royal Commission on Awards to Inventors" has been re-issued and is obtainable at H.M. Stationery Office, or through any bookseller, price 6d. (by post 7d.).

Hearings are held in public in the Court Room at Somerset House, Strand, W.C.2 (third floor), and cases to be heard are advertised in the Daily Cause List. The next Hearing of the Commission has been fixed for the week commencing Monday, October 6, 1947.

The Secretariat of the Commission will be pleased to discuss procedural matters with members who are interested.

Leeds O.R.M.

Members who attended the O.R.M. in Leeds last June may obtain a copy of the group photograph from Mr. P. B. Jackson, G3WQ, "Rose and Crown" Hotel, New Street, Selby, Yorks. A stamped and addressed envelope with 3d. in stamps should be enclosed. It is regretted that the print submitted to H.Q.'s was not sufficiently sharp to warrant publication.

N.W. Kent Amateur Radio Society

In future the Society will meet at 8 p.m. on the first instead of the last Friday in each month at Aylesbury Road School, Bromley. The A.G.M. will be held on October 3, when all interested R.S.G.B. members will be welcomed. The Hon. Secretary is Mr. R. Gregory, G2AVI, 18 Upper Park Road, Bromley, Kent.

Catterick Radio Club

The Catterick Radio Club now meets in new premises on Marne Lines, Catterick Camp every Tuesday at 7.15 p.m. The club room is, however, open every evening. The Hon. Secretary is A. Hall, BR814526, c/o 2 Squadron, 1st T.R.R. Signals, Catterick Camp. An HRO, an AR88, two CR100's, a WS No. 12 and two 75 ft. masts have been acquired.

Harrogate and District Short Wave Radio Society

Mr. W. Hartley (G8UY) recently delivered a most helpful lecture on "Interference, Its Effects, Causes and Cures." By means of records the speaker illustrated the effects on radio reception of such things as bells, lifts, motor cars, irons, vacuum cleaners, bed warmers and immersion heaters and then enlarged on the steps which should be taken to track down and remedy them. Members have also attended a concert at the B.B.C., Leeds, followed by a conducted tour of the studios.

FORTHCOMING EVENTS

REGION 1.

- Sept. 20 Whitehaven, 6.30 p.m., Golden Lion, Harrington.
Oct. 18 West Cumberland, 6.30 p.m., 31 Washington Street, Workington.

REGION 2.

- Sept. 19 Leeds, 7 p.m., Swathmore Settlement, Woodhouse Square.
" 19 South Shields, 7 p.m., St. Paul's School, Westoe.
" 22 Bradford (Amateur Radio Society) Annual Meeting, 7.30 p.m., 66 Little Horton Lane.
" 22 Halifax, 7.30 p.m., 32 Clare Road.
" 23 Catterick, 7 p.m. S.T.C., H.Q. Block, Vimy Lines.
" 24 Doncaster, 7.30 p.m., 73 Hexthorpe Road.
" 24 Sheffield, 8 p.m. Dog and Partridge, Trippet Lane.
" 24 Sunderland, 7.30 p.m., 16 North Bridge Street.
" 24 York, 8 p.m., 29 Victor Street.
" 26 Barnsley, King George Hotel, Peel Street.
" 26 Leeds, 7 p.m., Swathmore Settlement, Woodhouse Square.
" 26 South Shields, 7 p.m. St. Paul's School, Westoe.
" 29 Bradford (Short Wave Club) 7 p.m. Temperance Rooms, Harewood Street.
Oct. 1 Doncaster, 7.30 p.m., 73 Hexthorpe Road.
" 1 Harrogate, 7.30 p.m., Y.M.C.A., Victoria Avenue.
" 1 York, 8 p.m., 29 Victor Street.
" 3 Leeds, 7 p.m., Swathmore Settlement, Woodhouse Square.
" 3 South Shields, 7 p.m., St. Paul's School, Westoe.
" 6 Halifax, 7.30 p.m., 32 Clare Road.
" 7 Bradford (Amateur Radio Society) 7.30 p.m., 66 Little Horton Lane.
" 8 Doncaster, 7.30 p.m., 73 Hexthorpe Road.
" 8 Sheffield, 8 p.m., Alceda Works, Lydgate Lane.
" 8 Sunderland, 7.30 p.m., 16 North Bridge Street.
" 8 York, 8 p.m., 29 Victor Street.
" 10 Barnsley, King George Hotel, Peel Street.
" 10 Leeds, 7 p.m., Swathmore Settlement, Woodhouse Square.
" 10 South Shields, 7 p.m., St. Paul's School, Westoe.
" 13 Bradford (Short Wave Club) 7 p.m. Temperance Rooms, Harewood Street.
" 15 Bradford (Amateur Radio Society) 7.15 p.m., Valley Power Station.
" 15 Doncaster, 7.30 p.m., 73 Hexthorpe Road.
" 15 Harrogate, 7.30 p.m., Y.M.C.A. Victoria Avenue.
" 15 York, 8 p.m., 29 Victor Street.
" 17 Leeds, 7 p.m., Swathmore Settlement, Woodhouse Square.
" 17 South Shields, 7 p.m. St. Paul's School, Westoe.
" 20 Halifax, 7.30 p.m., 32 Clare Road.
" 20 Middlesbrough, 7.30 p.m., Cleveland Scientific and Technical Institute, Corporation Road.
" 21 Bradford (Amateur Radio Society) 7.30 p.m., 66 Little Horton Lane.

REGION 3.

- Sept. 16 Birmingham, M.A.R.S. Annual General Meeting, Imperial Hotel.
Oct. 14 Birmingham, M.A.R.S. Dinner (Ladies Invited), Imperial Hotel.

REGION 5.

- Sept. 25 Cambridge, Jolly Waterman. Mr. L. Baker, "Recording Gear."
Oct. 5 North West Essex, 3.30 p.m., G6UT, Normandale, Little Hallingbury, Essex, Ladies welcome.
" 7 Chelmsford, 7.30 p.m., 184 Moulsham Street.

REGION 7.

- Sept. 16 Cheam, 7.30 p.m., Ye Old Red Lion.
" 18 Slough, 7.30 p.m., Congregational Church Hall, Church Street.
" 18 Ruislip, 7.30 p.m., Oddfellows Hall, Waxwell Lane, Pinner.
" 19 West Norwood, 7.30 p.m., Brotherhood Hall, "Amateur Activity Out East," G2CX.
" 20 London Region Ladies Night.
" 20 Enfield, 3 p.m. A and B Café, Southbury Road (Junction with Ladysmith Road).
" 21 Ilford, 2.30 p.m., Town Hall (Lambourne Room), "Atlantic City"—G6CL.
" 22 Plumstead, 8 p.m., St. Mark's Hall, Old Mill Road, Plumstead Common.
" 25 Ruislip, 7.30 p.m., Oddfellows Hall, Waxwell Lane, Pinner.
" 26 Hampstead, 8 p.m., 17 St. John's Wood Road, N.W.8.
" 27 London Region, 2.30 p.m., Royal Hotel, Woburn Place, W.C.1.
Oct. 2 Ruislip, 7.30 p.m., Oddfellows Hall, Waxwell Lane, Pinner.
" 3 Southgate, 7.30 p.m., Merryhills Hotel (near Oakwood Station).
" 7 Welwyn Garden City, 8 p.m., Council Offices, Welwyn Garden City.
" 7 Cheam, 7.30 p.m., Ye Old Red Lion.
" 9 Ruislip, 7.30 p.m., Oddfellows Hall, Waxwell Lane, Pinner.
" 14 Croydon, 7.30 p.m., Blacksmiths Arms, South End, Croydon.
" 14 Cheam, 7.30 p.m., Ye Old Red Lion.
" 17 West Norwood, 7.30 p.m., Brotherhood Hall, "Frequency Modulation"—G4DN.
" 19 Ilford, 2.30 p.m., Town Hall (Lambourne Room), "The Q-Max Transmitter Receiver"—G6MB and G6LD.
" 21 Slough, 7.30 p.m., Congregational Church Hall, Church Street.
" 23 Ruislip, 7.30 p.m., Oddfellows Hall, Waxwell Lane, Pinner.

REGION 8.

- Sept. 21 Farnham, 3 p.m., at G2ZC, 89-West Street.
Oct. 4 Southampton, 7 p.m., 22 Anglesea Road, Shirley.
Oct. 20 Brighton and Hove, Sussex Ham-Fest, 7.30 p.m., Golden Cross Hotel, Western Road, Brighton.

REGION 9.

- Sept. 17 Exeter, 95 Sidwell Street.
" 19 Bristol, 7 p.m., Keen's Cafe, Park Row.
" 20 Plymouth, Scout's H.Q., Buckland Terrace, Millbay Road.
Sept. 20 Torquay 7 p.m., Y.M.C.A.
" 22 Stroud, Clubroom, Cainscross Road
" 26 Stroud, Clubroom, Cainscross Road.
Oct. 6 Stroud, Clubroom, Cainscross Road.
" 13 Stroud, Clubroom, Cainscross Road.
" 15 Exeter, 95 Sidwell Street.
" 17 Bristol, 7 p.m., Keen's Cafe, Park Row.
" 18 Plymouth, Scout's H.Q., Buckland Terrace, Millbay Road.
" 20 Stroud, Clubroom, Cainscross Road.

REGION 11.

- Sept. 21 Rhyll, 3 p.m., Crown Hotel.

REGION 14.

- Sept. 24 Glasgow, 7 p.m., Institute of Engineers and Shipbuilders, 39 Elmbank Crescent.
Oct. 9 Stirling (including Alloa, Larbert and Falkirk), 7.30 p.m., Plough Hotel, Stenhousemuir, Stirling.

Can You Help ?

Mr. A. W. J. Marsh, BRS13053, 16 Lugeley Street, Newport, I.O.W., requires circuit diagrams and instruction booklets dealing with Types 160A and W1310 signal generators. He also requires details of the 1147A and R1481 receivers.

Mr. W. G. Duncan, GM2HFV, 23 Noran Avenue, Dundee, requires details of the BC624A receiver.

Mr. C. Markie, BRS10567, 79, Allesley Old Road, Coventry, who requires details of the A.M. 1191A Wavemeter ?

Mr. G. P. Marley, BRS13024, 6 Kirkstone Gardens, High Heaton, requires information on voltage and current requirements, also plug connections of the B.2 transmitter-receiver. He also wants details of the V.T.149.

Mr. Parsons, BRS13864, 16 Cypress Avenue, Whitton, Middlesex, requires information regarding the acceptor and rejector circuits associated with the H.F. stage (V3 on the official diagram) of the ex-R.A.F. R1155A and R1155B receivers. He is willing to exchange notes with any members interested in making modifications to these receivers.

Mr. K. R. W. Swift, BRS5248, 50 Overdown Road, Catford, London, S.E.6, seeks details of the TP6 obtained from Ministry of Supply.

Mr. A. Thornton, BRS12441, 20 Bonegate Road, Brighouse, Yorks, requires details of the Type RG42C (Model 1235) receiver.

Mr. E. Walker (Associate), 83 Coombe Dale, Sea Mills, Bristol, 9, requires a circuit diagram of the R.A.F. receiver, type 76A 10 D/1446.

Surplus Service Equipment

Mr. D. Elliott, BRS11732, 38 Jennings Road, St. Albans, Herts, can provide full data on the following items of surplus Service equipment:—

U.S. Army.—BC348R, SCR269, AN/ARC/5, AN/ARN1, AN/CRN-10, SCR585B.

R.A.F.—TR5043 (U.S. SCR522, 542).

Mr. Elliott also possesses circuit diagrams of many well-known R.A.F. transmitters, including 1131, 1132, 1154, 1155, 1190, 1196, A1104, 1134, TR9, 1082, 1083, W1117, W1191, and the Bendix aircraft set which employs three 807s.

A stamped-addressed envelope should be enclosed when writing for information.

COULPHONE RADIO

Proprietor: C. Coulborn, G3AJM.

58 DERBY STREET, ORMSKIRK, LANCs.

EDDYSTONE, QUALRAD & WEYMOUTH Components
Undrilled 16 S.W.G. Aluminium Chassis. Four sides 3 in. deep. 10 in. x 8 in., 8/6; 12 in. x 9 in., 9/6; 14 in. x 9 in. or 16 in. x 8 in., 10/6; 20 in. x 8 in., 12/6.

Rotary Convertors, with 6 v. input 250 v. 50 mA. out, with 12 v. input 480 v. 40 mA. out. Note the price, 15/- post paid.

Mains Transformers. Primary 200-250 v. With 4 v. or 6.3 v. and 5 v. L.T.S. 300 v. 60 mA., 23/6; 350 v. 100 mA., 28/6; 450 v. 200 mA., 45/-; 1250 v. 300 mA., no L.T.'s, 115/-

Filament Transformers. 4 v. or 6.3 v. at 6 A.C.T., 17/6

Terms:—C.W.O. or C.O.D. Post free over 5/-.

Return of Post Service.

Send 2½d. stamp for latest 24-page catalogue. "T.R."

G8OG

BERT DOBSON

6, GRAND ARCADE, LEEDS I.

Offers a few brand new:—

No.3 Mk.2 RECEIVERS & POWER PACKS

(A.C. 90/250 v. or 6 v. input.) Complete in two steel boxes with all accessories, pair Phones, Fuses, Morse Key, Antennae and Power Cables. Power Supply also gives 460 v. at about 80 miles! OUR PRICE **£8-15-0**

We also offer you—**THE B2 TX** with coils **£4-2-6**

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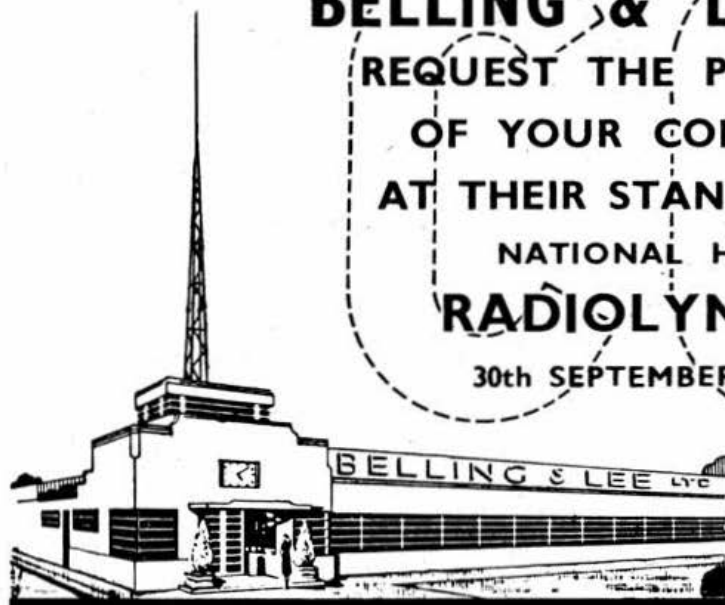
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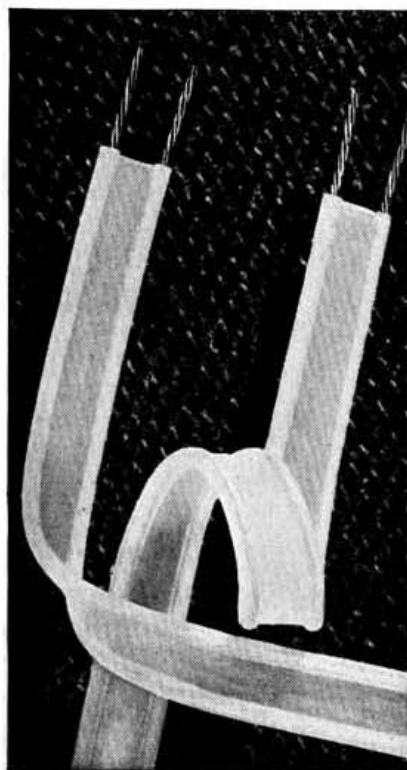
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