JOURNAL OF THE Q R P RESEARCH SOCIETY

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ISSUE No 62 SIXTH YEAR JANUARY 1955

Q R P SOCIETY

JOURNAL OF THE

PRESIDENT: Mr E. Banks, GC2CNC.
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Deadline for publication in next issue is the 12th of next month

EDITORIAL

A very sincere word of thanks is due this month to both "CQ" and "QST" for the inclusion in their December issues of a note about our Society. The response has been quite unexpected, enquiries having been received from WØSAK, W8FRD, W2GRT, W1YXB, WN8RJK, K6DCF and an SWL in California. It looks as if we may yet form a strong Group in the States and give Bud, WØPRM (our official W rep), something to really "get his teeth into". A live W Group would be a great step forward, enabling us to work up mission for the extension of our Low Power gospel right in the most highly populated centre of "unbelievers". It would give us, too, a most inter esting source for the exchange of ideas and development schemes.

OUR MOST URGENT NEED in this first menth of 1955 is for more "tutors" for the support of our Student Scheme. The Scheme is unique & is doing a fine job in helping many newcomers over the initial mysteries of the radio hobby. We have a waiting list of "students". Any experienced member can make a valuable contribution by offering to help.

SUBSCRIPTION RENEWALS

During the past two months we have found such tremendous demands upon our time here at HQ that we have not been able to ke sp up our usual practice of enclosing renewal reminders where necessary with mags. There will, therefore, be a rather heavy list of enclosures this month, and we would particularly request recipients of these reminders to be as prompt as possible in renewing their subs.

SOCIETY NEWS & ACTIVITY

SAM HALL. G2AOL, has been practically QRT for some time owing to structural changes at his QRA which have necessitated his gear being stored out of the way. He is likely to be active again by now, however, with the added advantage of a small Radio-Only (Danger - Live Ham!) room. (Hope we hear a lot more of you in 1955, Sam -- we've missed you)

MIKE DRANESFIELD, G3JKO, scored the highest number of contacts in the RSGB Low Power Contest in October (91 contacts, 35 code areas) but as he was using QRO (1.8 watts!) he was able only to claim 5 points a time and was eventually placed eleventh.

"MONTY" BANKS, GCZCNC, has lost all his outdoor antennas and is dependant upon his 14 megs half-wave dipole in the loft. He is willing to let Bud, WOPRM (this column last month) have an unlimited quantity of brand new snow (carriage forward) with a couple of QRO gales thrown in! Monty wants to see Peter and Ronnie Huntsman, G3KBQ & KBR, taking part in the 1955 "200" contest.

KEITH RANGER has got his move, predicted last month, and it has turned out to be Trans-Jordan where he will be for some seven months. He has permission to keep his O-V-O in camp but it appears that the CO (not to be confused with crystal oscillator, by the way) tock serious exception to a 33 ft ground plane outside the billet! The camp, at Mafraq. is 2,250 up in the mountains and should be a fb Dx location.

FRED GIBBS certainly has his hands full for 1955. He has been elected Vice-President of the Ravensbourne Amateur Radio Club and he is also RSGB Area Rep for Lewisham and District.

ALLAN HERRIDGE, G3IDG, has a sked with WØPRM every Wed at 1900 GMT on 14020 Kc/s. The line-up at 'IDG now is 10 watts from an EF91 C0 and QV04-7 PA with a T2FD antenna. W2LYO will probably be heard on Top Band later this month from 'IDG when he visits Allan.

HARRY WELLS, G3LZQ, and ANDY, ask me to pass on their greetings to all members and wish the Society as a whole a successful year. The 'LZQ Top Band antenna suffered in the gales before Christmas and has only recently been re-erected. In the Dec Bulletin G3JFF reports (The Month on the Air) that he received Harrys 1.7 watts at 579.

PETER HUNTSMAN, G3KBQ, has a new Tx on 160 with 5 watts -- 6J5 VFO / EF50 BA / EF55 PA. He is using his BC348 Rx but is planning to relay switch the whole station so that the O-V-2 (May issue of "QRP") can be used as the main Rx, the BC348 being retained for accurate oalibration checks and other incidental uses. Peter hopes to run the station at about 6.5 watts total and is going to try for WABC on 160. (Did you notice Montys remarks on page 2, OM?)

JOE STEPHENSON had a surprise this month -- he tuned across 21 megs and found the band wide open. Ws, 1, 2, 3 and 4 were rolling in and some BC stations a little HF. Despite this proof that the 1-V-1 is pretty OK, however, he thinks that he can still further improve it and is proposing a little soldering-iron surgery.

C. E. GAUNT provides us all with a most pronounced object lesson this month. He explains his recent silence by admitting that, since he moved to Folkestone in Sept he has been ill the whole time and has spent the last five weeks of 1954 in hospital. At home again now, he is occupying his convalescence by planning the 1-V-1 he intends to build as soon as his strength is fully regained. That in itself shows a grand spirit. Add to it the fact, Gentlemen, that C.E.G. is 70 years of age!

62/4 - JAN 1955

JACK HARRIS, G2BOF (alias "The Boffin"), has had very little time for radio this past year. He was hoping to finish the 200 for the Counties Certificate but didn't quite make it. He has recently been working in milliwatts, as low as 1 mW to a 3Q5 PA (reported at 559 from G3BHR in Carshalton)

JIM PEARSON is all set for the next RAE and is determined to pass as a token of esteem for his coach (Den Auton). Meantime he has got well away with a very small "emergency" type QRP Tx (single DCC90) to which he plans adding a modulator valve (probably DL92).

First organised 160 metre tests began Dec 5th. Condx were were poor with high noise and warm weather condx. Only two Dx stns were heard, KP4CC and KP4KD, both R-2. New one active on 160 is TI2BX. Heard of a W6 who has been hearing Gs S-6 on 160. His antenna is a 3 element wire beam, wide spaced and fixed on G-land! Unfortunately I do not know his call.

Condx on higher freqs quite improved lately. Several new ones wrkd here are: On 40 CW - ZL3GQ. On 20 CW - VELVR who runs 15 watts to FD 15 ft high; HPlBR Panama City; CR7IZ Tete, Mozambique; KP4ZW Puerto Rico; IlBNU Trieste; KG4AN Guantanamo Bay. On 15 CW - W7JFU/NM off Oregon.

Excerpts from CQ and QST: ZC5VS uses 20 watts to $\frac{1}{2}$ wave...ZD4BN runs 20 watts and has 3 tube blooper...Ray Herbert VS5KU ex-G2KU in Seria, Brunei, active with miniature set-up, Xmtr and Rx each weighing 2 lbs and built on QSL size chassis, tuns 18 watts...HS1C active with QRP...Antonie FG7XB runs 10 watts on 14.077, very active (R5 at this QTH)...W2CUQ uses a 12BA6-50L6 combination at 4.9 watts...CR7IZ has a 6L6 final...Look for VR1RO (G2RO) in the Gilbert & Ellice Group

until Jan 30th, then he will go to Cocos as ZC2RO. He uses a 15 watter.
73 to all & good hunting! Bud. WØPRM.

VHF GROUP NEWS

Reported by

Ted Stonestreet.

GEORGE STOKES should be hearing his first 2 metre sigs soon on his version of the Rx described by Capt Cusdin in our August issue. It was well under way at Christmas, but so was a "Huntsman" Rx -- we are wondering which will win the struggle!

JOHN CUSDIN has had far more than his share of troubles lately & has not managed to do any of the many things he had planned. It is all the more pleasant to hear from him again, therefore (and that goes for me too, John -- thanks for your letter, OM - Ed), and we all hope everything will soon be alright.

ALEC CLARK says he missed the Dec 3rd 2 metre opening -- lots of Gs were caught napping there, which goes to show it is worth while taking a listen and that even a chance call may start the ball rolling. Alec did find an opening on Dec 17th and managed to work ON4BZ on CW. He also worked our cld friend G3FYY.

NORMAN BASON has been left out in the cold with his Rx here for lining up (Sorry for the delay, Norman, but it wont be long now and if it works as well on 2 as it does on the other band you should certainly be OK.

JOHN (HQ) - (Fleased to hear of your threat to come on 2 metres, we'll keep you to that, OM! Wonder what sort of rig you have in mind there?)

MYSELF -- Having finished Norman's rig I have had it on the air every night since Christmas, but have not heard a 2 metre sig yet. Will have to arrange a special sked for checking up, No other news here.

CONSTRUCTIVE COMMENTS

My request last month for suggestions for the betterment of the mag and of the Society has filled the mail with comments -- all encouraging, and some really helpful . . .

ON GENERAL POLICY -- "I know the production of the QRP mag is almost entirely a one-man job, but it IS the official organ of QRP, and I know that it comes into the hands of many people who are not members. If it were possible to improve the journal at all I think this would go a long way to increase membership. I think the aim should be to make the QRP mag the accepted authority on QRP working."

LAYOUT -- "I suggest -- no more serials. Let each number of the journal be complete in itself."

ATMOSPHERE -- "There is one thing that must never be abandoned -- Your personal Touch which bobs up so cheerily on almost every page. Omit that Touch and the journal would be as coldly aloof as a professional magazine -- slick, glossy and lifeless!"

ARTICLES -- "I have not seen any gen on a Tx in the mag during the few months that I have been a member. What is the matter? Are our Tx boys shy or is everything too hush-hush!"

FORMAT -- "I should like to see it printed so that photographs and possibly a few advertisements could be included."

CONTESTS -- "It is a pity that all entrants do not send in figures early in the year. It is inclined to spoil the competition when people suddenly appear high up the table in November or December."

NEWS -- "I hope you will never find it necessary to reduce the size of 'Society News and Activity'. I always like this to a club meeting where one can see what the other guys are doing. In a Society like ours where personal meetings are the exception this column goes a long way in making up for the deficiency."

SPACE -- "If it could be made a foolscap magazine instead of half foolscap you would have a lot more room 60 lines per issue or the

equivalent of one extra foolscap page.... If you could beg, borrow or steal a typewriter with Elite type you could get an increase of 20%, or 4 more pages in the present size."

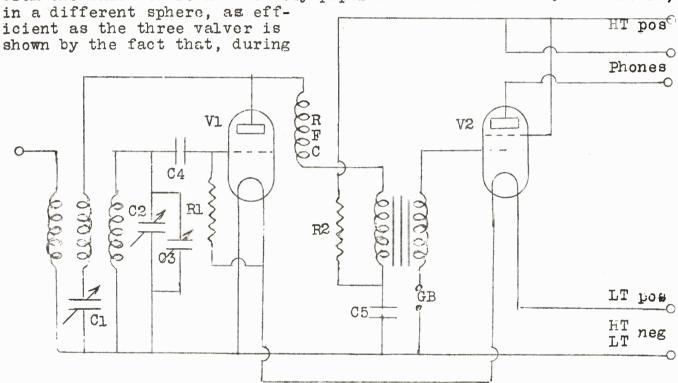
SUPPORT -- "I would like to see more members taking an active part. Those who are keen on the TRF, VHF and other sections are the very ones who do not help... It is left to the same old few all the time!"

SKEDS -- "I would like to see more advanced news of portable outings and especially if reports are wanted... If ways and means could be found to obtain information as to when TTX stations are coming on the air I think it would interest many of us on the listening side."

AND NOW JUST A FEW OF THE ANSWERS: -- The status of the mag as an authority on QRP depends upon the regular contents, and that depends upon the quality (accuracy and interest) and quantity of the gen that you fellows send me each month We must serialise when articles are too long to go in one issue... Tx gen -- well, that is dependant on you fellows again!.... I recken we need a circulation of 750 to 1000 copies before we can think of going into print There is no rule to exclude last minute contest entries: we must hope that the people in question will continue from the start next year ... Yes, I do agree on the point of early news of skeds -- I feel it is MOST IMPORTANT and I should like ALL MEMBERS TO ACT UPON THAT SUGGESTION.... It would make the mag much easier to produce if we left it foolscap size instead of going to the trouble of spacing and cutting, but how much more attractive and convenient it is in its present size! As to support -- I agree, a lot of you chaps ARE NOT backing up the sections provided for your interest and it IS always the same old few in consequence -- once again it is YOU who can put that matter right.

RIMEMBER THAT FIRST BIT -- we want more constructional articles, urgently -- articles that are accurate, interesting, fully detailed and with theoretical and layout sketches -- especially of Tx gear which, as our correspondent rightly says, have been very scarce.

G3KBQ is as yet probably better known as Peter, and this Rx comes from the same stable as the very popular "Huntsman 0-V-2". That it is,



only a print four hours listening, in full field-day conditions from a QTH 750 ft asl, with a 66 ft long wire, 39 countries were heard. It will be obvious from the diagram that the main feature of the cct is the complete simplicity and minimum of frills. It is, we would think,

an ideal battery set for the beginner as well as being blessed with a very quiet background and capable of very good results from 1.8 to 28 Mc/s. For field-day or other portable use both valves should be HL2 with the heaters wired in series as shown, but when used at home V2 may be changed for a 220 OT beam tetrode since the necessity for conservation of LT may not then be so great. In the latter circumstances the heaters may be wired in the more normal parallel arrangement. In the series-wired portable arrangement a 4.5v bell battery may be used for supplying LT, the odd .5v soon being dropped by the current drain.

Coils used are Denco 6 pin plug-in and they oscillate down to 30 Mc/s with 90 volts HT. The chassis is 18 swg aluminium, $8"x5"x2\frac{1}{2}"$, with strengthened corners.

COMPONENTS: -- C1, 75pF -- C2, 160 pF -- C3, 15 pF -- C4, 100 pF -- C5, .01 uF -- R1, 2 meg -- R2, 10 K -- Grid bias, 1.5v or 3 volts.

Anyone requiring further gen please write direct to G3KBQ, 2. Lincoln Terrace. Hexham-on-Tyne. Northumberland.

TRANSISTOR GROUP NEWS

Firstly, we are in need of a Reporter for this Group. It eases my "chores" at this end very considerably to have group news nicely collated and sent in pretty well ready for print as is now being done most effectively by Ted for the VHF boys, Peter for the TRF Group, Bud for the Ws, and so on. So anyone interested in transistors who can spare one or two evenings a month to do this job will be giving very real assistance to the efficient running of the Society and the mag.

ROGER TAYLOR, G3JAL, has completed an OC51 TTX (OC51s are 30/from Mullards) and has had 549 reports over distances of about 2 miles.
While this may not seem very spectacular he had, as he says, no means
of knowing if he was correctly loading the antenna which, in any case,
is not high enough for QRPP being only 16 ft up with a house at either

end. The cct is a grounded base type, similar to that of G3HMO with a 750 ohm pot added in the base circuit to give positive feed-back as he could not otherwise get oscillation using a 30 volt deaf-aid battery. The input is around 40 to 50 milliwatts and the frequency 1880 Kc/s.

ERIC CHAPMAN, GC2FMV, is also having trouble in getting a new TTX to load, his best Dx to date being GC2CNC over a distance of 12 ft!

ERNEST "MONTY" BANKS, GC2CNC, has acquired three transistors and

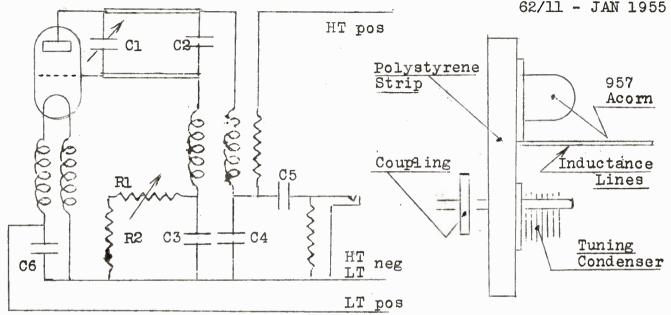
is toying with the idea of a l-T-l (ref l-V-l, or should it be T-T-T?) receiver. We hope to hear more of this effort whether it works or not.

JACK HARRIS, G2BOF, says that his TTX activity has come to a dead stop (temporarily, we hope) since blowing up a couple of transistors, one by accident and one by overwork.

TWO METRE SIG-GENNY, by TED STONESTREET

There is no doubt that a rig such as this is the most important piece of equipment that anyone interested in Two Metre receivers can possess. The construction of a Rx for Two is childs play compared with "finding the band" by experiment (ask Norman Bason!).

Ted says his sig-genny is of USA origin and covers 100 to 200 Mc/s. It uses a 957 acorn, but Ted sees no reason why the 954-5 would not work just as well. The acorn valve holder is mounted on a ½" thick strip of polystyrene (Ted quotes "perspex" but this is a poor insulator compared with polystyrene -- they both look and "work" exactly alike) measuring 2" x 3". Polystyrene can be obtained from Denco (357/9 Old Road, Clacton-on-Sea, Essex) at 2d per square inch for ½" thick sheet. The strip is held vertical, parallel to the front panel, and also carries the tuning condenser. The tuning inductance is made up of two lengths of 14 swg tinned copper wire, $2\frac{1}{2}$ " long and 13/16" apart, taken direct from the anode and grid pins. Component values are:- Cl, 10 pF C2, .002 uF -- C3, .01 uF -- C4, O.1 uF -- C5, .002 uF -- C6, O.1 uF --



R1, 250 K variable -- R2, 68 K. Connections for the 957 acount are. filament to pins 1 and 4, grid to pin 3 and anode to pin 2. Any further gen may be obtained direct from Ted Stonestreet. 29 Chaplin Road, Willesden Green, London NW 2.

SOCIETY STUDENT GROUP

As mentioned on page 1, we are in urgent need of more tutors to volunteer in support of our Student Scheme. Some of you may not remember just what the scheme (which is unique to this Society) involves. It is quoted in our Membership Data Sheets as follows: "Newcomers to the radio hobby may be 'adopted' by one of the experienced members of

the Society who, acting as tutor, will make it his personal charge to assist the selected pupil over the snags and pitfalls of theory and practice which beset the nevice. The student will be expected to defray the costs of his tutors postage and the scheme MUST NOT be expected to include the construction of any apparatus by the tutor for his pupil."

The duties which a "tutor" takes on, therefore, are reduced to matters of advice and of answering specific queries -- and simple as this idea appears, it has proved of great benefit to many of our novice members, especially where they are resident beyond easy access to a local club.

We have a waiting list of students and our Student Scheme manager for 1955 is GEOFF BASKERVILLE, 65 HAZON WAY, EPSOM, SURREY.

If you have an hour or two a week which you can spare and if you have already overcome the elementary snags of radio, do please write to Geoff offering your services as a tutor. Need I mention the rewards you will stand to gain? -- The sincere thanks of some aspiring novice, and the knowledge that you have been instrumental in putting one more ham on the right road to an appreciation of the hobby. To you who understand the "Ham Spirit" such returns, surely, will be as valuable as hard cash -- and far more lasting.

WANTED ARP12 -- AR8 -- TTll -- Variable condensers suitable for 350 volt working in 100, 250, 350 and 500 pF -- Small 6v relay for VHF wrk -- Tandam variable resistors, 10 and 100 K -- 2" square meter, 0/5 mA -- 2" square meter, 0/150 mA -- Thermocouple meter for RF, .5 A -- Relays suitable for antenna coupling -- GOOD SURPLUS COMMUNICATIONS Rx, around the £20 mark.

FOR SALE . . . Condensers -- Knobs -- Valveholders -- Switches Potentiometers -- Valves -- Intervalve Transformers -- Output Trannies-- Mains Trannies -- Full Vision Dials -- Rack mounting Power Packs --

COMPLETE RECEIVERS -- TUNING UNITS -- INDICATOR UNITS -- Gear in full working order -- gear for stripping down -- it is all here waiting for you.

Our Spares Service Manager is going to a lot of trouble to act as "Clearing House" for HUNDREDS OF ITEMS which are "surplus" to someone, but may be just what YOU have need of. Neither he nor the Society make anything out of this -- it is just one of those things that we enjoy doing for nothing if it proves of benefit to YOU -- so the price of any item is likely to be lower than you will find anywhere else.

BEFORE YOU BUY "IN TOWN" SEE IF GEORGE HAS NOT GOT JUST WHAT YOU WANT. All you have to do is to drop him a line: G3CED, 17 Ethel Road, Broadstairs, stating your requirements and enclosing a stamped and slef-addressed envelope.

If you have seen the item you want in a previous copy of "Q R P" and know the price, then send a BLANK P.O. plus a BLANK stamped envelope

ALL CORRESPONDENCE DIRECT TO MANAGER: G3CED, 17 Ethel Rd, Broadstairs.

THE "200" CONTEST (for the GC2CNC cup, held in 1954 by G2BOF) for the largest number of British Counties worked during the year (Jan to Dec) on three bands with a maximum power of 2 watts.

									1.8 Mc/s	3.5 Mc/s	7.0 Mc/s	TOTAL
1:	G2AOL	_	-	-	_	_	÷	-	66	41	34	141
2:	G2BOF	-	-	•	-	-		-	74	3 5	26	135
3:	G3JK0	_	-	÷	÷	-	-		5 2	56	12	120
4:	G3HJL	•••	_	-	-	_		_	6	27	_	33
5:	G3JZQ	-	-	***	•••	-		_	22	100	-	2 2
6:	G3EUE							_	-	21		21

Congratulations to Sam, '2AOL -- a well deserved win, OM, after the close fight last year.

62/14 - JAN 1955

THE COUNTIES CERTIFICATE CONTEST for the ALL TIME total of 200 counties (composed of a minimum of 50 on each of the set bands), working under the rules of the "200" Contest above.

		1.8 Mc/s	3.5 Mc/s	7.0 Mc/s	TOTAL
1:	G2BOF	86	62	47	195
2:	G3JKO	5 2	56	12	120
3:	G3HJL	12	70	-	82
4:	G3JZQ	22		-	22
5:	G3EUE		21	-	21
	TRANSISTOR TRANSMITTING	G SECTION:			
1:	GC2CNC	11		-	11
2:	G2BOF	8	-	•	8

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 $1\frac{1}{2}$ watts total HT consumption. A county or zone may count only once in the total and not once per band. The runner-up receives one years free subscription to the Society (presented by Peter Huntsman).

Mc/s:	3.5	7	14	21	28	TOTAL	ZONES	C plus Z
Peter Huntsman	26	61	116	26	28	136	35	171
Keith Ranger	-	27	117	-	qua	117	30	147
E.W.Gardiner	12	4	96	45	5	1 0 9	26	135
Norman Bason	21	30	89	-	-	98	33	131
Joe Stephenson	22	5	98	3		104	27	131
D.G.Gordon	19	10	89	51	6	94	27	121

Since re congratulations to Peter on a win which he certainly deserves on thescore of his persistently regular entries if for no other reason. With the exception of Keith, who is new to the Panel, the top three are in the same order as last year, but none of the scores are as high by ten or more points. Bad luck loosing that second place at the last moment, E.W.G! Keith promises a regular entry this year so you will have to give him a run for his place.

THE TOP BAND PANEL is an annual contest (Jan to Dec) for the highest score of countries and counties heard on 160 metres with an Rx consuming not more than $1\frac{1}{2}$ watts total HT.

_									COUNTRIES	COUNTIES	TOTAL
Bo: Iball	-	-	-	-	-	•			19	79	98
Norman Bason		-		-	-	_	-	_	10	54	64
Peter Huntsman -	-	-	-	-	_	-	-	•	10	46	5 6
D.G.Gordon	_	-	_		_	-	-	-	6	45	51.
E.W.Gardiner	-	-			_	-	•••	-	5	18	23

No further returns have been received for the <u>V H F RECEPTION</u> <u>CONTEST</u> since October 1954. Since the contest never attracted more than four entrants it would appear that we may file it with the VQ2W contest as being insufficiently popular to warrent the consumption of the required space.

December 12th, 1954: Between 0612 & 0702, W4ZQ at from 249 to 459 -- At 0622, W1FB at 549 -- At 0717, W2GGL at 339.

December 19th, 1954: (Session from 0538 to 0757) -- K2BWR, 459 to 569 -- W2GGL, 449 to 559 -- W1BB, 449 to 459 -- W4KFC, 449 to 569 -- W1ERK, 249 to 549 -- W4ZQ, 569 to 579 -- W4LCV, 559 -- W4LRN, 349 -- W8KIA. 559 -- W2QHH, 469.

December 26th, 1954: At 0603, WlAHX, 339 -- Between 0605 & 0620, W3EIS, 549 throughout -- At 0621, W3RGQ, 449.

January 2nd, 1955: At 0605, VE3AAZ, 549 -- From 0611 to 0627, KV4AA at 449 to 549 -- Between 0623 and 0743, WlBB, 349 to 559 -- At 0635, KP4CC, 349 -- At 0655, W4ZQ, 349 -- W2WWP at 349.

January 9th, 1955: At 0612, YUlGM, 579 to 589 -- Between 0700 and 0714

62/16 - JAN 1955

WlBB, 349 to 459. Condx were poor on this date, only WlBB being heard deffinitely. At least two were missed due to QRM. Bob remarks that he was most surprised to hear YULGM who was near 1870 Kc/s.

GROUP REPORTERS

Do please remember that we have officially appointed reporters to deal with all activities and news items concerned with specific aspects of our interests. Do let them have YOUR news in time that they can get it into their columns in the next issue of the mag -- that means that your letter needs to reach THEM not later than the first weekend in each month. Except for constructional and general news, which should come direct to HQ as in the past, you should write to the following:--

V H F :- A. E. Stonestreet, 29 Chaplin Road, Willesden Green, London, NW 2.

T R F :- Peter Huntsman, 2 Lincoln Terrace, Hexham-on-Tyne, Northumberland.

STUDENT GROUP: - G. T. Baskerville, 65 Hazon Way, Epsom, Surrey.

SPARES (Manager): - G.Partridge, G3CED, 17 Ethel Rd, Broadstairs.

No 1:- Post free $10\frac{1}{2}$ -- "The Language of Amateur Radio", compiled by G3GBP especially for members of the Student Group, is a dictionary of abreviations and codes, particular care having been taken to explain various commonly misused symbols.