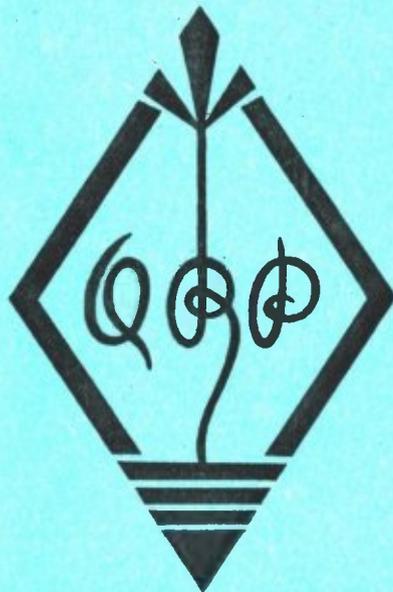


**JOURNAL OF THE
Q R P
RESEARCH SOCIETY**

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Q R P

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AUGUST 1955
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JOURNAL OF THE Q R P SOCIETY

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THE ONLY SOCIETY IN THE WORLD CATERING EXCLUSIVELY
FOR THE LOW POWER AMATEUR RADIO ENTHUSIAST.

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.....: THANKS!

Well, you certainly worked the oracle for us this year, OMs. Tnx to all your good wishes for our holiday we had the best time we remember -- perfect weather, stacks of good grub, comfortable beds -- THE LOT! Only one fault -- I have never in my life known two weeks to go so quickly!

All of us here do sincerely wish that you -- each of you in your respective turns -- have had, or will have as good a holiday as ours.

.....: A CHAT ABOUT REPORTS WITH BOB IBALL

(continued from last issue)

(This is the final instalment in this series in which Bob has talked to you about reporting and, as promised, it takes the form of a complete sample report. Many of you have written to tell me that you have already had examples of Bob's beautifully detailed reports. Those who have not could do no better than to study this sample -- ED:)

STATION -----

DATE: March 12th 1955

FREQUENCY in 1.8 Mc/s channel.

- | | |
|--------------------------------|---|
| 2102 GMT: Signing over to G--- | Signal RST 559. No QRM or QSB. |
| 2106 GMT: Returning to G--- | Signal RST 4/559. No QSB but fairly heavy QRM from a phone station operating a few Kc/s HF of your frequency and identified as G3--, rated at S7. Had a little difficulty in copying you. |
| 2110 GMT: Clearing G--- | Signal RST 559. No QRM or QSB. |
| 2113 GMT: Returning to G--- | Signal RST 579. No QRM or QSB. |
| 2115 GMT: Returning to G--- | Signal RST 5/269. No QSB but heavy QRM from a CW station operating on the <u>immediate</u> LF of your |

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frequency and identified as ---, rated at S8; also heavy QRM from unidentified Commercial phone station operating about 5 Kc/s HF of your frequency, rated at S9. Had much difficulty in copying you & missed a lot of your transmission.

2120 GMT: Clearing G--- Signal RST 569. No QRM or QSB.
2124 GMT: Clearing G--- Signal RST 569. No QRM or QSB.
2127 GMT: Called CQ Signal RST 559 peaking S6. No QRM or QSB. Note, your call answered by G---.

Keying good, nicely spaced and sent steady. Easy to copy.
Rx, RL224A, 5V battery SH with reaction control & RF stage using VR22; HL2; 2/VP23; K8OB. HT at 90v from AC eliminator. 2v LT acc, GB battery. Reception on phones.

ANTENNA - 100 ft long wire of 14 gauge, 12 ft high, S - N.

Local Wx fine and cool with light NE wind.

Condx good. General QRM strong, but high noise level noted with QSB on some signals. Much QRM.

SIGNALS HEARD, 2030 - 2140 GMT

<u>STATION.</u>	<u>R S T.</u>	<u>QTH</u>	<u>STATION.</u>	<u>R S T</u>	<u>QTH</u>
G3GGN	599	Littlehampton	G3JK	459	
G3ERN	459	Harlow	G3GYQ/A	559	
G3JDK	599	Rotherham	G2KF	559	Edinbridge
GW3GCZ	369	Holywell	GM3JZK	559	Isle of Mull
OK1MQ	249		G3JKO	569	Nottingham
G3IYO/A	559		G3KFT	229	Cheltenham.

SIGNED

SOCIETY BADGE PRINTING BLOCKS are again available at 2/6 post free.
SOCIETY LAPEL BADGES (button type) are in stock, also at 2/6 post free.
Both are first class quality and may be obtained from Hon Sec.

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.....: SOCIETY NEWS & ACTIVITY :.....

KEN JONES (Worthing) joins us this month (Welcome, OM!) with a truly historic rig. It came to him from our own Past President, G2MI, via G6XJ and was constructed by '2MI in person and described and illustrated in the Bulletin of Dec 1949. The only modifications which have carried out are the addition of an aerial change over switch and grid block keying using an internal bias battery. The only available Xtal is 1802.5 Kc/s, but others it is hoped are on the way.

BILL CALLENDER, VP4LW (Trinidad) says that he has rather lost interest in the Society as our idea of QRP is "different to his end". He adds that he has not opened the last two or three issues of the mag. Well, if you do happen to open this one, Bill, I should like you to know we have enjoyed having you and please don't think I am "digging" when I say that if you had written us even ONE letter during your membership it is possible that we might have had something more interesting for you

JOHN CUSDIN (Polegate, Sussex) sends us detailed gen on his FM tuner in which we, personally, are extremely interested. If any other members would like the gen we (with John's able assistance) will put it in the mag; as, however, it lines up 4 X EF50 and 1 X 6H6, I suppose it can hardly be called QRP.

NORMAN BASON (Peel, I.O.M.) has been finding the HF bands opening up quite often recently and has managed to log some on Ten, though he still has a big ZERO against Two. Norman is certainly a stayer! He has been trying to log his first 2-metre call longer than I can remember now, yet he never seems to loose heart.

KEITH RANGER (Mafrag, M.E.A.F.2) has justifiable grounds for a good grouse at HQ -- we have accused him of not sending in his sub when infact he was fully paid up to Dec 1955. We do appologise, OM. Keith is due to return to G early in Sept, so his C-Z score will be unchanged for a while. "But just wait till I get home with a 90' wire and the old faithful O-V-1" he says!

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NILS HANSSON (Gavle, Sweden) finds it much more sporting to get a QSO with QRP but says that he is rather alone in this opinion. Swedish hams, he says, get most of their ideas from American papers and "it is safe to say they are fond of many tubes and many watts". Nils has tried but has had no success in raising interest in our aims yet though he still hopes to find others for whom our constructional articles are as interesting as they are to him.

BOB KENYON (Liverpool) has migrated to a new address and is very pleased about the greater antenna space and the fact that he has managed to reserve a room for a "shack". Bob has had the curious experience that the last half dozen O-V-O and O-V-1s that he has built refuse to function on Top Band though they are quite good on 30, 40, 20 and 21. Nor is he alone in this peculiarity for several members of the local club claim similar experiences (You are lucky, OM -- the last few I've built won't work on any band!)

MIKE DRANSFIELD, G3JKO (Nottingham), has resigned from the Society this month as he does not feel justified in continuing membership as he is using 60 watts on all bands and has (temporarily, we hope) lost all interest in QRP. (Always glad to have you with us, OM, any time the urge returns -- and IT WILL!)

BOB KENNY, VE3AYE (Kleinburg, Ontario), ex-G3AAU, ex-GM3AAU, from whom we have not heard for many moons has come in this month with an interesting letter and a copy of the magazine which he runs for the reformed W.F.S.R.A. which is still going strong overseas. Bob is active most Sundays between 1800 and 2000 BST on the LF edge of the 20 metre band, around 14003 Kc/s, and will be looking for Gs -- will be particularly pleased to hear any of his old friends in G. (Have put you on our mailing list as from this issue, OM, and Tnx for "Bee-Kay", fb!)

WALTER CAUGHY, G12DZG (Belfast), is another of our very old friends from whom we have not heard for something like two years. We ran into him again as the result of a QSO which he had with Allan, G3IDG. At present he is QRO with an "Elizabethan", but he hopes to rejoin us

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later in the year (No need to say you are always welcome, Walter).

ALLAN HERRIDGE, G3IDG (Balham, SW 12), has not been on the air so much lately. We hope this is not due to his duties as our Society Press Officer in which capacity he is doing a really very magnificent job. We know, here at HQ, only too well the amount of work that even a "back room" job of this kind involves and we are anxious that all our members should appreciate this fact. Publicity is essential to keep a Society such as ours on its feet -- and Allan is certainly doing that!

CLIFF LEAL, G3ISX (Welling, Kent) has been experimenting with a W8JK antenna, but unfortunately the "mast" was required for its normal duty of hanging out the washing, so he had only three QSOs (OH, PY & ZL) but it did seem promising.

"MONTY" BANKS, GC2CNC (Jersey), our President, has been elected to the Council of Tops C.W. Club and I know that I can truthfully submit the congratulations of all our members. We feel particularly glad of this extra link between Tops and ourselves as we have always enjoyed the most friendly relationship with them. "Monty" has contracted to give Slow Morse (RSGB) on Saturday evenings on Top Band, 2300 hrs clock time, starting in Sept. This will be an excellent opportunity for our Code Students to make headway as frequent instructions will be given on phone.

JOE STEPHENSON (Shipley, Yorks) has been trying out a small battery superhet but has come to the conclusion that the I-V-1 gives better overall reception. Signal strength was about 100% up on the SH but noise level was plus 500%. Joe suggests that we produce an HQ rig for PAREC -- If we really got down to any solid constructional programme, OM, there would almost certainly be no mag as a consequence!

PETER WILKES (Bourne, Lincs) is looking for "a good QRP superhet" circuit. Well, perhaps Joe's comments above will prevent you expecting too much of these types, OM. There is a lot of development work needed yet with the very small SH and we must agree with Joe that, at present, three valves are best employed in some TRF type!

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.....: V. K. CALLING :.....

(Jack Cowles joined the Society in April 1950 as G2AJU. It is one of the joys of this job of mine when such old friends keep in touch even though their lives have taken them to the other side of the world in the mean time. Jack's letter, I feel, is worthy of reproduction in full; so here it is. Jack, by the way, is now VK6EJ -- ED:)

I guess it is about time I dropped you a line to let you know we are on the air & would be glad to have some of the boys keep an ear open for us on 20, 40 and 80 CW.

We have now settled in on a 2500 acre wheat, sheep farm here (plenty of room for aereals, hi!) & have put up a rhombic 16 waves long on 20 metres beamed on G!! and at present are enjoying ourselves working all sorts of Dx in all continents (inc. all over Europe & W the long way round) but so far no luck raising G. This with 50 watts. Must be local condx I expect but they seem to be improving a lot and my next job is to build a band switched QRP rig which I hope may beat the big rig. We are just 1100 ft asl & nicely in the clear, our own paddocks stretching all round the house. Have been QRL with work on the farm, seeding 550 acres and now are in the process of shearing 750 sheep!

We found the ham spirit much in evidence here. It is sure a great hobby! Our nearest ham neighbours are MK6BS who works 21 Mc/s fone (QTH 50 miles distant) and is also farming a similar place. We often visit one another at week ends and have regular rag chews on 80 fone Sunday mornings. Another neighbour is Malcolm MK6MU at Merridin who runs a regional BC station.

Out here we are not allowed Top Band 1.7 which would not be much use anyway as static is vy hvy here, so 80 is our local rag chew band for VK & ZL and there is some activity most evenings. 40 is a good Dx band these days if one can get underneath the QRM (BC & comm'1) & 20 just coming good with 21 a bit erratic and very occasional openings on

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28. The latter two bands we are not on yet as we have to build a converter for the BC348.

We do enjoy reading "Q R P" & congratulate you on a very interesting little mag. I do realize the work you have to put in, having tried my hand at a local radio mag when in Suffolk. Georges' spares service is very tantalizing as any gear is expensive & difficult to get here. But still a good Dx call does compensate for a lot & we are glad we brought plenty of 'junk' with us (about $\frac{1}{2}$ ton, hi!). We are lucky in having a 2hp petrol engine & 32v house lighting with batteries, plus a 230v AC alternator $1\frac{1}{2}$ Kw which G8MU sent out from England last year, a fb shack (the pantry) which we commandeered from the XYL!

Would like to send greetings to all friends much too numerous to write personally.

Vy 73, Jack.

PS: I did listen during NFD in June & heard a lot of the G QRM including various field day stations signing /P, but static crashes were so bad I failed to get a full call (the rhombic was not up then). Will listen carefully on Low Power field day & any tests of a like nature. I do endorse your opinion that a properly aligned aerial matched into the Rx makes all the difference to reception & is better than an extra RF valve.

(If any of Jacks old friends would like to drop him a line the QRA is P/O Box 11, Bencubbin, Western Australia . . . And thanks a lot for the letter, Jack and Andy, we do appreciate hearing from you, OMs)

"STRAIGHT FROM THE STATES" ::::::::::::::: REPORTED BY BUD RUGEL, WØPRM.

JULY 2, 1955: Lloyd WØQGI has received his DXCC and is still going strong with such 14 Mc/s stuff as HKØAI, YNØYN, VP2MD, CP3CA, VP5DC, VP5BM, VK9RM, JZØAG, KW6BB, KC6CG, JA1-2-3-4-5-6-7-8-9-Ø, VK9OQ, 9AU & IT1TAI. QSO'd KA2SK on 14 Mc/s phone. 21 Mc/s phone contacts include CP5EK, HR3HH, LU6OJY, OA5G, TI2BX & VP1CG. Lloyd operates a Radio & TV shop and

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.....: THE 1955 KALEVELD CUP CONTEST :.....

The contest for the cup presented to the QRP Society by Evert Kaleveld, PAØXE, will be held this year during the week Sat, November 5th to Sat, November 12th (midnight to midnight) 1955.

The rules have been simplified to remove any such "bones of contention" as those which arose last year, and to encourage a very much bigger entry. It is hoped that it may help to spread an interest in the working of real Dx with a very low power.

Entries will consist of a signed, true copy of the log of ALL CW contacts made during that week. All such logs will be submitted to a committee elected specially to judge this contest and they will select what are in their opinion, taking all relevant matters into consideration, the three best QSOs in each log. The entrant of the three most outstanding contacts thus selected will be adjudged the winner of the cup for 1955.

- (1) All contacts must be on CW.
- (2) Max power must not at any time exceed 5 watts.
- (3) Any band may be used.
- (4) A readability of less than R4 will disqualify the contact.
- (5) All contacts must show the entrant's estimate of mileage between stations participating.
- (6) THE DECISION OF THE SPECIAL COMMITTEE WILL BE FINAL AND BINDING.
- (7) All entries must reach Society HQ by Sat 26th November 1955.
- (8) Every entry must carry a description of the equipment used.

As a general guide it may be pointed out that the Committee will give special consideration to (a) power used, (b) mileage covered, (c) band worked, in the order 145 Mc/s, two and 160 metres, 80 metres, ten and 40 metres, and 20 metres. They will also give full consideration to all other points and circumstances appertaining to each entry.

In cases of ties the overall value of the weeks logs will be taken into account.

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.....: QRP SOCIETY SPARES SERVICE :.....

(Write direct to SPARES MABAGER, G3CED, 17 Ethel Rd, Broadstairs, Kent. Enclose PLAIN stamped envelope but DO NOT send money.)

WANTED:-- HT Eliminator. Valves (EF50, EF91, 6K7, EL33, 6X5, 5R4GY, 6AC7, 6SN7, 5U4G). "Lifeboat" 12 volt hand generator. D104 crystal mike. MC mike 100:1 matching transformer.

SALE:--A number of 3:1 intervalve transformers. PP driver (phase splitter) transformers. 100H 3mA audio chokes. 2v and 4v valves too numerous to list. Single, two gang and four gang tuning condensers, with or without dials & SM drives, all 500 pF. NO REASONABLE OFFERS REFUSED for any of above.
EF50 (2), 6Q7GT, VR101, 4/-
6L6 (British, new), 10/-
Pots, 50K & 500K, 1/- each or 3 for 2/6.
Metal rectifiers, 125v (2), 2/- each.

SWAP:-- 200 mA DC meter for 50 mA DC meter.

- o - o

SOCIETY BADGES (gilt and green enamel) specially designed to add that finishing touch to your QRP equipment may be obtained TO ORDER. They are single hole fitting and may be either 2BA or 4BA, supplied complete with nuts and serrated washers - - - Post free 4/- from HQ.

SOCIETY BADGE PRINTING:-- Stationary, envelopes, letter headings, or QSL cards can have the Society badge added at 1/- per 100 (plus return postage). A real quality job makes all the difference to your papers or cards. Send your goods in to HQ with instructions and we will see that you get the best results and quick service.

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TRANSISTOR GROUP NEWS ::::::::::::::: REPORTED BY R. C. TAYLOR, G3JAL

There is little to report this month, which I suppose is only to be expected in view of the beautiful weather recently.

My own activities have been devoted to attempts at making point contact transistors, my only success ranking with those stories fishermen are reputed to tell each other! Unfortunately I over formed the likely specimen. After working up from 100 volts and a 300 pF capacitor to 180 volts and a .25 uF, with the transistor showing signs of improving all the while, I finally tried 200 volts and a 1 uF capacitor. The result was a loud crack and complete ruin of the transistor! Ah well, try again!

I should be very interested to hear from anyone who has tried making transistors.

Please send your letters and postcards to 67 Colliers Water Lane, Thornton Heath, Surrey.

H. H. F. GROUP NEWS ::::::::::::::: REPORTED BY TED STONESTREET

(Interesting how the GREEN DIAMOND proves its worth. Ted was on an outside job the other day in a district he doesn't know and had not visited before. In the station on his way home he glimpsed our little badge and accosted the wearer. It was George Stokes, to whom Ted had posted a letter only the night before. George had just left the pillar box in which he had posted the answering letter to Ted! Naturally a visit to Georges shack followed where Ted was interested to see copies of the Cusdin Special, the Huntsman and of his own Old Faithful. -- Ed)

George Stokes (in the course of the personal QSO explained above) asks for his sincere thanks to be passed on to Capt John Cusdin for the many letters and invaluable help he has received regarding the "Cusdin Special" Rx. George also reports the one-lung job to be in good

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shape as witness his 2 metre log for July -- G2MV, ABD, AIW, HDZ, G3XC/P, IUL, DGR, KP, BYY, CAS, FYY, JPU, GSE, GSM, YU, IQU, G5KW/P, DS, G6TA, YU, G8AL. He has also had veries from YU, TA, MV and AIW. Incidentally, just to make Norman Bason still more envious, George says that he switched on the one valve rig for the first time after completing construction and hearx a 2-metre station straight away!

For myself, I bashed into the middle of a contest on Two on the 2nd July; no idea when it started but it was on all the afternoon till about 1815 when it pourde with rain and the band folded up. My 2 metre log for July includes G2ABD, AIW, HDZ, G3FYY, GSE, CZY, FQS, G5KW, G6TA, AG.

I do hope that these proofs of activity on the band will being in other news from interested members. And, incidentally, what about some of our W members weighing in with some VHF news? ARE YOU THERE, BUD! We'd welcome letters from some of your boys, OM. QRA here is 29 Chaplin Rd., Willesden Green, London, NW 2.

NORTH KENT RADIO SOCIETY ::::::::::::::::::::::: TOP BAND CONTEST

DATE: 2nd to 8th October 1955.

OPS PERIOD: Any one hour per day, making a total of 7 hours.

SCORING: G for 1 point; GI, GM, GW, GC, GD for 2 points; any others for three points each.

SENDING: CW only.

CALL: Possibly "CQ NKRS TEST", but not yet decided.

Listen out for the North Kent boys, chaps and give them a point or two if you can. Reports to Cliff Leal, G3ISX, 1 Deepdene Rd, Welling, Kent.

=====
WOULD ANY MEMBERS BE INTERESTED IN THE PRODUCTION OF A SPECIAL Q R P SOCIETY CHRISTMAS CARD? If sufficient enquiries are received we will look into the matter of cost and report next month. Write to HQ - NOW!

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Q R P TOP BAND CONDX :::::::::::::::::::: REPORTED BY BOB IBALL.

Not a lot to report this time due to holidays and being inactive before the holiday.

I did hear GC3DVC/P on June 14th at 2220 GMT; unfortunately I got only a single listing as the stn vanished under fone QRM -- and the fone stn was having one of those long natters! On the strength of that I have not put in a report.

On June 26th at 1225 GMT I logged PAØLR working another PA stn & sent my report off. In reply PAØLR says his power was 3 watts. A report to the other stn has so far produced no reply!

Our good friend G3CED was heard on July 3rd at 1858 GMT working '3JFA.

On Sat 9th July GM5PP/P (Roxburg), G3AKU/P (Rutland) and GW5RI/P (Llanberis) were the most interesting stns -- along with GW3KHY. Any idea as to the QTH of '3KHY? July 10th brought in PAØBRD, PAØLR and PAØGN between 1258 and 1321 GMT. An interesting stn logged on July 20th at 1819 GMT was G3HM/P working near Lowestoft ON FONE!

What is probably my best Dx in the mobile section was ob Aug 8th when I heard G3BK/M on fone at 1015 GMT giving QTH as Hunstanton, Norfolk. A ruler across the map gives mileage as approx 80 miles from here

:::::::::::::::::: THE 160 METRE Tx AT G3ISX ::::::::::::::::::::
CONCLUDED FROM LAST ISSUE

By way of conclusion to this series of articles your Editor feels that a very warm vote of thanks are due to Cliff Leal for the trouble he has taken in the preparation of the finely detailed gen on his Tx.

He ends by saying that a word about R12 is necessary. It should be ensured that the drive never goes over 5 mA which is the max permissible with the 5763 and also effectively prevents any TPTG of the PA.

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Cliff uses 1 mA drive on CW and 2.5/3 mA on phone.

Keying is effected by keying the bottom of CH1 in the cathode of V1. It would appear that the lack of mod is not due so much to a mismatched mod tranny as to lack of gain in the modulation. All reports on Cliff's signals, however, assure him of excellent quality.

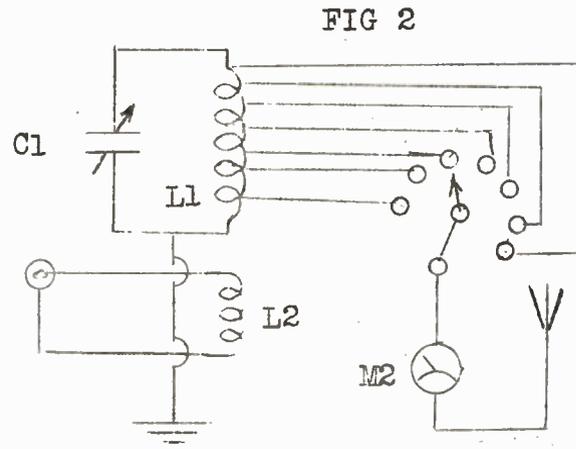
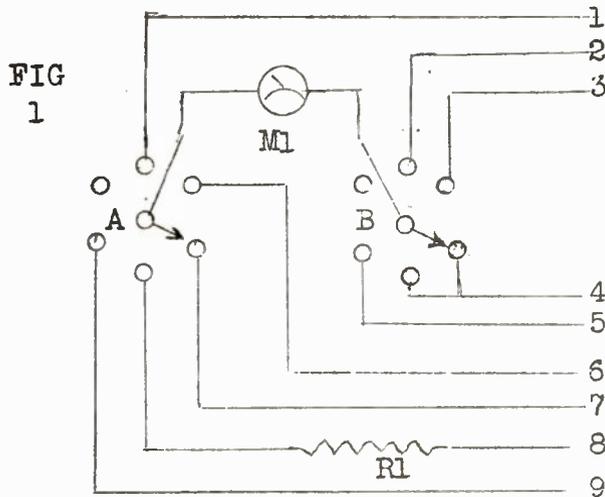


Fig 1 above shows the Meter and Function Switch circuit. The point connections are as follows: 1 to HT side BA anode; 2 to anode load side; 3 to top 100 ohms PA grid resistor; 4 to chassis; 5 to VFO anode load side; 6 to chassis; 7 to top PA cathode shunt; 8 to PA HT line; 9 to VFO anode HT side. R1 is a 100 K 1 watt multiplier which will make a 5mA 7 ohm meter read near enough 500 volts FSD. The spare position on switches A and B will eventually be used to read total current. M1 is 5 mA FSD.

Fig 2 above shows the antenna tuning unit. C1 is 250 pF; L1 is

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35 turns of 24 swg close wound on 1½" diameter. The atppings are at every 5 turns. L2 is 3 turns wound over the earthy end of L1. M2 is a 0/350 mA thermo.

.....: QRP SOCIETY CONTESTS :.....

THE C - Z CONTEST (for the Partridge Cup, now held by Peter Huntsman) is for the highest annual (Jan to Dec) score of countries & zones heard on five bands with receivers of not more than 1½ watts HT consumption. A country or zone heard on more than one band may count once only in the total.

	Mc/s: --	<u>3.5</u>	<u>7</u>	<u>14</u>	<u>21</u>	<u>28</u>	<u>Countries</u>	<u>Zones</u>	<u>TOTAL</u>
Norman Bason - - - - -		15	36	125	33	5	133	35	168
Ted Stonestreet - - - - -		30	15	106	-	-	114	30	144
E.W.Gardiner - - - - -		12	9	92	20	-	108	27	135
Keith Ranger - - - - -		-	59	99	-	-	106	28	134
Joe Stephenson - - - - -		17	2	89	14	-	91	26	117
Mack McIntosh - - - - -		20	27	72	-	-	72	26	98
D.G.Gordon - - - - -		17	4	60	20	1	88	22	90
Peter Huntsman - - - - -		-	-	36	-	-	36	17	53

TOP BAND PANEL -- An annual contest for the highest score of countries and counties heard on 160 metres with an Rx consuming a max of 1½ watts HT

	<u>COUNTRIES</u>	<u>COUNTIES</u>	<u>TOTAL</u>
Bob Iball - - - - -	16	70	36
Bill Iball - - - - -	11	57	68
D.G.Gordon - - - - -	2	27	29
Norman Bason - - - - -	5	22	27