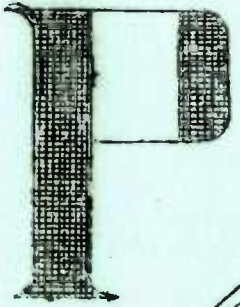
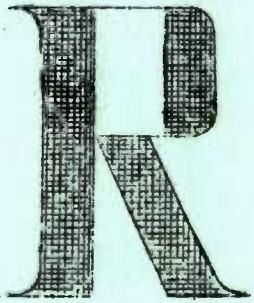
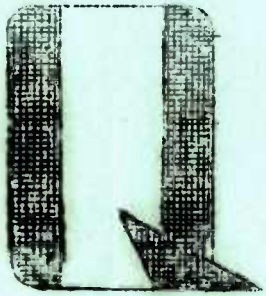
EDITED BY: J. Whitehead,
6, Abbot's Tilt, Hersham,
Walton-on-Thames, Surrey.

::::::::::::::::::::

By subscription
only:- 8/-
per annum.







No: 24

SEPTEMBER 1951

::::::::::::::::

LOW POWER RADIO RESEARCH and NEWS

LOW POWER RADIO RESEARCH and NEWS

"Q.R.P"

No: 24

SEPT 1951

EDITORIAL.

Once again we are at the beginning of the exhibition season. I invariably gather a sense of excitement and "urgency" around this time, not only on account of the various annual shows to which I always look forward with enthusiasm, but because it heralds the approach of all those happy evenings and "cumfy" Sundays which can be spent in the shack without any guilty feelings about the lawn which should be mowed or the hedge which aught to be cut.

In Sept 1949 I had a few caustic comments to record on the subject of Radiolympia. Well, Radioearlscourt (or whatever the catch-word for this catch-penny is going to be) is open as I write and a perusal of various pre-view accounts has assured me that this year's "do" is still less likely to interest any QRP enthusiast. So we'll say no more about THAT one.

November, however, heralds a very different atmosphere, and I DO want you all to bear in mind the RSGB Exhibition which gets better and better each year and is, I am sure, a real "calendar-mark" for many hundreds of ISWL members, including the majority of our own QRP men. The Amalgamated Short Wave Press stand, at which the ISWL and the QRP Research Group, played such an excellent part last year, will, I am sure, be an even greater attraction this year. I shall be looking for YOU there, OM, so do please turn up.

RADIO CONTROL.

The first of a series of articles on the practical aspects of Radio Control of Models appears in the current September issue of Radio Constructor, from the very able pen of Arthur C. Gee, G2UK, the President of the International Short Wave League.

Now Radio Control (otherwise known as "Telearchics" - or just RC for short) is, as I have pointed out before, right "up our street". It is essentially a QRP function. The receiving gear must be as small as possible both in dimensions and in weight, with the least possible drain on the diminutive batteries which it is essential to use. The transmitting gear, while not so greatly restricted, must of necessity be thoroughly portable and, since the power source must equally be battery, the QRP element is still an essential.

Moreover, RC provides the only outlet in the radio game for both Tx and Rx facilities which does not entail the possession of a "ticket". Two frequencies are available for RC use (26.96 to 27.28 Mc/s and 464 to 465 Mc/s), the only restrictions being that the input to the final stage of the Tx shall not exceed 5 watts, and that at no time must any "message" be transmitted on the frequencies concerned. Here, then, is an opportunity for all our SWL members to try their hands at Tx design and construction and of practically demonstrating at first hand the results of their own ingenuity.

RC, which began in a small way in the States before the war, is still in it's infancy and an enormous amount of pioneer development is still waiting to be carried out in this newest branch of the radio hobby. Nor is there any need for the necessary equipment to entail any large expense as the model to be used as a "testbed" need not be in any way elaborate. Those who are lucky enough to be

endowed with a mechanical "bent" will certainly be able to manufacture a suitable model themselves, while those who are not so gifted have a large number of commercial model "kits" at very reasonable figures from which to choose. In this direction, too, there are endless varieties of models which lend themselves to the practice of RC -- aircraft, boats, cars, railways and all sorts of "stationary" assemblies which can be made to work in truely life-like fashion.

Finally, it should be remembered that any genuine development work undertaken in the RC field is liable to carry results of wide commercial and even national importance in "full-size" spheres of use, since already RC is being adapted in a number of industrial applications as well as for a variety of "service" purposes.

It is felt that a sufficient number of our members will be interested in the subject to warrent the organization of a Group devoted to RC. If everyone thus interested will PLEASE DROP ME A LINE (a p.c. saying "Interested in RC" will do for a start) I will place the matter, should the response be sufficient, before the next meeting of the ISWL Committee.

If you do not already subscribe to Radio Constructor and wish to make sure of the regular receipt of G2UK's RC articles, send a subscription of 18/- (or 9/- for six months) to Amalgamated Short Wave Press, 57 Maida Vale, Paddington, W9.

::

NOTE: G3CED has a daily sked with G2ZC, G5PS and PAØXE from September 28th for 8 or 10 days, on 3506 Kc/s at 1400 hrs BST. 3CED will be /P and all reports of value will be welcomed.

We shall be interested to have copies of any such reports at QRP HQ, so drop us a line if you hear these calls, OMs.

K A L E V E L D C U P: LIST OF RESEARCH GROUP CALLSIGNS.

For the benefit of SECTION "B" CONTESTANTS (that is the Listening Section) in the Kaleveld Cup Contest a list is appended here of ALL Research Group Tx member's calls.

G2AJU	G2ATV	G2BTO	G2DHV	G2FZQ	G2HKQ	G2HL
G3CED	G3CHF	G3EAZ	G3EBL	G3EDW	G3EEM	G3EKP
G3ERI	G3ESX	G3FAU	G3FVE	G3FYX	G3GBP	G3GRQ
G3GZA	G3GZJ	G3HBI	G3HCN	G3HCW	G4QW	G5GG
G5QI	GC2CNC	GI2DZG	GM2CUV	GW2DDX	HZ1HZ	OZ5U
PAØXE	VE8OM	G2HUH	G3IDG	2.B2L.		

Section "B" contestants are required to send in reports of all calls heard TO or FROM any of the above Group Stations during the period of the contest, according to the rules of the Contest, printed in last month's "Q R P".

THIS IS T H E CONTEST OF OUR YEAR. IT IS THE CONTEST WHICH ALL OUR KEEN Tx MEMBERS HAVE BEEN WAITING FOR. OUR SWL MEMBERS HAVE ALREADY PROVED WHAT THEY CAN DO IN THE ISWL INTER-GROUP CUP AND THE LEAGUE WILL BE WATCHING THIS, OUR OWN BIGGEST "DO". DON'T SIT BACK AND LET THE OTHER CHAP DO ALL THE WORK -- HAVE A GO AT THIS YOURSELF, OM. I WANT AT LEAST 200 ENTRIES, SO THAT MUST INCLUDE YOU. DON'T FORGET THE DATE:- SEPT 23rd to SEPT 29th.

::

RECEIVING STATION G-3672.

Peter White, ISWL/G3672, is one of our oldest SWL members -- oldest, that is, in length of membership -- and certainly one of our keenest, though his interests run more to constructional and design research than to contests and Dx log recording, which explains why his name may not be so familiar to many of our members.

Peter is ISWL County Rep for Northants and he is one of those lucky individuals who, when they refer to their "shack", have no cause to blush at any undue exageration. He has, indeed, a most delightful, roomy wooden shack, well removed from household QRM, with roses rambling in wild profusion round the eaves, and feeders stretching away to a lofty 40 metre half-wave dipole and to a radar reflector antenna which is matched to 40 and 20.

Inside the shack a large amount of equipment is stowed away so neatly that relatively little space is taken up. A series of Rx units are rack mounted and so wired that they may be switched in or out of use in any required sequence, ranging from a O-V-O unit to a combined QRO total of nine valves in line.

The bottom shelf of the rack houses a power pack giving 400v at 150 mA and also a variable voltage of 60/200v at 50 mA. On the next shelf is a 2 x SP41 preselector which, by switching, also can take the form of a self contained 1-V-O or, alternatively, the first two stages of a 1-V-1. The third shelf holds a 4 valve SH chassis (6K8, 6SH7, 6SH7, 6H6) one IF stage of which, again by a single switch, can be thrown out for operation as a 3 valve QRP SH rig. Over this is a 1-V-1 consisting of a 7193, 6H6, 6SH7 line up. Above again is an amplifier using 6SH7, 6C5, 6V6, from which the 6C5 can be switched alone to run behind the two SP41s to form the composite 1-V-1 mentioned earlier. The top of the rack carries an 8" speaker which, when the switches are over to the maximum QRO

position, can be fed by the two stage preselector, the SH with two IFs and the full audio amplifier, the 400v power pack supplying a loaded voltage of 270 to this line-up.

To one side of the main rack is a secondary rack housing the very complete switch control panel and the "shack library" which is equally varied and comprehensive.

Peter hasn't mentioned it but I fancy that plans are in the "pending" file for another rack to house a QRP (switchable-to-QRO) Tx. In any case this shack certainly proves that a lot of radio gear can, with a little care and forethought, be stowed away neatly in a surprisingly small amount of space.

::

IN REPLY TO W.F.POTHECARY.

John H.F.Wilshaw of Bromley has sent in a number of comments on the subject of the O-V-1 which we presented last month (page 23/2). Now, notwithstanding the fact that the rig in question has been tried out and found extremely efficient, it's designer admits that it is "purely experimental". Therefore these comments of John's are likely to be of considerable value and I am listing them as received from him. He says:-

1: RF is developed across R2 in parallel with C3 and the regen coil and C5-R4, and is applied direct to the grid of V2.

2: HFC in circuit of V2 anode accentuates effect of (1) above and applies almost pure RF to phones. Little or no AF would be developed across the HFC which effectively shorts the phones for AF.

3: With C4 connected as it is the bulk of the AF (RF) available from V1 would be developed across the pot R3 to earth across (1) part R3-C4 and (2) part R3 via HT battery.

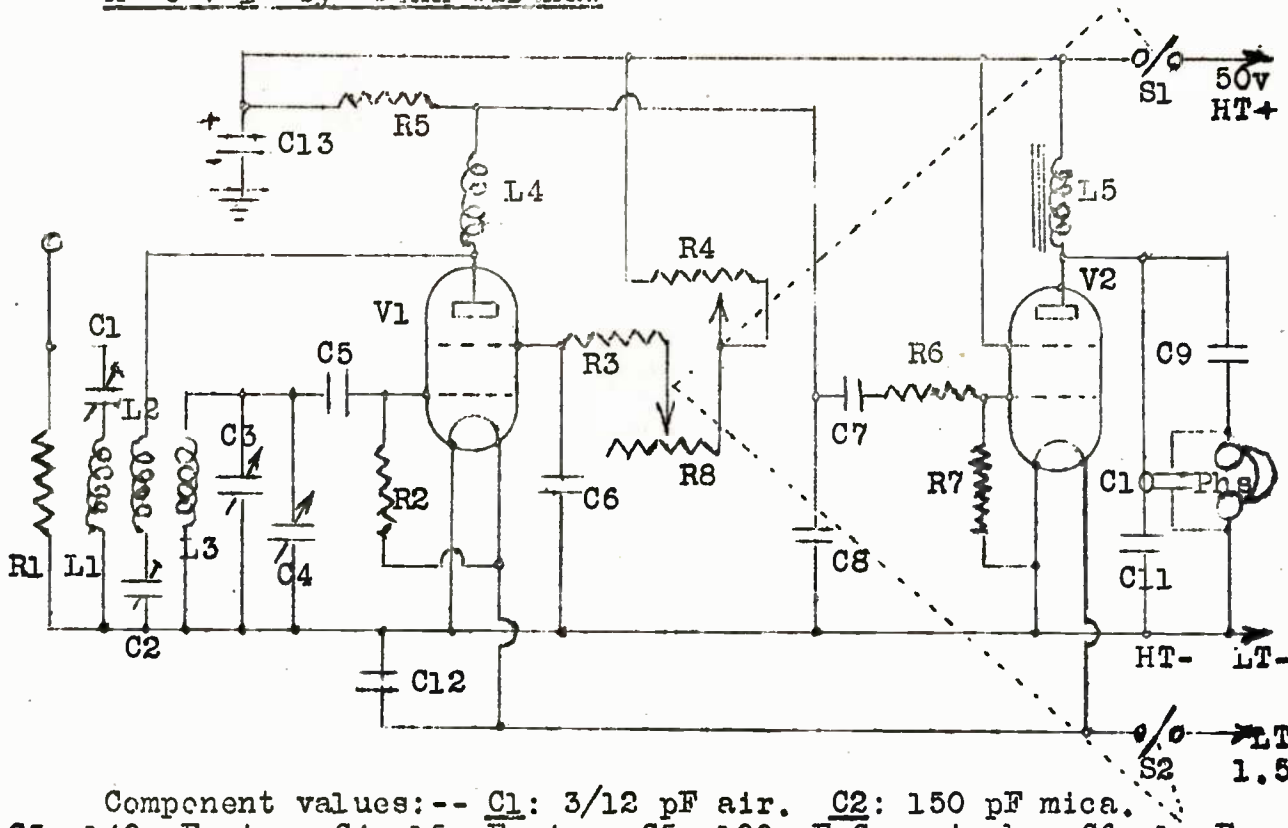
4: Aerial/Grid/Reaction circuit: I have tested the Eddystone 706 range coils for HF ranges and have found the following faults:

(a): The aerial coupling is too great to allow good selectivity on the amateur and BC bands unless a very small capacitor (well under 1 pF) is placed in series with the aerial coil. The signal to noise ratio in this condition need not be described! In the case of W.F.P's O-V-1 this fault is corrected by inserting a rejector circuit in series with the aerial coil. This offers a high impedance to the wanted signal and a large proportion of the signal voltage appears across the parallel combination and only part of the signal is developed across the 706 aerial coil into which is reflected the impedance of the grid circuit. On the lower frequencies where selectivity is not required to the same extent the effect of the overcoupling is not so marked but will still be a nuisance. The advantage of the parallel circuit in series with the aerial coil over the usual small series condenser appears to be that it serves as a form of bandspread.

(b): The reaction winding is not close enough coupled. The optimum reaction capacity with given voltages on the detector is often found to resonate the reaction winding (in series) to the signal frequency. This results in instability at the point of reaction -- one of the worst faults in a O-V-1.

Many thanks for these comprehensive notes, John, which will, I hope prove of value to the designers of the original rig in obtaining even better results than those already vouched for. I think there is a lot in what you say, but I would remind everyone that, like the bods behind bigger and better magazines, "opinions expressed by contributors are not necessarily those of the editor". Perhaps others will come in with their views on some of these points, and, in the mean time, John Wilshaw has given us even better value by sending in his own O-V-1 design as a final answer to our old friend W.F.P. In the matter of line-up the two rigs are very similar and it would be interesting to have them side by side for try out, but that, unfortunately, is hardly possible.

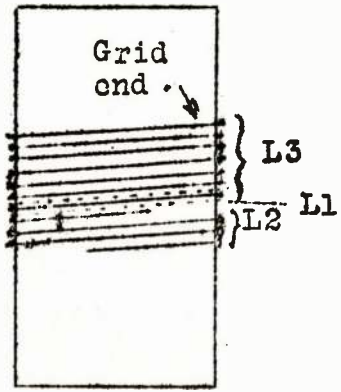
A O-V-1 by John Wilshaw



Component values:-- C1: 3/12 pF air. C2: 150 pF mica. C3: 140 pF air. C4: 15 pF air. C5: 100 pF Ceramicon. C6: 1 uF. C7: 2000 pF mica. C8: 300 pF mica. C9: 0.01 uF. C10: 1000 pF mica. C11: 500 pF mica. C12: 1000 pF mica. C13: 8 uF elect. R1: 2.2 K. R2: 4.7 meg. R3: 12 K. R4: 100 K. R5: 47 K. R6: 2.2 K. R7: 1 meg. R8: 2 meg, ganged S1 & S2. V1: 1N5GT. V2: 1LN5.

This Rx was designed specifically for the 20 metre band and to use it on any other band necessitates modifications to the detector circuit. Also it was designed for use in a "quiet" location and, if it is to be used in a "noisy" district the additional AF stage shown in Fig 2 is advisable. In it's two valve line-up the DC input to both valves, anodes and screens, at 50 volts HT is 0.6 mA which gives a QRP rating of 0.03 watts. The HT should never exceed 55 v for best results.

Tuning condensors C3 and C4 should both have efficient slow motion drives, while the value of C2 may be best found by experiment, trying in turn such values as 50, 100 and 200 pF. The detector stage will operate for several seconds on the charge held in C6 so that, if the reaction setting is suddenly reduced, the reaction takes an appreciable time to follow. It may be found better to use .1 uF here. L4 is an RF choke of 1.5 mH, and L5 is an AF choke rated at 40 H. Potentiometer R8 has a double-pole-single-throw switch (S1/S2) ganged to it, and the phones should be a double headset of 2000 ohms per phone.



The tuning coils, L1, L2, L3, are wound on Eddystone 1002 type formers, these being six pin, 1½" diameter, 8 ribbed and threaded 16 TPI. The reaction (L2) and the grid (L3) coils are wound with 22 swg enamelled wire, and the aerial coil (L1) is of 34 swg enamelled with a single silk layer in addition. As shown in the sketch on the left, starting at the bottom of the former, the regen coil has 3⅓ turns. From the end of this winding a distance of ⅜ of a turn (still keeping in the same thread) is left and then the grid winding is commenced and continues for 6⅞ turns.

The aerial coil consists of two turns, interwound at the E end of the grid winding as shown in dotted lines in the sketch.

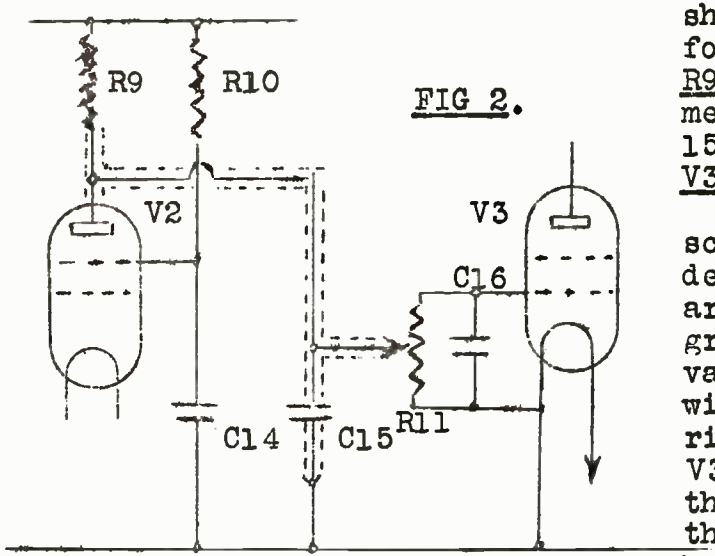


FIG 2.

The additional audio unit shown in Fig 2, consists of the following extra components:- R9: .5 meg. R10: 2 meg. R3: 1 meg. C14: 8 uF elect. C15: 1500 pF mica. C16: 50 pF mica. V3: 1LN5.

The whole of the anode and screen circuits of the original design are removed from V2 and are replaced by R9, R10 and the grid circuit of the additional valve, the whole of which, it will be noticed is well screened right up to R11. The output from V3 is identical in every way to the original output from V2 so that all the components which have been removed from that circuit can now be inserted in the same sequence in the new audio stage. The HT remains, as before, at 50 - 55 volts.

::

S U B S C R I P T I O N S.

A number of readers have failed to renew their subs within a month of receiving renewal reminders. With the cost of paper at it's present exhorbitant level it is becoming increasingly difficult to prevent a regular loss on "Q R P" in normal circumstances and it is quite impossible to continue sending out copies gratis. It

would therefore be greatly appreciated if everyone concerned would make a point of renewing their subs promptly and if those who do not wish to renew would drop me a postcard to that effect. As back numbers of the mag are always at a premium I have made a regular practice of continuing to send the mag for at least two months after any sub falls due for renewal so that the reader concerned shall not suffer through any accidental oversight, but, with the best will in the world, I am afraid this will have to be curtailed. So ---

DO PLEASE RENEW YOUR SUBSCRIPTIONS PROMPTLY, OMs.

(If you put away two pennies every week you will have more than your full sub at the end of the year!)

::

Rx A C T I V I T Y.

D.G.GORDON (Bournemouth) has just finished making up the crystal set outlined in the July issue. He says: "I must say it is most fascinating to find such stations as Lisbon and Moscow coming in Q4 and Q5 on such a flimsy looking job. Selectivity is poor at present but the more elaborate tuning arrangements may improve this. I'm going to experiment with bias voltage to buck up the volume. If you can find enough support to run a Xtal-set Contest you can count me in!"

PETER HUNTSMAN (Hexham) says that he has "just hit on the right time for Dx"--his log is not to hand yet, but we are certainly looking forward to seeing it after that remark! Also Peter seems to have found a system for 160 -- he has half a dozen keen tpp band men within as many miles around him and he finds that by "sitting on them", he usually manages to "get the other fellow coming back". Peter says he has built a table into the wall of his room and he now has all the aerials, earths and power packs built in. He is "swatting for the next RAE too". Best of luck with that, OM.

RONNIE HUNTSMAN (Hexham) is really getting down to business now and has migrated to the CW end of 20 using his brother's O-V-1 and 1224A pending completiom of his own rig. This Rx will, if Ronnie has his way against Pete's staunch backing for a O-V-1, take the form of a QRP SH. He has his eye on the job described by P.Lumb in Radio Constructor for Jan 1949. Why not try our own "Q R P" battery SH, Ronnie? It was described in the October 1950 issue and was designed by Bob Brooker for whom it won our Carter Shield. It really is the job, and I am sure that Bob will be only too pleased to send along any extra details you may want.

H.G.WELLS (Waltham Cross) has completed a new 1-V-2 which we shall be describing shortly. He has collected four new countries , Liechtenstien, Nigeria, Aden and Belgian Congo, this month but is still short of that extra zone. A new half wave dipole has also been finished, using 16 swg for the elements with 75 ohm twin feeders.

T.R.TIFFIN (Newcastle), we are sorry to say, will be QRT for a long while as he is going abroad. All the very best, OM, and do remember to contact us on your return — we shall still be around!

RON TURNER (Brierly Hill) has passed the PMG's Morse Test, and now waiting anxiously for the RAE next May. He has also been getting some very useful experience with the key as second op to a local amateur and has already got over his initial "key shyness". Like Peter Huntsman, he has 8 Top Band habitues within a 2 mile radius and finds it a bit trying when they are all "on" together.

W.F.POTHECARY (Kettering) has built his three receivers (O-V-1, 18 and 21 set) into a rack with seperate switches to each from the power packs in the bottom rack. Future plans include an RF stage for the O-V-1 and a new antenna.

E.W.GARDINER (Diss) is another who has been seeking the elusive extra zone or two, though, like Harry Wells, he has found the new

countries, including HB1, VS9, LD1, PJ5 and ZD4.

A.D.H.LOONEY (Liverpool) has had fine results with a new O-V-O (3Q5) using three GB batteries as HT (27v plate & 18v on SG) but he hasn't managed to find the 14 Mc/s amateur band with it yet. The 1-V-1 which he took on holiday with him had an attack of obstinacy, refusing to produce anything but 41 metres despite the use of a 20/40 and a 160 metre coil. Arthur suspects that the aluminium caravan had a shading effect on the 100 ft antenna, but my private bet is that an antenna matching unit would have cleared the bugs.

::

Tx A C T I V I T Y.

G5QI (Henley) has made a vallient effort to reduce 2CNC's Trantest lead, but, as he says, "Monty has set us a very hard task". During the month Bill contacted G3CED and 2AJU, both on 3.5 Mc/s. George (3CED) was having trouble with chirps but, apart from that, was putting out a very fb signal for his 1 watt. Bill is hoping to be in Broadstairs around the end of the month and to have an hour or so with George.

GC2CNC (Jersey) has also worked G2AJU during August, as well as G3GZA/P on 3.5. He has had quite fair results with a 1T4 VFO, but his plans for taking it /P in Sark have had to be cancelled due to business commitments. Monty is hoping to over in G again in the middle of December when he will be taking a course at Nottingham University. (Don't you dare go back without looking us up here, OM) He says the highlight of the month was "a station signing XU2Z, QTH given as HOOSEZ -- how do they think of them!"

G3CHE (Huddersfield) has moved his QTH which explains his recent silence. Another junior op has also arrived reday to take over as soon as Hugh completes the alterations and decorating!

He (that is Hugh, not the new junior!) has managed to make a few satisfactory mods to the Tx and has also built a microphone amplifier and has acquired a Class D Wavemeter. A phone monitor has come along well too, and the cellar of the new QTH has been laid out as a workshop, so Hugh really has been busy.

ZB2L (Gibraltar). It is with the deepest regret that I hear Den Auton has had to pack up his recently acquired station on Gib. He and his gear have been shipped home under doctor's orders as he has a touch of TB, and is faced with the grim prospect of an indefinite period in hospital. More unfortunate still, all his gear came over ahead of him in a Naval transport and I gather Den is expecting to find most of it U/S when he does get round to looking it up again. I know that he would appreciate a line from any of you who feel like easing the monotony of his days with a letter and I will publish his G address as soon as I hear it. Moreover, it has been suggested by George, G3CED, that we might replace any gear of Den's which has suffered at the hands of the Navy and, knowing the spirit of our Group, I am sure that you would all like to have a finger in getting Den back on the air, so, if I list any items that are wanted, OMs, will you rake out those junk draws and see if we can put things right between us?

G3EDW (last heard of at Weymouth). What's that song about mad dogs and Englishmen -- no, they went out in the midday sun, so that's all wrong. EDW and G5VQ have been out in the midsummer rain on a cycling tour. They started through Kent via the Tilbury-Gravesend ferry and on to Burgess Hill where they stayed with 6CT. Then on to Petersfield and via Ringwood to Weymouth. Their last despairing message to QRP HQ was picked up in a bottle in the flooded High Street and said that, despite thunder storms and sleet they were detirmined to cross the Dartmoor desert and penetrate into the wilds of Cornwall. Ah well! It was nice knowing EDW and I believe VQ was a very decent fellow too.

::

::::: Q R P TRANTEST :::::::::::::::::::::::::::::::::

	AVERAGE BEST	QSO with	MILES -M-	Mc/s	WATTS -W-	-X-	POINTS -P-	MONTH'S TOTAL
1: GC2CNC	16097	OH3NY	1350	3.5	‡	3	16200	
Jersey,	---	SM7BDK	770	3.5	‡	3	9240	31560
C.I.	31560	HB9KO	510	3.5	‡	3	6120	
2: G5QI	12137	DL1FN	506	3.5	‡	3	8616	
Henley,	---	DL1AU	600	3.5	‡	3	7200	21888
Oxon.	21888	OK1AJB	668	3.5	‡	3	8616	
3: G2AJU.	4609	average.		No entry this month				
4: PAØXE	3688	average.		No entry this month				
5: G3HCW	3254	average.		No entry this month				
6: G3EDW	1690							
Rayleigh,	---	HB9EL	475	3.5	2	3	713	713
Essex.	4155							
7: G5GG	1348	average.		No entry this month				
8: G3HBI	837	average.		No entry this month				
9: G3GZA	783	average.		No entry this month				
10: G3CED	669	average.		No entry this month				
11: G3EKP	377	average.		No entry this month				

Well, Monty has done it again - this is the fourth time that he has broken the Trantest Best Score record. Poor old QI, who had so much hoped to reduce the lead a little this month, will find the gap wider than ever! But, even more encouraging than Monty's record, I feel, is the sight of EDW's detirmination to keep in the running even though circumstances prevented him being on the air more than one evening during the month and gaining thereby only one scoring contact. That's the spirit!

Q R P C - Z P A N E L

1951 SERIES	COUNTRIES 3.5	7	14	28	TOTAL	ZONES TOTAL
P. Huntsman	20	43	164	17	166	37
Mike Wassell	--	39	142	87	159	39
D.G.Gordon	19	15	82	35	92	31
H.G.Wells	14	16	89	9	93	29
E.W.Gardiner	9	10	73	29	91	26
A.E.Stonestreet	10	17	48	28	65	18
D. White	4	4	46	5	51	19
R. Huntsman	8	8	39	--	44	18
R. Murray	7	10	30	--	41	15
R. Nixon	--	--	34	--	34	14

Hullo there, Ronnie - nice to see you here, OM. And very nice to note so much increased interest in the Panel.

:::

T W O - W A T T P A N E L

No change has taken place in the panel this month except for one new country which G3EDW found on 3.5 Mc/s, so, as we are very tight for space this month I have not reprinted the full panel.

:::

PLEASE NOTE:- G3FAU, Vic Cundall, 93 Chandos Rd, Stratford, London, E 15, is particularly anxious to receive reports on his CW transmissions, 1823.5 Kc/s, Monday and Tuesday evenings during tests of a new QRP Tx - CO, PA (2 x KT2), 1.1 watts. Please help, OMs. Tnx.

Dx NOTES AND NEWS, by Bob Brocker.

In the words of Peter Huntsman, the month of August provided plenty of Dx on the amateur bands if one cared to search for it. Peter's main listening periods have been between 1600 hrs and 2000 hrs and nearly all on the CW end of 20 since he finds CW more satisfying then phone. The Dx heard at Hexham-on-Tyne includes the following prefixes - PK4, AP, VS2, ZD6, KS6, HE, VS4, EQ, ZS7, XZ, FI8, ZD2, VQ3, ZC3, PX, UM8, VK1, which is as nice a collection as one could wish for. All this on an O-V-1.

In answer to your query, Peter, about Zones 18 and 19, these are Russian zones. 18 includes nearly all UA9 and 19 nearly all UAØ, though they do overlap - a good one for Zone 19, for instance is UA9KCC.

Harry Wells managed a little activity over his holiday as a result of some bad weather. On Aug 11th HB7HY/HE was heard from the Alps of Liechtenstien, and ZD2CD was logged at 1810 the same day. The 12th brought OQ5DZ at 1915 and KP4AZ at 2125, DU1AL at 1439 and ZC4DT at 1526 were a couple of good ones on the 26 th, while the 28 th produced VQ4RF roaring in as usual at 1858, and VS9MA at 1907. Finally, on the 29th, CX2CO at 2010, VP3LF at 2007, VP5AK at 2044 and OQ5BG at 2108 (having trouble working W2ZKG) were heard comfortably at S6.

That's the lot this month, chaps. 73 & gud Dx, Bob.

::

HELD OVER:- I am sorry, OMs, but a great deal of interesting gen (including a late arriving Trantest entry from G3GZA) has had to be held over to next month. I just haven't got room and I dare not increase the consumption of paper at the present time. I'm doing my best to find new sources of supply, but it is very difficult indeed and we MUST conserve what small stock we have at present.