

LOW POWER RADIO RESEARCH AND NEWS.

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QRP

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THE JOURNAL OF THE
Q R P
RESEARCH GROUP

LOW POWER RADIO

RESEARCH and NEWS

“ Q . R . P ”

Issue No 25, OCT. 1951.

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Q R P
RESEARCH GROUP

This issue is especially dedicated to Mike A. Wassell in grateful recognition of his very generous gift of the paper upon which it is printed. Thank you, Mike.

EDITORIAL.

Too much has happened this month for me to be able to get a clear picture over to you in the small space which is all I dare allow myself. The Kaleveld Cup has been run - and won. Plans for the presentation of the cup by Evert himself have been finalized. A reorganization of the Research Group Council comes up for initial discussions. A new scheme which I have christened the "Student's Adoption Scheme" is announced. The Q R P Portable Receiver Contest results are waiting to be reported. Many urgent requests have persuaded me to reintroduce our old system of Calls Heard records. And to cap it all there has been an all time record in Activity Reports rolling in here this month. There isn't the least doubt that we are going from strength to even greater strength and carrying the banner of Low Power Radio with us to some purpose. I remember the scoffing of more than one "knowledgable adviser" two years ago when I launched this mag - I shall remind them of it some day! The only trouble with so much activity is that I can't get it all in here. Some items will have to be held over. The most important one which must not be, of course, the PRESENTATION of the KALEVELD CUP.

A UNIT Rx STATION.

We have often stressed the merits of "unit" construction of receivers, but, until a letter arrived recently from Harry Wells, we had not heard of a member having actually built up a receiving station on these lines. The advantages of the unit principle are pretty obvious, enabling the easy testing of any individual stage, the immediate insertion of alternative stages in case of breakdown or rebuilding, the use of a series of RF (and/or det. stages) especially tuned each for a particular band, and, of course, the prime advantage in the case of the novice that he can start with a single stage and build up as his ambition increases -- it is sound policy to have the ultimate project in view at the outset.

Now, the rig that Harry Wells described for us is an outstanding example of the unit technique, notwithstanding the fact that he described it as a single complete layout. It was so suited to the unit principle (doubtless because it originated that way) that we have been prompted to take out of cold storage an idea for unit chassis construction which is entirely original to the "editorial staff" of "Q R P" and which we claim in all humility (and without any trumpet serenade) to have got over the one great disadvantage of "unit" jobs by being the neatest and most practical idea yet put forward for such construction.

Therefore we are going to consider this unit constructed Rx station in three instalments. First we will quote Harry Wells as regards the actual circuitry of the whole layout, then, next month we will enlarge upon the chassis construction, and finally we will run over the job unit by unit in the December issue.

And the beauty of it is that, for anyone who does not want the whole rig, any stage can be picked out from these descriptions and made into a self contained receiver, amplifier or output stage in the certain knowledge that it is thoroughly tested and proved.

Here, then, is Harry Wells:--

A 1-V-2 by H.G. WELLS.

This rig is a development of the O-V-1 which I used for the ISWL Inter-Group Contest in April (Ed:- The Group No 1 team won the cup and Harry put in an individual score of 41 countries and 16 zones, gained on this O-V-1). The RF pentode was added to remove damping of the detector circuit and also to stop interference with others should oscillation occur. Incidentally, a certain amount of gain and added selectivity was evident. Later the 6SJ7 was added as a high gain first stage LF amplifier and considerable increase in signal strength resulted. Thus each stage was well tested before the next was added.

The triode-strapped 6J7 output was found to give the best results with the original O-V-1 and also provided an efficient means of taking the signals to the phones whilst getting the most out of the 6SJ7 in the 1-V-2. The last stage is easily overloaded, but, as it is only intended to operate high resistance or moving coil phones and not a loudspeaker, this does not matter. A volume control is provided to remedy this point if needed.

The 6J7 was chosen for RF and detector because of it's low HT consumption and it's performance is quite good. The 6SJ7 is, of course commonly used in the position shown, and current is quite low whilst gain is high.

Well, there you are. The circuit can be modified to a O-V-1 by cutting out the RF and 6SJ7, or to a 1-V-1 by deleting the 6SJ7, whilst to those who favour a start with a O-V-0 this circuit will be found a "stunner". In this connection (as a O-V-0) L1 is, of course, wound onto the L4 former.

The type of coupling used between RF and detector was found to give excellent results, the tapping being taken approximately 1/3 up the grid coil. Selectivity can be varied by using different tappings, but in all cases care must be exercised when making this

tap during construction as the reaction (or "tickler" coil) leads carry the HT to the anode.

This is the best arrangement for reaction that I have yet tried and, with the potentiometer in the screen circuit, provides very efficient and smooth reaction control. Either the condenser or the potentiometer can be used at will, but the pot will not alter the tuning condenser readings to a noticeable amount, which is, of course, a distinct advantage. The detector screen should be operated at approximately 30 volts.

The other voltages are controlled by the resistors and current flow, so care should be taken to follow the values given. The mains tranny gives out 270 volts, being a 250-0-250 type.

The coils used are wound on Eddystone miniature ribbed formers and, for the 20 metre band are wound thus:-

L1: 2 turns wound on earthy end of L2.

L2: 13 turns.

L3: $3\frac{1}{2}$ turns on earthy end of L4 in between turns.

L4: $13\frac{1}{2}$ turns, tapped at 2 turns.

The formers used are threaded and all windings are double spaced

A dipole is used for 20 and balanced twin feeders are taken to the two turn aerial coil. For 40, 80 and 160, however, the lower end of the aerial coil is connected to the earth pin as shown by the dotted line in the circuit diagram. The 40 metre coil is:-

L1: 6 turns on earthy end of L2.

L2: 25 turns (enamelled)

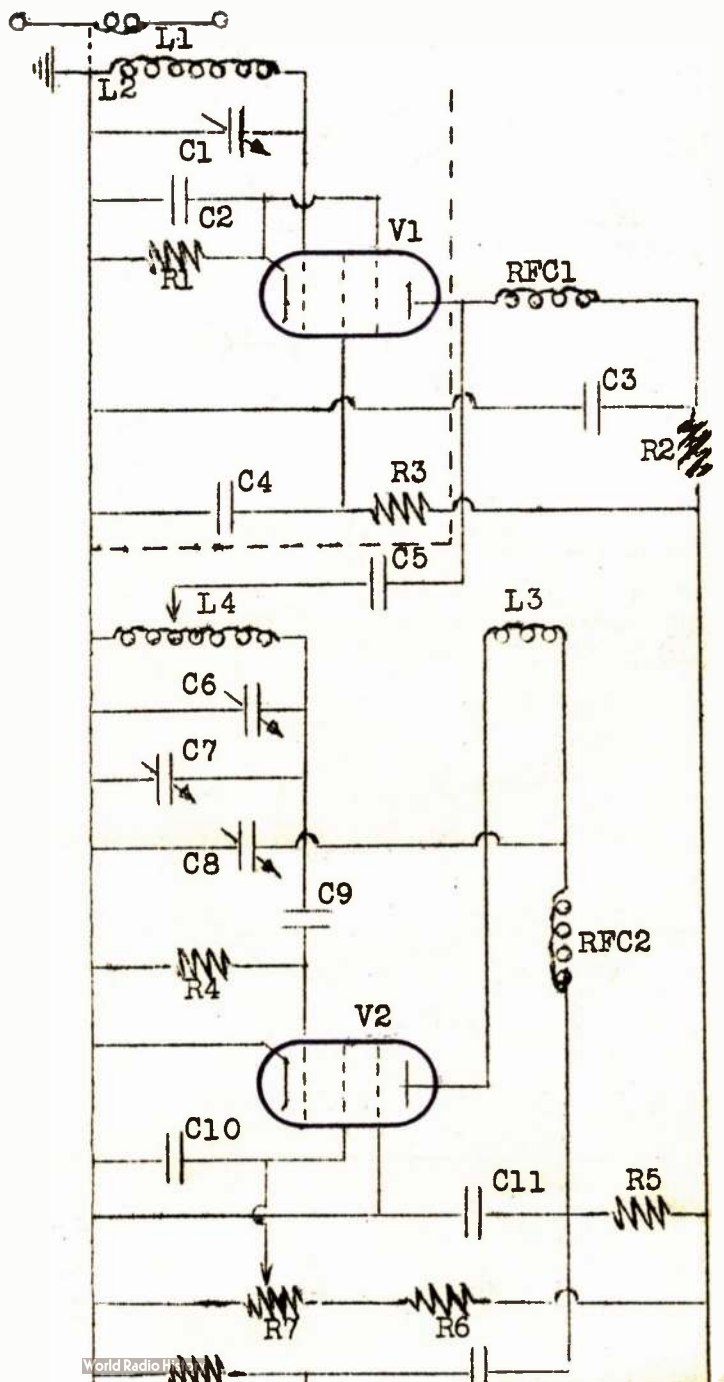
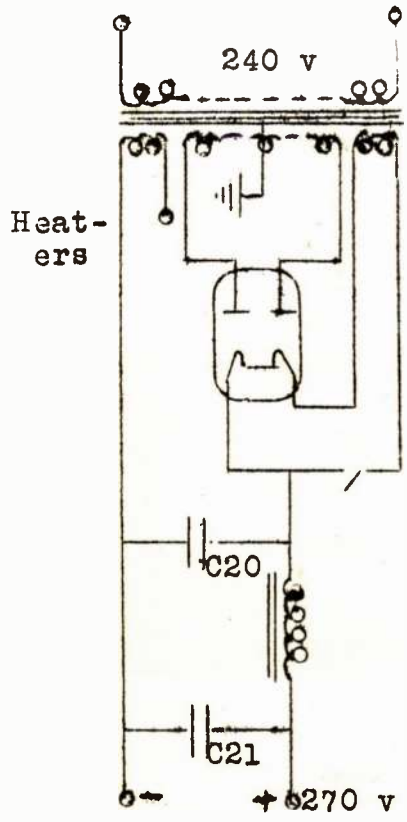
L3: $9\frac{1}{2}$ turns (DSC) wound over earthy end of L4.

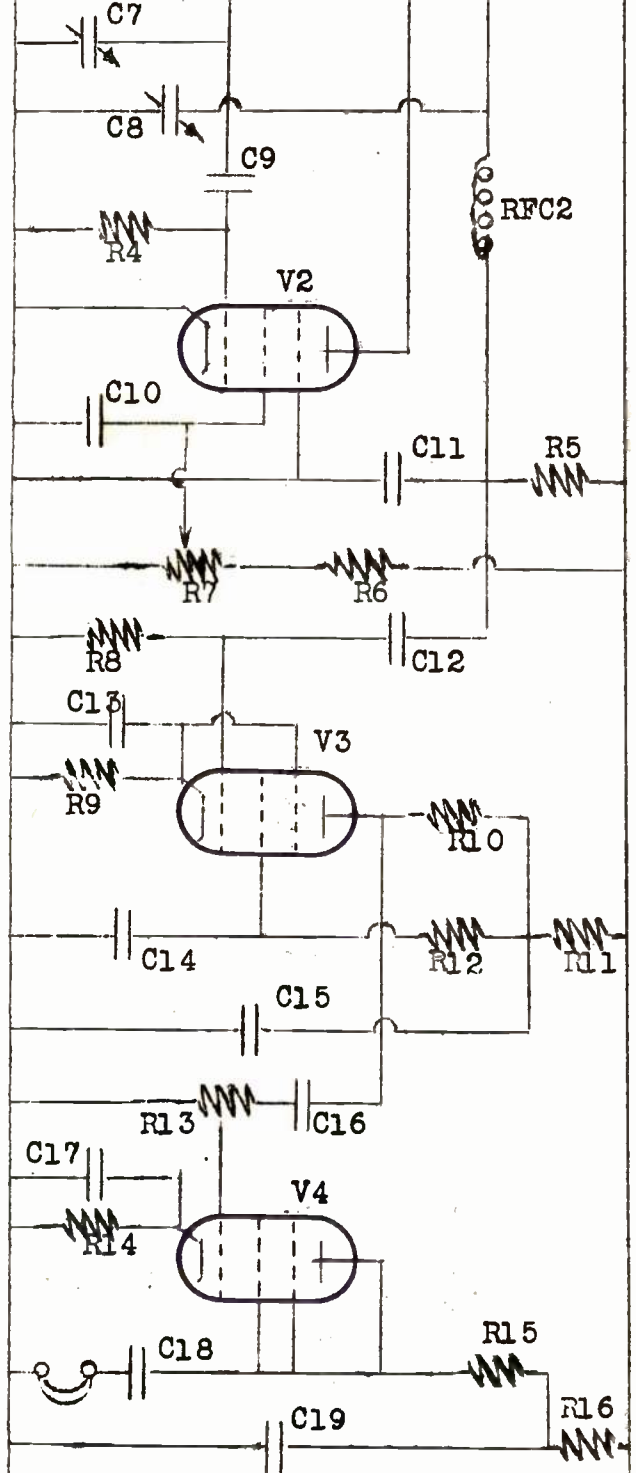
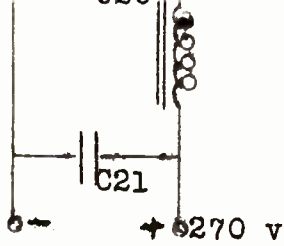
L4: 26 turns, tapped at 6 turns.

The 80 metre coil has not yet been designed, but the coil for 160 metres is:-

L1: 14 turns on earthy end of L2.

L2: 90 turns.





(7001) 2-1-1
 4500054
 0770054

L3: 78 turns.

L4: 94 turns, tapped at about 25 turns.

For 40 and 160 metres the aerial is brought in via a .0003 fixed capacitor in series with the aerial coil.

One final word -- the capacity in the wiring, due to the particular type of tuning condenser used, is rather high and this explains the low inductance of the coils I am using. However, the figures given will provide a guide.

The component values are:-

C1, C8: 160 pF. C2, C3, C4, C12, C16, C18: .01 uF. C5: 50 pF.
C6, C9, C11: 100 pF. C7: 10 pF. C10: .5 uF. C13, C17: 25 uF, 25v
C14: .1 uF. C15, C19, C20, C21: 8 uF. R1: 1.2 K. R2: 1.8 K.
R3: 330 K. R4: 2.7 meg. R5: 500 K. R6: 100 K. R7: 50 K.
R8: 470 K. R9: 1.5 K. R10: 220 K. R11: 47 K. R12: 1.5 meg.
R13: 500 K. R14: 2.9 K. R15: 39 K. R16: 15 K.
V1, V2, V4: 6J7, metal. V3: 6SJ7.

Wait for next month's chassis design before you begin construction of your metalwork. It may be just the idea you have been waiting for if you are interested in a layout where any stage can be pulled out as easily as a drawer.

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THE RESEARCH GROUP COUNCIL.

This issue of "Q R P" marks the commencement of our third year of organized development. Since our very early days we have held the idea of a Group Council in abeyance, mainly because the normal idea of a council brings visions of a gathering arguing hotly across a table, whereas our basic principle is one of unlimited territorial coverage. The result of that would obviously be an over-representation of the Home Counties and none at all for the

more distant districts. As I said in my editorial, the excellent growth of the Group has caused me to give this subject a great deal of thought lately and I feel that it is high time that we arranged a more normal system of control. The outcome is that Group Representatives have been appointed for the following areas:-

- Northern England: A.D.H.Looney, 61, Alstonfield Rd, Knotty Ash, Liverpool 14.
- Midlands: M.A.Wassell, 69, Wynn St, Edgbaston, Birmingham 15.
- South West England: W.G.Clapp, G3HCN, 35, St Lukes Cresc., Totterdown, Bristol.
- South East England: G.A.Partridge, G3CED, 17, Ethel Rd, Broadstairs, Kent.
- Europe: Not yet elected.

These representatives will keep the Council in touch with local conditions and will be able to offer much valuable advice. All such discussions will, of course, be conducted by post, but it may be possible to arrange an annual meeting -- possibly in conjunction with the RSGB Exhibition or on some similar occasion.

The full Council, then, will consist of: the President (to be elected, our Past President having been G2ATV, C.W.C.Overland), the five Representatives mentioned above, and the Hon. Sec, Treasurer and Editor. Fuller details will be worked out when the Council have had a chance to "get together", but, with that as a working basis, we should be able to evolve a really strong future for the Group.

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THE STUDENT ADOPTION SCHEME.

Since our inauguration we have all, I know, taken a keen interest in giving every possible assistance to our novice members, but it is only recently that the possible solution to the obvious need for organizing such assistance has occurred to me. The idea

which has taken shape is extremely simple and yet is, I believe, entirely unique. It is simply this -- that a number of our older and more experienced members should volunteer to "adopt" one novice member each and make it their special care to guide him around those snags and pitfalls which we all remember beset our own early days. In the local club the novice member can always corner one of the "old hands" at the club meeting; (or even, now & then, get an invite to his shack). In our Group many novices live far beyond the reach of such an adviser and it is to these in particular that our scheme is directed. All it will cost him is the time to write a letter to his "adviser" and an extra stamp for the answer back. There's a point there -- will all "adopted" novices please remember that, since it is they who are benefitting from the contact, they should religiously enclose a stamp for return postage. Finally, will some of our older members please volunteer for this service -- I feel pretty sure that they will get quite a kick out of giving a helping hand in this way.

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THE PRESENTATION OF THE KALEVELD CUP BY PAØXE.

NOTE THE DATE: During the afternoon of Saturday DEC 1st.

NOTE THE PLACE: The platform of the RSGB Exhibition at the Royal Hotel, Woburn Place, London, W.C.1.

And I know that every member of the Group, whether he is able to attend the function or not, will join me in offering very sincere thanks to Mr Scarr, the President of the Society, and to Mr Clarricoats, the General Secretary, for their fine gesture in making this best of all possible venues available to us.

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THE KALEVELD CUP RESULTS.

1 :-	GC2CNC, Jersey	71,400 points.
2 :-	G5QI, Henley-on-Thames . . .	44,940 "
3 :-	G2AJU, Ipswich	20,700 "
4 :-	G3EDW, Rayleigh, Essex . . .	3,615 "
5 :-	G3GZA, Bristol	654 "

Sincere congratulations to you, Monty, for your really magnificent score, and to you, Bill Carter, for gaining a grand second place. And, to Dudley West, I feel we must say thanks, OH, for your very sporting gesture in sending in a score even though you did guess it would not gain a "place". The really amazing results achieved do not show up, of course, until we start to analyse the results, and then -- well, it makes one wonder if the GPO would not be wise to restrict ALL bands to QRP limits. Certainly we cannot see where any hardship would be suffered if a general maximum of 10 watts were imposed. Look at the scores laid out on Trantest lines:-

STATION	QSO	MILES	Pc/s	WATTS	X	POINTS
GC2CNC	OK1AJB	710	3.5	0.10	3	21300
	OK1HX	780	3.5	0.10	3	23400
	SM7QY	890	3.5	0.10	3	26700
G5QI	DL2RO	483	3.5	0.10	3	14490
	HB9GM	485	3.5	0.10	3	14550
	DL8FAL	530	3.5	0.10	3	15900
G2AJU	GC2CNC	250	3.5	0.10	3	7500
	G6GM	250	3.5	0.10	3	7500
	G3HLP	190	3.5	0.10	3	5700
G3EDW	DL1KVA	410	3.5	2.00	3	615
	OK2UD	700	3.5	2.00	3	1050
	G3COI	130	3.5	0.20	3	1950

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	G2AFV	156	1.8	2.00	5	390
G3GZA	G3GZM	60	3.5	2.00	3	90
	G3GDI	116	3.5	2.00	3	174

Look at those QSOs on one tenth of a watt! There is no need for me to enlarge on the subject. The table above speaks for itself and all I need add is that the QSOs quoted were by no means isolated cases. I only wish that I had space to reproduce the reports in full, but that would need the whole of this issue of "Q R P". However, I do feel that GC2CNC's beautifully laid out log is deserving of at least a synopsis. Cut to the barest minimum it reads:-

Sept 23, 3.5 Mc/s, 0.25 watts:- 0017-DL1JW, 0026-DL6NB, 0038-DL1BR, 0045-DL1WR, 0052-G6BQ, 0100-GD3FBS, 0116-DL1WR, 0127-UA3KAA (giving QTH as Moscow, but regarded as phoney) 0143-G2SU, 0150-G2AJU, 0210-LA5DD, 0224-G5JU, 0234-DL3HZ, 0252-DL9DS, 0303-HB9KP, 0320-LA5ID (the last three with .20 watts), 1130-G3JZ; Power was then reduced to 0.10 watts. 1823-G5QI, 1832-G2AJU, 1908-GC2FMV, 2010-G3EER, 2255-EA4CR 2300-SM7QY, 2325-OK1HX.

Sept 24, 3.5 Mc/s, 0.10 to 0.20 watts:- 1955-GC2FMV, 2308-G3CVW, 2340-G2AJU

Sept 25, 7 Mc/s, 0.50 watts:- 1240-F8IL; Power was then reduced to 0.20 watts. 1907-DL6W0; Frequency changed to 14 Mc/s. 1933-HA5BX, 1943-OB8XX

Sept 26, 3.5 Mc/s, 0.25 watts:- 1938-G5QI.

Sept 27, 3.5 Mc/s, 0.10 watts:- 1706-G2KF, 1932-G5QI, 1957-G5LQ; Over to 14 Mc/s and 1.00 watts. 2042-W2GT; Back to 3.5 and 0.10 watt. 2109-OZ5PA, 2142-GI3FJX, 2209-PA0GJQ, 2230-OK1AJB.

Sept 28, 3.5 Mc/s, 0.10 watt:- 0825-GW8WJ, 1907-GC2FMV. Up to 1.0 watt on 14 Mc/s. 1947-VS6CG, 2004-OH50P. Back to 0.10 watt on 3.5. 2222-G5AQ.

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Monty remarks that the QSO which gave him the biggest thrill was with VS6CG on the 28th, but it was eventually spoilt by "the Dx fraternity". He found Top Band too noisy to work on and the proximity DAC most discouraging. With the exception of the Monday, he reports that conditions were generally good, but that the operating of some stations (not contestants) was very bad. He notes that the 3Q5 which comprised his Tx will perk with 10 volts HT at roughly 2 plus mA, but no QSO was forthcoming (no wonder). Asked to what he attributes his continued outstanding success, Monty says: (a) a good antenna in clear space, (b) a good QTH - his is on the sea front, (c) clean ears - hi! (d) a good call sign, (e) LUCK. He says that his QSO with SM7QY (Sept 23rd) started with 100 watts at the SM end, was reduced to 30 watts, then to 10 watts - yet "Gunnars" signals remained at 559 all the time, so WHY WASTE 90 WATTS? During the contest Monty jotted down comments on the T6 (and less) notes which wandered over the band, the G6 who called CQ and CQDX so many times before signing, the two QRO stations who complained that QRP stations seemed to want all the band to themselves (!), the DL1 who persisted in breaking in on G2AJU's calls because he wanted a GC on 80, the number of VFO users who swooped all over the band without listening (3.5 Mc/s), the umpteen commercial "spitch" notes on 3.5,

THEY WINNER'S EQUIPMENT :- (GC2CNC) Tx, 3Q5 CO. Power supply, HT battery, Rx, S64C. Antenna, 132 ft end fed through universal coupler. (G5QI) Tx, LP2 CO. Power supply, 9v grid bias battery, Rx, 1-V-1 battery. Antenna, 66 ft end fed, SE (fed) end 12 ft high rising to 25 ft at NW end, We haape very shortly to produce full descriptions of both these transmitters.

STOP PRESS ENTRY: Just to hand is an entry from G3HBI, his three best calls being DL3GG, GM3HJV and GM3HHB, all on 7 Mc/s at 4 watts. This gives him 642 points. He makes no comment on his equipment but, I fancy HBI suffers from an indoor antenna and has not the advantage of a "sea-front QTH". Thanks for the entry all the same, BOB.

25/11

THE Rx SECTION, Kaleveld Cup Contest: The listener section of the contest did not produce any really valuable results. It was unfortunate that our SWLs elected to monitor Top Band, ten, twenty, forty and, infact anything but the band where most of the activity took place. To Mike Delany of Putney, SW 15, goes the certificate for his TOP Band report, which, while not extensive, certainly covers most of the Contest calls which did take place on that band. He spent many hours of fruitless search up there on 1.8, but the receipt of the certificate from PAØXE on Sat Dec 1st may be some recompense.

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Tx A C T I V I T Y.

G3GZA (Bristol) will be on Top Band, between 1880 and 1900 Kc/s, most evenings from 2200 to 2245 hrs. Accurate frequency checks will be welcomed. He will also be on phone after Oct 17th and all reports will be QSL'd (Top and 80).

G2HKQ (Poole) has built the freq. meter as per Aug Bulletin and finds it excellent. The next job will be a OV1 or 1V1 type Rx to complete a fully-QRP station using a total of 5 watts all in before the winter session. Already all Tx gear other than a battery CO/PA has been dismantled.

G3GBP (Scampton RAF Station) is using 5 watts on 80 into a $\frac{1}{4}$ wave coax fed antenna, but he finds the erection of an efficient antenna very difficult on the camp. Dusk and dawn are his best times and reports average S7 with a strong field to the west and nothing eastwards or to GM.

G3KPK (Darwen, Lancs) is still as active as time will allow and has managed to get his 58 set going. HE IS ANXIOUS TO BORROW A CIRCUIT DIAGRAM OF THE 58SET and any gen on the mike input and vibrator pack would be welcomed as these are giving trouble.

25/12

GC2CNC (Jersey) points out that I reported his forthcoming visit to Nottingham incorrectly. He will be there as Channel 15 member to a Conference of Agricultural Economists, not, as I had it last month, on a course at the University.

G2AJU (Ipswich) had G4FN and G6AB staying with him during part of the Kaleveld Contest period and both of them were "shaken rigid" by the several 100% QSOs which took place between Jack and Monty GC2CNC at various inputs from one watt down to 0.10 watt at each end. Jack also worked G3GBP and reports a nice signal for $1\frac{1}{2}$ watts, so take courage, Bob. 5QI was heard during the Contest and Jack is most enthusiastic over his 1/10 watt quality -- a lovely signal with an absolutely beautifully clear note, Jack reports.

G3EDW (Rayleigh, Essex) did manage to survive his cycle tour of Devon with 5QV. They got washed up by the tide and found themselves stranded on a railway bridge. Just as they lost consciousness again a train roared by below and the next thing they knew was being wheeled out of Waterloo station with the milk and the mail bags. By way of a change Peter has been experimenting with antennas and has had some success on 3.5. He also has worked GC2CNC, 5QI and 2AJU during the contest period and, moreover, has worked G3GBP as well, so Bob is certainly getting out even if these are not very Dx.

G3FAU (Stratford, E15) sent along a very nice check log for two days of the Contest period. He didn't have much success himself due to his temporary antenna being very low. He is now erecting 26 ft masts which should make all the difference. Mike Delany was there with a report of Vic's only QSO (with 2JF) in the two days activity--which says a load for Mike's watchfulness.

G5QI (Henley), like all the others who took part in any way in the contest, thoroughly enjoyed the tussel and is looking forward to next year's version. He says that his best reports came from G3GM whom he had no difficulty in working, even through heavy QRM with his QRPP.

25/13

PAØXE (Rotterdam) reports the safe arrival of Evert William Kaleveld on October 2nd. Sincerest congratulations to you and Mrs Evert, OM, from everyone in the Group. Without breaking into any of the worn out jokes about QRM we all wish every success to E.W.K. and great happiness to your two selves.

G2DHV (Lewisham), who is Hon Sec of the British Two Call Club, has been on holiday in N.Wales and has been on 1.7 Mc/s to 720 Mc/s bands as GW2DHV/A. He also made many personal contacts. He says it is a fb holiday area.

G3HUH (Staines) presents us with a new callsign in the Group and becomes our first licensed YL. Verna Stent has been with us since our very early days, though we have not heard much of her lately - due, no doubt, to her intensive swatting for the RAE and, lately for the morse test. Jolly good luck to you, Verna, and congratulations on your well deserved success. Let's have more news of your activities.

G12DQG (Belfast) is a thundering lucky chap -- he's busy BUILDING himself a new QTH, and taking jolly good care that this one has an official shack attached thereto -- no more corners in the bedroom for Walter! He hopes to complete the job around March, and to get really cracking on QRP activities afterwards. You are a lucky OM, Walter. Not that I'm jealous of course - MUCH!

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Rx ACTIVITY.

Mike Wassell (Liverpool) is swatting with great determination for the next RAE, but he has found time for quite a bit of listening all the same. Like everyone else he has found Top Band full of QRN, but has managed to collect a lot of VK/ZL Dx on 20 in the early mornings. Ten produced VQ4CRM and OQ5VD as well as W1WM/MM on board the Mell Fortell using 20 watts input. There was also a good

deal of VK Dx on 14.

K.B.Ranger (Strood) has sent in some interesting logs for ten and twenty and says that ten "has been terrific lately". He has also become our first SWL to have heard OZ5U on 20. Unfortunately K.B.R. will be QRT for some considerable time owing to preparations for two examinations leading to University entrance.

A.E.Stonestreet (Willesden Green) has had the misfortune to have driven a rusty nail into his foot and has been laid up for a week or two in consequence. The only compensation was that it enabled him to "do a little listening". He has tried out several new ideas on his O-V-O (described in "Q R P" issue No 1) but it always comes back to the original layout which he finds best in the end.

W.P.Griffiths (Ashted) asks for gen on the 18 set. We shall be producing a series of articles on this rig shortly, OM, as it appears to be of general interest and we are continually getting queries relating to various aspects of it. The address of AC4YN is Reg N. Fox, M.B.E., Lhasa, Gyantse P.O. Tibet, via Siliguri, N.W. Bengal, India.

G.Helleben (Southampton) has been concentrating on CW lately and found the recent special CW edition of SWN most helpful and interesting and derived much benefit from the list of coast stations.

J.R.Ayrs (Woodbridge), being a Flight Cadet at Cranwell, does not get much time for amateur radio though he finds plenty of use for it in the "daily round". He is hoping to take the next RAE. Also he has done a bit of experimenting with some of our "Experimental" circuits. He has some interesting comments to make on these, such as - "there was one which would not perk on 10 but was excellent on 2, though the original values were much altered." What a pity you don't give us more details, OM - those are just the points we should all like to have laid out in detail. Do let us have more gen, John.

P.Huntsman (Hexham-on-Tyne) has a couple of queries for us this month. First, who or what is CGL? He is not the only bod who

25/15

heard the call in the early part of September. Secondly, his Rx is a O-V-1 (.84 watts), HL2/220 OT. Mains hum sets in as reaction is advanced - but only on 40 and 80, all other bands being free from any sign of it. Peter has sent in an interesting log of calls heard during recent periods but, this month I am afraid we are tight for space as it is. I am proposing to reintroduce our old system of log recording, however, so keep up your records, Peter.

R.Huntsman (Hexham) is attending evening classes three nights a week, so his listening time is suffering, but he is still doing his best to catch up on brother Peter. He is hoping to get a new Rx completed shortly.

C.E.Atherall (Tunbridge Wells) has been a BC enthusiast until recently when he was so interested by his first assault on the amateur bands that he is now thinking of constructing a separate Rx for each band.

J.Hart (Brighton) has given us a long and most interesting letter this month, full of points which each deserve consideration on their own. I am keeping it on one side so that I can do better justice to it, perhaps, next month when we may be less cramped for space. Sufficient, now, to report that J.H. is working experimentally on 145 Mc/s with a 958A into a 1T4 (MUCH more gen on this, please, OM,); that he has a Xtal Rx that really does work; that he takes only two radio mags - QRP and QST (he doesn't say which has pride of place!) and that he is dead against our budding interest in radio control (afraid you're in a minority there, OM!)

R.L.Kenyon (Liverpool) has made contact with our Northern Rep Arthur Looney. He says "I found Arthur a very helpful fellow indeed and if all SWLs are like him I want to meet more." Well, that is the spirit throughout our Group, OM. R.L.K. is attending radio evening classes twice a week, but he has managed to complete a 1-V-1 which is showing profit on 40 and 80. Let's hear more from you, OM.

R.N.Hodgson (Chadderton) has had a spell of QRO construction

25/16

lately (there's no need to feel guilty about that, OM.), including a TV for Holme Moss, but he finds that his O-V-1 still holds it's own against the big B21 owing to the relative noise levels.

Ron Turner (Brierly Hill) is finding difficulty in keeping on the active list due to shortage of time, but he is busily planning ahead, his theme being superlative selectivity. I am making a list of subjects which we want to cover in future articles, OM, and I have added this to it - a most interesting one, too.

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Dx NOTES and NEWS, by BOB BROOKER.

It would appear that the Dx bands have not been delivering the goods of late, infact Harry Wells who usually hears plenty of it was forced to migrate to Top Band. He found 160 quite interesting and, as he says, it was a pleasant change to hear the Gs nattering. Altogether he logged 75 phone stations in 3 countries and 14 counties. I think we are all looking forward to an improvement in condx during the coming winter. As an omen, just prior to writing this, a distinct improvement has been noted on 40 for a few evenings past. Round about 1930 to 2000 GMT all the Gs have suddenly faded right out leaving the medium Dx well in the clear. UA9 and UA0 have been heard quite early, while G3GZH, close by, has worked several Ws at about 2200 GMT using only 7 watts - not QRP by our ruling, but certainly not QRB. Let's hope October will provide plenty for you to report for next month's "Q R P".

73, R.J.B.

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PLEASE NOTE:- In order that we shall have no difficulty in "getting together" at the RSGB Exhibition this year I shall have a quantity of lapel discs for free distribution to any Group member who may be able to attend. They will be in primrose card with "Q R P RESEARCH GROUP" printed in green and will

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have a green woven cord for suspending from button hole or RSGB badge. If there is any likelihood of your getting to the Show do please let me know so that I can send you one in advance. It is the only way we can hope to find one another and I want to meet you ALL this year. If I come across a member at the Show without a disc in evidence I shall take his name and number! Remember:-

THE DATE: Saturday, December 1st, 1951

THE TIME: All day, but especially afternoon for the Presentation.

THE PLACE: Royal Hotel, Woburn Place.

SEND FOR YOUR BADGE IN ADVANCE - a p.c. will do.

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G R P C - Z PANEL.

1951 SERIES.	COUNTRIES					ZONES	
	3, 5	7	14	28	TOTAL	TOTAL	
Mike Wassell	18	52	169	91	186	40	
P. Huntsman	20	43	164	17	166	37	
D.G. Gordon	19	15	82	35	92	31	
H.C. Wells	14	18	91	9	93	29	
E.W. Gardener	10	13	75	29	93	26	
A.E. Stonestreet	11	18	65	32	81	26	
R. Huntsman	11	10	49	--	54	23	
D. White	4	4	46	5	51	19	
R. Murray	7	10	30	--	41	15	
R. Nixon	--	--	34	--	34	14	

Well, there certainly have been some changes here this month. Mike has pulled out a strong lead, and Ronnie Huntsman has moved up a place while a real battle seems to be raging between third, fourth and fifth. The unfortunate one is Harry Wells who has gained several new countries on 7 and 14 without affecting his totals having already claimed them on other bands. Never mind, there is still time.

: : : : : Q R P T R A N T E S T :

	AVERAGE	QSO with	MILES		WATTS		POINTS -P-	MONTH'S TOTAL
	BEST		-M-	Mc/s	-W-	-X-		
G02CNC	23,010	SM7QY	890	3.5	0.1	3	26,700	71,400
Jersey,	-----	OK1HX	780	3.5	0.1	3	23,400	
C. I.	71,400	OK1AJB	710	3.5	0.1	3	21,300	
G5QI	16,823	DL2RO	483	3.5	0.1	3	14,490	44,940
Henley	-----	HB9GM	485	3.5	0.1	3	14,550	
Oxon	44,940	DL8MAL	530	3.5	0.1	3	15,900	
G2AJU	3941 (average)		No entry this month					
PA6XE	3228 (average)		No entry this month					
G3HCW	2892 (average)		No entry this month					
G3EDW	1503 (average)		No entry this month					
G5GG	1156 (average)		No entry this month					
G3GZA	1032	OZ7BO	680	3.5	2	3	1,020	1,584
Bristol	-----	G2AFV	156	1.8	2	5	390	
	2690	G3GDI	174	3.5	2	3	174	
G3CED	869	GM3FSV	600	7	5	2	240	1,000
Broad-	-----	11A0H	600	7	5	2	240	
stairs	3720	OH3QR	1300	7	5	2	520	
G2HKQ	822 (average)		No entry this month					
G3HBI	623 (average)		No entry this month					
G3EKP	442	DL6HE	500	3.5	2	3	750	,962
Darwen	-----	G3GHO	45	1.7	2	5	112	
Lancs	1365	G3GXT	40	1.7	2	5	100	

What a pity that that block of "no entries" spoil the middle of our panel. But there are certainly two hard triers up at the top, and it looks very much as if they have worked out a most successful system in that they have seen the merit of REDUCED POWER which, after all, is the main purpose of this contest. That QRP can achieve results is what we set out to show and that is what they are

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most efficiently demonstrating. Before leaving Trantest I must just refer back to last month when three entries were missed out, one through an oversight on my part and two through being sent in late. One was from G2HKQ who gained 1645 points with G3FYR, DL6XT and F9SJ. The second was G3GZA, 692 points for ON4CP, G6TD and G2HDT. The third, G3CED, 1260 points for OH3QH, SM7A00 and SL6CJ. Adjustments have been made this month and their current scores are correct to date. It is obvious that the Kaleveld Cup Contest, run during this month, has had an influence on the scores shown.

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Q R P TWO - WATT PANEL.

	COUNTIES			COUNTRIES			
	TOTAL	1.7	1.7	3.5	7	14	28
GC2CNC	108	4	2	20	29	31	32
G5QI	55	24	2	16	13	--	--
G3EDW	46	17	4	12	13	--	--
G3GZA	27	16	4	6	1	--	--
G3HBI	20	5	1	--	14	--	--
G3HCW	16	--	--	--	14	--	--
G3FKP	10	3	1	1	5	--	--

Apart from a general increase in scores the only change this month is that 3GZA has crept up one place, but it is pleasing to see that the approach of the "season" has already revived interest in the panel.

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Q R P AUGUST PORTABLE CONTEST.

Once again Mike Wassell has won this "simple" contest. I say simple because of the intentional lack of rules. You may remember

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that the contest is for the best report sent in for ANY one hour's portable working during the month of August.

Mike's portable location was in the Malvern Hills, 52-4N and 2-20W by compass reading, and 560 ft above sea level. Over the hilly landscape the weather was dull and thundery that morning - 0800/0917 hrs BST, August 31st 1951. The Rx was a modified 18 set, tuned for 14 Mc/s, taking 5.3 mA at 100v HT, Lt being from a twin cell cycle battery. The antenna was a 14 Mc/s half wave ground plane, centre fed, 3ft 5in high supported on poles and directed SW-NE. Total weight of all equipment was 17 lbs. The log for that one hour, disregarding the host of various Europeans, was:-

CW: VK3GA, LU1AAP, VE7AIM, UA9KCC, ZC4ND, ZL2AAG.

PHONE: CO2OZ, IL2R, OQ5BG, VP6HR, VK7AJ, YV8AD, W9VR/MM, VK2AGW, VK2ADN, KP4KC, HC1FG, VK4XR, TI2GHV, SU1AS, TF5TP, and VP3CW.

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W - A - N - T - E - D

- 1: Circuit diagram and details of the RL139 Rx.
 - 2: One BC-453 (Q-Fiver).
 - 3: Bandpass Xtal filter unit for 470 Kc/s.
 - 4: Instruction manual for BC-342-N.
 - 5: Car radio (cheap) or superhet suitable for conversion for car
- Any offers via "Q R P" please.

F-O-R S-A-I-E.

- 1: Hallicrafters "Sky Champion" S20 Rx, Good order - £15
(Money refunded if not satisfied)
 - 2: Odd components for experimental work, Suit novice members.
- S.A.E, both items: R.V.Aldridge, "Aprillis", New Rd, Amersham, Bucks

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RESEARCH GROUP SPARES SERVICE.

(Note: All correspondence to Group Spares-storekeeper direct:-
G3CED, G. Partridge, 17 Ethel Road, Broadstairs, Kent)

L.T. Transformers: (200/230v) 5-0-5v 5A (twice). One only....£1.0.0
do. 4; 6.3; 6.3; 7.5; 7.5v 250mA. 2 only. £1.0.0

Bias Tranny: 200-0-200, 60mA; 150-0-150, 100mA; three 4v..... 15/-

Chokes: 30H, 400mA, 2 only, £1.0.0. 8H, 250mA Parmako, one, 10/-
10H, 200mA Westinghouse, four, 10/- each. 4-20H 150mA Parmako
four, 5/- each.

Meters: 2" sq flush: 0/5mA, 0/100mA, 0/150mA,.....5/- each
0/3A, 0/3.5A RF.....2/6 each.
2" round, flush: 0/15 mA.....2/6 each.
2½" projection: 0/5mA, 0/5v & 0/20v.....5/- each.
035A & 0/20A.....5/- each.
(Ferranti twin scale)

Condensers: Oil-paper: 4 to 8 uF and 500 to 1500v, 2/- to 7/6 each.

Mica: .0001 to .01 uF, 1500 to 2200v, 4d each.

Tuning: 200 pF Cydon Tx..... 2/6 each.

Butterfly, 100/100, 50/50, 35/35 and 25/25 pF,
all at 1/- each

Split stator, 20/20, 25/25(1000v), 25/25(3000v),
500 pF 4 section, 1/6 to 7/6 each.

Resistors: 30W mica (ex 1131), 350, 1000, 2000, 4000 ohms, 3d each.

Miscellaneous: TU9B, 7/6. Marconi Sig-Generator, 140-300Mc/s, £2.

1131 PA chassis (no valves) £1.10.0. Trimmers, jack
sockets, spindles and many other items.

ALL ORDERS MUST CARRY SUFFICIENT EXTRA CASH TO COVER POSTAGE:::::

WANTED: QRP type single section variable condensers with
standard spindles.