

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

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EDITORIAL.

Many suggestions have come to hand this month, mainly in connection with contests and with additional subjects for inclusion in the mag--so many, infact, that, having given each idea due consideration, I find that it is time to start on this issue and that a good number of the letters will not get the personal answer which I do try to give each one. I want to impress upon you again, therefore, that every letter, short or long, which reaches me is greatly appreciated and that the contents does receive individual attention in every case. So, if your letter has not been answered, please accept this as a personal word of thanks and do not run away with the idea that we are not interested at this end.

As soon as I have completed this issue it is my intention to draw up a report on all the suggestions received during the month and submit this to the Society Council for their consideration. Their decisions will be published in these pages as soon as possible, but this may not be until the June issue.

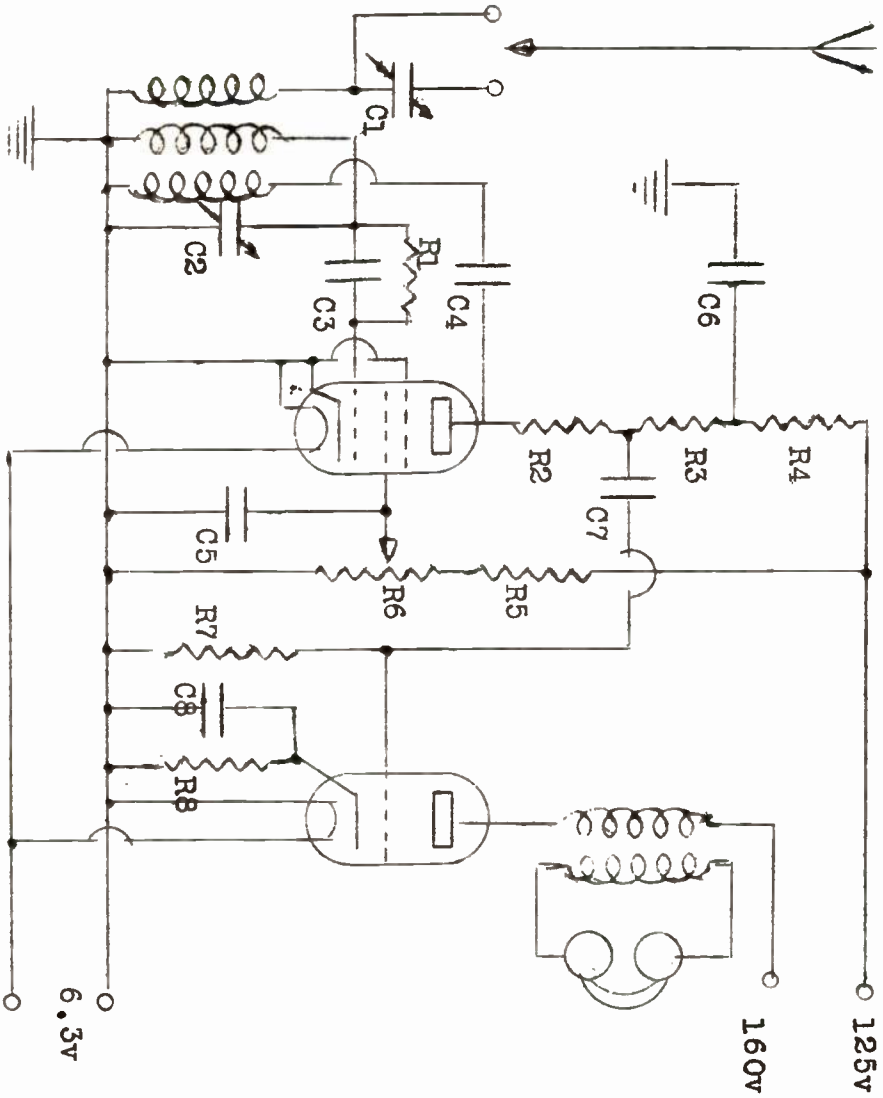
Meantime, the proposed VHF Section has received even more support than I anticipated and I have written to GC2CNC, "Monty" Banks, who is one of our most regular correspondents and a very enthusiastic VHF exponent, to ask if he will accept the post of VHF Manager.

Elsewhere in this issue you will find proposed rules for our Inter-Societies Contest. Please let me have your opinions on these so that we can finalise them in next month's issue.

.....: A MAINS - BATTERY O-V-1 Rx
By R. L. Kenyon.

The following points were kept in mind when designing and constructing this set - (a) simplicity, (b) portability, (c) QRP power requirements and (d) the possibility of using it on the mains or by battery. It will be seen from the circuit diagram that there is nothing very unusual in the circuit. There is a fixed positive feedback ensured by C4 and the reaction is varied by the potentiometer R6. The value of this (.5 meg) seems rather high but it does give smooth reaction up to the oscillation point on all wave bands. There is no suspicion of ploppiness or of backlash, but the detector slides into oscillation with a comforting hiss. For the sake of compactness bandspread has been omitted and may be added. The value of C1 has been omitted as it pays to experiment with this on the aerial which is in use. On the 160 and 80 metre bands no aerial condenser is necessary. The set has been worked with an input of 200 v from a mains powerpack and with 76 v from a battery. Whilst some loss of volume and sensitivity is to be expected when the lower voltage is used the set still brings in dozens of BC stations. The heaters have been supplied by battery and from a transformer and both work equally well. Thus it is possible to use this set for field days and yet be free of fears on the score of battery consumption at home in the shack. It should be noted that one side of the heaters are earthed as a very pronounced hum occurs otherwise. R2 is used instead of a short wave choke as it is much smaller in size. The decoupling capacitor, C6, seems unduly large but it does remove any motor-boating when the mains power pack is used.

CONSTRUCTION: The set is built on a plywood chassis, 6" square and 3" deep. The panel is plywood backed with tin plate. It measures 8" x 7". A 100/1 Utility dial is used for the tuning condenser. The layout of the chassis and panel are given in the



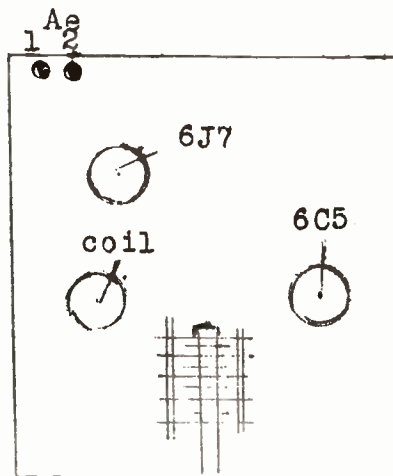
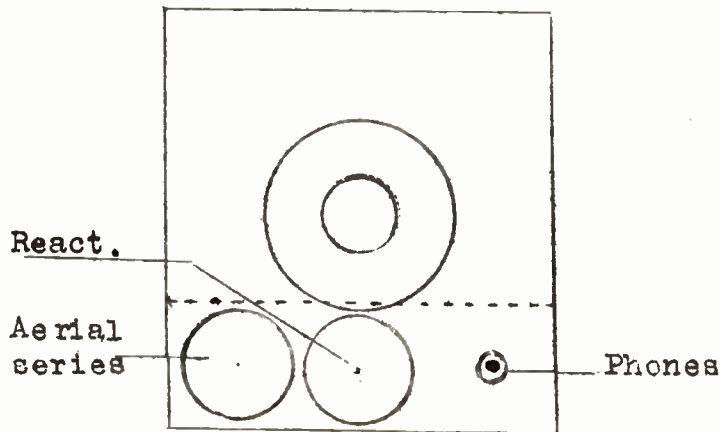
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attached sketches

RESULTS: My main interests are on the BC bands and, during the time this set has been in operation the following stations have been logged at QSA5R9 plus -- Brazzaville, Leopoldville, Ankara, Damascas, India VUD, CKCS, Berne and numerous American stations

CONSUMPTION: The watts consumed are .87 - well within the QRP requirements and I include some voltage checks which may be of help. The meter used has 2000 ohms per volt and with this the HT to the output valve was shown as 160v, HT to detector 125v, anode volts to output valve 140v, anode volts to detector valve 65v, drop across bias resistor R3 5 volts, output valve anode current 5 mA, detector anode current .5 mA.

COMPONENT VALUES: C1, see text. C2, 140 pF. C3, C4, 100 pF. C5, C7, 0.1 uF. C6, 8 uF. C8, 25 uF. R1, 3.3 meg. R2, 10 K. R3, 47 K. R4, 20 K. R5, 100 K. R6, R7, 500 K. R8, 100 ohms. Valves are 6J7 and 6J5, and coils from the Eddystone range are used throughout.



::::: PROPOSED RULES FOR AN INTER-SOCIETY QRP CONTEST :::::::::::::::

The rules laid out below have been drawn up to include as many as possible of the suggestions put forward to date. They are not intended to be the final word and can be amended should any further suggestions be forthcoming following a perusal of this draft layout. It is particularly requested, therefore, that anyone interested (especially the secretaries or contest organisers of any clubs or Societies having an element of QRP interest) should let me have their comments as soon as possible. If the proposed date for commencement of the contest is to be held it is essential to complete the rules next month.

(1): This contest is open to any Amateur Radio Society or Club within the British Isles.

(2): Any member of such a club may take part and the best three reports should be submitted each month by the Secretary or Contest Organiser of the club. It is thus not necessary that the same individuals should be operative throughout the entire contest providing that all reports sent in are those of fully recognised members of that society or club.

(3): As an alternative to Rule 1, any three or more members of the QRP Research Society who are resident within any one County of the British Isles may constitute themselves as a "County Section" of the QRP R.S., and as such will be eligible for this contest.

(4): The contest is, basically, a combination of the existing "200" and "100" contests and relates to:

(a) counties of the British Isles (a schedule of counties, price 2d plus postage, may be obtained from the Hon Sec of the QRP R.S.) worked on 1.8, 3.5, and 7 Mc/s, and

(b) countries (other than G, GC, GD, GI, GM and GW) worked

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on 3.5, 7, 14, 28 Mc/s.

(5): At no time during any contest QSO may the competitor's Tx exceed an input of 2 watts to the final stage and no preceding stage may take more.

(6): One point will be allowed for each county or country worked PER TEAM (ie, the scores submitted shall be the aggregate for the team and not the sum of the individual scores). These returns should be submitted to the Hon Sec, QRP R.S. during the first week of each month so that the TEAM POSITION TABLE may be drawn up to date for publication in the next issue of "Q R P".

(7): The contest shall commence on June 1st 1952 and a trophy will be awarded to the leading team at the end of each 12 months, to be held for one year or won outright after three consecutive wins. A certificate will be presented to each member of the leading team, or, where more than three members of a club have, at various times, figured in their club's returns, certificates will go to the three members having submitted the highest scores.

(8): Any case of a tie will be decided in favour of the team using the lowest average power consumption.

(9): Participation in any team entering this contest shall not in any way prejudice an individual's entry in any other contest, ie, an individual may operate as a member of his local club team for the purpose of this contest and he may also enter the same returns in the "200" or "100" contests as a member of the QRP R.S. No individual, however, may assist in the returns of more than one club within this contest.

::::: SOCIETY NEWS AND ACTIVITY :::::::::::::::::::::::::::::::

One of the suggestions received this month put forward the view that the separate Tx and Rx Activity columns should be combined. Since all the reports contained therein apply to Society mem-

bers and that each are obviously interested in the other's views, it has been decided to adopt this combined column under the new heading.

DEN AUTON, ex-ZB2L, has moved to Ward "B", Isolation Hospital, Swindon, which is his home town. He has not got his G call yet but is expecting it any time now and is getting set to make the best possible use of the 15 ft indoor aerial.

CLIFF BLATHERWICK, G3VU, is getting busy with a newly purchased TR9D (R1120 plus T1119) which he acquired for a fiver complete with batteries. The batteries, however, turned out to be vintage 1945! A small power pack is now under construction and the coils are also undergoing mods for ham bands.

It was very nice to hear from BOB MURRAY again after a very long silence. He has been, and still is, tied right up work which cannot be shelved for a hobby. The old O-V-1 (KF35-KL35) is feeling it's age now and a new specimen (2 x EF50) is not behaving too well, so there are no reports for the present (but we're just as pleased to hear from you, Bob).

W.N. BASON, BRS 18353, creates a little bit of history this month by being our first Isle of Man member. He runs an 18 Rx on 40, a 68R on 80 and a O-V-1 with separate Rf stage for 160 to 10 metres. He is building a wavemeter and a 2 watt CO/PA with which he and his brother, GD3GRN, hope to operate shortly.

DAVID WHITE of Kingston has sent in a most interesting article on noise limiters which we hope to publish next month. He has spent a considerable amount of time searching out information on this subject and giving each theory a practical try out.

G.H.M. YUJE, G3IED, is the latest of our SWL members to gain a call (sincere congratulations, OM) and he is hoping to be on the air shortly. The initial station is being designed for portable use, the Tx being KT2 CO/PA and the Rx two 1C5s.

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IAN GLEN has now arrived at Locking for his RAF radio course and says it is a very fine camp with good billets, good food, a wonderful NAAFI club AND an active radio club using the call G3IRS. The head station of the RAF Amateur Radio Society is also at this camp (call G8FC). We are hoping to see Ian here during his next leave in London.

BOB BROOKER, G3HBI, has had mains available since Jan and has given way to the temptation of a bit of QRO working. He says that he "found the results no better than QRP"! Experiments with various modulation systems have occupied most of his time and we hope to be publishing the results of these in due course.

VIC CUNDALL, G3FAU, is still rebuilding and remarks that his "200" entries are suffering in consequence. (Let's hope the new rig will help you to pick up later on, Vic.)

BRYAN READ of Liverpool had an interesting month on 20. An outstanding night was March 20th when, between 1830 and 2300 he heard CE, CO, EA9, HI, HP, KG4, KP4, OX, PZ, TF, VE6OD (Baffin Is), VP4, 5, 6, 7 and 9.

WALTER CAUGHY, GI2DZG, should be in his new home early this month, so we may hope to be hearing something of his redesigned gear shortly. (Good luck in the new QTH, Walter).

FRED STONESTREET sadly admits that "Old Faithful", the O-V-0 which appeared in the very first issue of "Q R P", has at last gone dead. The standby Rx is a ten year old O-V-1 which has proved it's worth by bringing in AR8, MP4, OX3, TF5, VE1, 2, 3, 4; VS1, 7, VQ3, 4, ZS4, 6, and a new call, AJ2. Fred would like to know if anyone has any gen on this one.

PETER HUNTSMAN has found condx pretty good during the latter part of the month and has collected a number of new countries. Cards have come to hand from VQ4RF, GW3ZV, GC2CNC, G3NT and a very fine one from HZ1TA (Prince Talel of Saudi Arabia).

F. R. BAILEY, G3HJL, lost two antennas during the gale this month and hopes that others were more lucky. He also points out the need to watch the driver stage power input during our contest QSOs, as he had a nice QSO with GC2CNC lined up for the "200" only to realise that the stage preceeding the PA was taking more than the allowed 2 watts.

RONNIE HUNTSMAN is hoping to get a little more time to devote to building up his C-Z Panel score in the near future. Meantime he is more than ever enthusiastic about his QRP SH4 which has finally converted brother Peter from his staunch adherence to TRF law.

HARRY WELLS expresses his pleasure at a most interesting visit which he had from Vic Cundall recently. He would be glad to receive reports from anyone who constructed his 1-V-2 described in the Oct 1951 issue. Lately he has been concentrating on collecting Top Band counties and countries and suggests we run a separate panel for 160.

F. F. HAWKSLEY, ex-G3GBP, is still waiting for his ZB1 call to come through. He has a Tx rigged up ready and a BC348 Rx, so it should not be long before we have some news of activity in Malta. The Tx, incidentally, should be an interesting piece of work as, apparently, it consists mainly of Maltese junk gathered from every kind of source, the only genuine radio equipment being the tuning condensers which had to be imported. Details of the VFO are already to hand and will be found later in this issue.

E. W. GARDINER has had quite a good month having heard three new countries in 9S4AD, OY2Z and M1B. Others heard were SVØ, EA6, VQ5, OX3, EL9, CO2, TI, VP5, VP9, KP4, HI6, VQ2 and VE8.

"MONTY" BANKS, GC2CNC, had to hang onto Jersey with one hand as he wrote his monthly letter to me this time. His VHF aerial was smashed, his long wire blown down and part of the roof of his bungalow blown off just before he wrote. Apart from these "incidental" of living on the coast, Monty has found condx bad this month

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with 14, 28 and 145 all dead. He is finding the "200" contest more difficult, too, and appears to be reaching saturation point.

..... SOCIETY BADGES

I have received samples of our new badge and I can truly say that the results have surpassed my expectations. The design is, of course, the same as that carried on our front covers, the size being $\frac{1}{2}$ " x $\frac{5}{8}$ " across the corners, the finish gilt and an outstanding green enamel. The effect is a small and most distinctive badge which will, I am sure, be worn with pride by all our members. Deliveries will be ready during the next couple of weeks so orders can be accepted at once and badges will be despatched as soon as available.

THE PRICE WILL BE 2/6 post free

..... THE NINETY-EIGHTH COUNTY

I have been taken to task by our very active Bristol contingent over my failure to list Bristol as a county in the "County Schedule" first published in our Jan 1952 issue. Proof of their claim for the status of the "City and County" of Bristol is provided by a quotation from the original charter granted by Edward 111 in AD 1373. More recently, in Nov 1951 (Bulletin, Vol 27, No 5, page 206), the RSGB recognised Bristol as a county for the purpose of representation

In future reprints of the County Schedule list we shall add Bristol as County No 98. Will all members already in possession of a list please make this amendment forthwith?

Contestants in the QRP R.S. "200" contest should, therefore, note that they now have an extra county to collect. It should be a reasonably easy one.

..... Q R P C - Z P A N E L

There has been a most gratifying increase in activity on the Panel this month. Some of our contemporary journals are bemoaning lack of support for their SWL contests--it would give them joy to see the solid struggle that is taking shape in this one!

| | COUNTRIES | | | | C Total | ZONES | Grand TOTAL |
|------------------|-----------|----|-----|----|------------|-------|----------------|
| | 3.5 | 7 | 14 | 28 | | | |
| 1: P.Huntsman | 12 | 37 | 111 | - | 114 | 33 | 147 |
| 2: B.J.Read | 11 | 8 | 86 | 6 | 88 | 29 | 117 |
| 3: D.G.Gordon | 20 | 16 | 70 | 12 | 80 | 28 | 108 |
| 4: E.W.Gardiner | 23 | 14 | 58 | 8 | 71 | 21 | 92 |
| 5: A.Stonestreet | 16 | 19 | 51 | - | 71 | 19 | 90 |
| 6: R.Huntsman | 1 | 27 | 46 | - | 59 | 19 | 78 |
| 7: R.L.Kenyon | 2 | - | 53 | - | 53 | 21 | 74 |
| 8: H.G.Wells | - | 14 | 35 | 9 | 44 | 17 | 61 |

Everyone has made a substantial increase in scores this time and several places have changed hands in the process, the most noticeable being D.G.Gordon who has jumped from 7th to 3rd place. In the case of H.G.Wells (who has been concentrating, as stated elsewhere, on Top Band Counties) there was a regrettable misprint last month which gave him 29 countries on 28 Mc/s instead of 9

..... TOP BAND PANEL

This panel is being introduced in response to a number of requests from our SWL members. It is proposed to run it on similar lines to the C-Z Panel, using the Counties Schedule, published in

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our Jan issue (extra copies specially produced on single foolscap sheets are available price 2d plus sae) as a basis. The "all time" column is included as a matter of interest as is also the "stations logged" column. The critical entries are the Counties and Countries heard during the year which will be added to form a grand total as in the C-Z Panel and it is hoped that, by the end of the year, we may be able to offer a trophy for the winner. Failing this a certificate will certainly be awarded. Entries for this year may be back dated from Jan 1st -- so get out your log books, OMs, and let us have a solid entry next month. It should be noted in connection with the Countries column that the prefixes G,GC,GD,GI,GM and GW do not count as these are covered in the Counties column.

| | -----ALL TIME----- | | -----1952----- | | Grand |
|-----------|--------------------|-----------|----------------|-----------|----------------|
| | Station. | Countries | Counties | Countries | Counties Total |
| H.G.Wells | 194 | 6 | 33 | 5 | 26 31 |

Harry Wells' entry in the Countries columns may require amendment next month as it is not clear at present if they include the G prefixes. His entry is shown above to give a general idea of the lay out of the panel.

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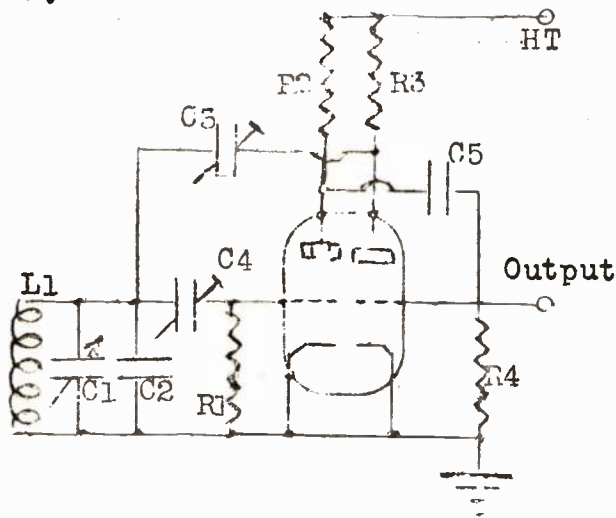
REMEMBER TO ENCLOSE 2/6 FOR YOUR SOCIETY BADGE IN YOUR NEXT LETTER, OM.

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::::: A QRP VFO, by R.F.Hawksley, G3GBP :::::

No claim is made for originality in this layout, but it's app-

lication to QRP is, it is felt, enormous. It is a simple Franklin demanding few "bits" and providing a nice note with good stability. The whole oscillator can be mounted in a metal box with a Jones plug. It should be followed by a buffer stage, otherwise BCI may claimed against it. The range is approx 3.2 to 3.9 Mc/s. By taking out the 200 pF condenser, C2, in the tuned circuit it is possible to get oscillation at 7 Mc/s, but this is tricky. When testing, set the trimmers about half way open to start with. The prototype was keyed in the second cathode, but experiments are being carried out with an improved scheme involving earthing the output grid lead.



For 3.5 Mc/s L1 is about 22 turns of 20 swg close wound on a 1" dia former. C1 is 100 pF variable, C2&C5 200 pF fixed, C3, C4 2/20 pF concentric or other type trimmers, R1, R4 47 K, R2, R3 are HT droppers of 10 K or above. The valve is a 6SN7.

The whole should be completely screened.

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SOCIETY CALL-SIGNS.

The following is the current list of member's calls:

G2AJU, BTO, DHV, HKQ, HL, MI (Pres.)

UK (Hon Mem), ZC. G3AAU (Hon Mem), AFL, AGO, ANB, BII, CED, CHE, EAZ, EEL, EDW, EKP, FRI, EGZ, FAU, GAP, GZA, GYZ, HBI, HON, HCW, HJL, HUH, IDG, NA, VU, G4QW, XC, G5QG, QI, G5AQ, CI (Hon Mem). G2OG. G2CNC, 3FSN. G12DZG. GW3ELM. E1CW, HE1HZ, OZ5U. PA0XE. VE3OM. G3IED.

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..... THE QRP "200" CONTEST

| Returns for MARCH 1952 | 1.8 | | 3.5 | | 7 | | GRAND TOTAL |
|---------------------------|-------|-----|-------|-----|-------|-----|----------------|
| | MARCH | TOT | MARCH | TOT | MARCH | TOT | |
| GC2CNC | 2 | 32 | 1 | 24 | 9 | 15 | 71 |
| G3EDW | - | 30 | - | 10 | - | 5 | 45 |
| G3AGQ | - | 36 | - | 6 | - | - | 42 |
| G5HJL | - | - | 1 | 17 | - | - | 17 |
| G3FAU | 4 | 16 | - | - | - | - | 16 |
| G5HCW | - | 12 | - | - | - | - | 12 |

There has been an allround reduction in results this month. Doubtless condx have played a major part in this, though 2CNC, who can be guaranteed to pull off a contact if there is any possibility at all, gathered in some really Dx numbers including Yorks, Lanark, Durham and even Shetland. It will not be possible, on account of space, to include full lists of counties worked each month, but to date reports are as follows--

GC2CNC, 1.7 Mc/s:- 4, 17, 21, 25, 26, 32, 34, 38, 39, 40, 41, 43, 47, 48, 53, 54,
55, 56, 59, 65, 66, 67, 70, 83, 85, 86, 87, 88, 91, 95, 96, 97
3.5 Mc/s:- 9, 10, 27, 32, 34, 38, 39, 41, 43, 47, 48, 52, 53, 54, 65, 66,
69, 82, 83, 86, 87, 88, 91, 96.
7.0 Mc/s:- 21, 29, 32, 37, 39, 46, 52, 53, 57, 67, 81, 83, 91, 96, 97.
G3EDW, 1.7 Mc/s:- 10, 17, 26, 28, 34, 36, 38, 39, 46, 47, 48, 53, 55, 56, 67, 68
82, 87, 95, 97, 4, 14, 21, 27, 41, 59, 60, 65, 85, 91,
3.5 Mc/s:- 21, 24, 34, 37, 38, 43, 48, 59, 61, 66,
7.0 Mc/s:- 34, 37, 43, 53, 60,
G3AGQ, 1.8 Mc/s:- 4, 5, 11, 14, 17, 21, 26, 27, 28, 32, 34, 36, 38, 39, 41, 43, 47
48, 52, 53, 54, 55, 56, 59, 65, 67, 68, 82, 83, 86, 87, 88, 91,

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..... SOCIETY SPARES SERVICE
(Manager: Mr G.Partridge, G3CED, 17 Ethel Rd, Broadstairs)

A new scheme for the more rapid circularization of Sales and "Wants" news has been devised by our S.S.S. manager:-

(1): Members wishing to participate in the scheme please notify G3CED by post, enclosing their own wants and sales lists if possible. The only conditions are an undertaking to abide by rules.

(2): Rotas of twelve members each will be drawn up, current lists being sent to the first member on each rota. He should post this to the next rota member WITHIN 24HOURS. The rota list will be enclosed and will be changed each month to ensure fairness. All rota lists begin and end with G3CED.

(3): When forwarding please write on back of envelope "If undelivered please return to-----" (name & address of NEXT BUT ONE on rota). Rota members should inform G3CED of dates when they are likely to be away from home or arrange for forwarding to member named on back of envelope.

(4): All items for inclusion in the lists should include postage in the quoted price. Names and addresses of vendors will be appended and application should be made DIRECT, not to G3CED. Send no cash until goods are received (to avoid return of postal orders)

(5): When ordering an item on sales lists cross it out and append date. When you have an item in the "wants" list do not send it before contacting the member requiring it and naming your price.

(6): Add your own sales and wants, together with your name & address in the blank spaces provided.

The lists will be revised each month and should prove a great success IF MEMBERS COMPLY WITH THE RULES and FORWARD THE LISTS WITHIN 24 HOURS.

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