OFFICIAL REPORTS :::::::: OF THE

Q R P ::::::

RESEARCH GROUP

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SEP 1950

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Dedicated to the advancement of Low Power Radio

QRP

No. 12. " Q R P " SEPT. 1950.

EDITORIAL.

I remember having great difficulty writing my first "Q R P" editorial twelve months ago. It seemed most important, carrying with it the success or failure of my whole endeavour. With no experience in editing, and little enough in the tremendous field of post-war radio, I had nothing but hope to bolster my anxiety to make something of this magazine and through it to give strength to the least glamorous aspect of amateur radio.

It seemed, then, to be a very large task which I, as a junior and unknown member of the ISWL, had set myself. But I had not anticipated the wholehearted help and unstinted encouragement which was to be so willingly showered upon me by everyone at ISWL Headquarters during the following months. Nor did I foresee that Mr. Clarricoats would applaud such efforts in the RSGB Bulletin, a fact which was instrumental in arrousing interest from sources I could not otherwise have reached. Least of all did I expect the tremendous enthusiasm with which you, all of you, were to reward me.

In one year we have laid a solid foundation upon which to build a programme of advancement. Our membership has increased by over 700% and such growth should rapidly demonstrate the merits and interests of QRP radio.

The strength of our Group, and it's friendly relations with other organisations, can help to enliven our particular sphere of the Lobby in endless ways. We have, I believe, created an unique atmosphere. Our members are spread far and wide across the country yet brought together through the pages of our mag and I am not alone, I know, in having made, during these past few months, more than one good friend whom I have never seen. Many radio clubs run magazines as a non-essential subsidiary. To us "Q R P" is the binding link.

It is not simple to produce any periodical in these days of unease restrictions and still increasing costs. To maintain a steady improvement in a magazine with a relatively minute circulation, no official recognition, and complete dependence upon a minimum subscription rate is indeed a problem. Therefore, if such improvements appear slow, I can only ask you to have patience and to believe that I am making every effort to increase our size, scope and quality whenever and wherever it may be possible.

"CONVERSATIONS OVERHEARD" by Bob Brooker.

FP8AC (ex W6SAI) was supposed to begin operating from St Pierre during July. One G station claims to have heard him on CW, but 6SAI has also been heard as a visitor at a Swedish station.

EA8OA is operating from Spanish Guinea although some express doubt about him.

CR8AG in Goa is working all the Dx bands regularly and has been heard putting in a very good signal on 21 Mc/s during July evenings.

CE7ZG is a Chilean naval base in the Antarctic and may be heard in the early mornings.

ACTIVITY.

Bob Brooker (3457), Herne Hill, had a constructional drive during July and, in the course of experiments connected with his Automatic Reaction Control scheme, he evolved a 1-V-1 layout which really shook him by it's extreme sensitivity and complete lack of hand capacity. Bob says the ARC has not yet materialised but that he will send along the 1-V-1 gen. Mind you do, Bob!

A.E.Stonestreet (2945), Willesden Green, sent along a very cheerful letter written in bed (You didn't say what the trouble was, Fred, but we all wish you quick and complete recovery, OM). He will certainly be busy when he is about again as four of his rigs, including the family BC job, "went for a Burton" at the same time. Only "Old Faithful", the O-V-O described in the Sept 1949 "Q R P" (Issue 1), continued to pull them in.

John Anderson, Bilston, has built Bob Brookers O-V-1 (Rig No 7) and is much surprised with the results, finding that the real Dx is easier to read than with his commercial QRO Rx owing to the excellent signal/noise ratio.

D.White (3975), Milford, is another who shows exemplary good cheer despite his unenviable temporary residence in the Sanatorium. I believe he actually thanks the sister for waking him at 0600 hrs and gets his own back by having early morning sessions with his O-V-1. David doesn't say what he has rigged up as an antenna but his Rx is a 1T4 into a 3S4 covering 150 Kc/s to 18 Mc/s. He is thinking of changing the 3S4 for a 1S5 or another 1T4 to reduce LT consumption. He also hopes to extend the range to 28 Mc/s. Let us have some of those early morning logs, OM.

A.L.F.West (3039), Wilton, rushed off a hasty line between enforced changes of QTH due to RAF service. Poor old Alf (who is one of our oldest members) has certainly been on the move lately.

So much so that radio activity could not possibly keep pace even though the "spirit" is still there. Good luck, OM -- you are certainly seeing the country, though you may know better ways of doing that!

P.White (3672), has made up A.J.Bennett's O-V-1 (July "Q R P") and has got very good results using a 6SJ7 and a 7193. He also has tried one of the antenna matching units suggested in "Q R P" with marked success.

NOTES ON CONDX by Bob Brooker.

Summer storms and static have made the LF bands rather "difficult". There may have been plenty of Dx, but the continuous sizzling and plopping effectively covers it up. On a few mornings 80 has come up with some Ws, mainly W4 and W1. Otherwise there seems to have been very little.

Twenty remains the one "almost reliable" band and even this tends to be erratic. For quite 90% of the time it is difficult to hear anything but SMs and Is. It seems to be a father melancholy fact however that all the best Dx comes in at the same time as the short skip. Try sitting on top of a powerful European until he goes over, then tune just a few Kc/s to either side of his frequency and it's ten to one there will be something worthwhile there.

Best times are late afternoon and evening for the Far East, around midnight for S. America, and early morning until about 0800 hrs for West Coast Ws and the Pacific.

A O-V-1 SPECIAL, by F.A.Herridge.

This receiver was designed and built to give maximum performance at frequencies up to 30 Mc/s, and to contribute towards this end the following features were incorporated:

(1). The end plates of the variable condensers were replaced with ones made from polystyrene sheet.

(2). The HL2K detector was re-based by the method described in the May issue of "Q R P".

(3). The coils were home wound on Raymart formers to give best results on each band.

(4). Polystyrene or ceramic insulation was used on all components working at RF.

(5). The whole receiver was built on an Eddystone diecast chassis with a Tele-Radio black crackled dural panel cut down to 10" x 7". This ensures high mechanical stability.

All three variable condensers are mounted on Eddystone insulated brackets and are coupled to the same firm's 3½" slow motion drives by flexible couplers.

The primary winding of a standard output transformer is used for choke-capacity output.

The only aerial used has been a 14ft length of enamelled wire in the shack on the first floor. HT has been obtained via an eliminator. Most listening has been done in the evenings but never later than 2300 hrs GMT. In the first 28 days of 1950 the following countries have been heard, all on CW.:

3.5 Mc/s: DL, F, G, GM, HB, LA, OK, ON, OZ, PA, SM.

7 Mc/s: CT1, DL, EA, EI, F, G, GC, GM, HA, HB, I, LA, MD2, MD7, OE, OH, OK, ON, OZ, PA, SM, UA3, UB5, UF6, UQ2, VE, W.

14 Mc/s: CT3, DL, EA, F, EA, G, GI, GM, GW, HB, I, LA, MB9,

MI3, OH, OK, OX, OZ, SM, SP, UA3, UB5, UP2; VE, W.
28 Mc/s: FE8, G, KP4, OH, UA3, UB5, UN1, VE, VK, VQ5, W, ZS.
This log gives a total of 41 countries and 15 zones for the 28 days listening.

Component values are as follows:

C1 : 140 pF variable
C2 : 15 pF "
C3 : 100 pF ceramic
C4 : 250 pF variable
C5 : 2 uF, 250v DC wkg.
C6 : .01 uF 350v " " ("Minicap")
C7 : .01 uF " " " "
C8 : 25 uF 25v wkg. electrolytic.
V1: VT50 (HL2K).

R1 : 3 Meg, ½ watt.
R2 : 180 ohms, "
R3 : 180 " "
R4 : 20 K "
R5 : 47 K "
R6 : 470 K "
R7 : 470 ohms "
RFC: Eddystone 1010.
V2: VR21 (210LF).

"LOW POWER LAMENT", by GW2DDX.

Why don't you chaps sometime try it?
With a plate that's never "hot"
Power is my daily worry --
I can only raise a watt!

You who make transformers rattle;
Those whose valves just start to glow --
"Plate's a lovely cherry red --
The GPO will never know!"

Do you ever pause to listen
Under that "R9" sig

PLEASE

try and get your logs, C-Z entries etc, in not later than the 17th of each month. A number of letters reached me late this month and have had to be held over.

AMATEUR RADIO HANDBOOK for 1949
(A R R L)

One only, in excellent condition,

10/-

(Don't send cash! The first claim by letter or p.c. will secure and the sender will be notified and can then complete the purchase)

To a "CQ" bravely pumping
From a single one watt rig?

Oh, the work! And Oh, the trouble!
Trying aerials by the score;
Just to make that little wattlet
Cover perhaps a few miles more.

Then the joy -- "Worth the worry!"
When in answer from afar --
"FB, OM, UR QRP".....
You certainly deserve a bar!

So, you chaps who use high power
On the bands that are called "low",
Pause a while in your travels...
For the voice beneath the "snow".

Yes! Of course we like to work you,
All you "big shots", and the others,
So answer, please, that little wattlet,
Because as "Hams" we are all brothers.

(Copies of the above, on high quality foolscap paper, will shortly be available at 3d each for mounting and hanging in your shack. Ed:)

NEXT MONTH :---------- A special 1.2 watt four valve super-het.
N - O - W:---------- QP-AID (1/4 post free through "Q R P").

GEAR - CHANGE.

VALVES. Free to the sender of the first request opened, any or all of the following:-
215SG (2), 210HL (1), PM2HL (1), 12SK7 (3), 12K8 (1), 12A6 (1).
Ron Turner, 63 Tennyson St, Pensnett, Brierly Hill, Staffs.
(Ed: Don't forget to send sufficient postage, OMs).

"Q R A" SERVICE.

Peter Short (636731, Sgt Short, RAF, Sundern, BAFO, BAOR 15), having a current Call-book, has offered to run a Group QRA service for anyone who would like to avail themselves of it. Replies will be sent by return IF you enclose a S.A.E.

GROUP LIBRARY.

A very fine parcel of books for the Group Library arrived during the month from J.A.R.Garner. Very many thanks, J.A.R.
The new titles include:-
(1): Amateur Hand-book, 1945. (ARRL).
(2): Manual of Practical Mathematics. (Castle).
(3): Short Wave Radio. (Rayner).
(4): Technical Notes On Universal Circuits. (R.S.Roberts).
(5): Radio Circuits. (W.E.Miller).

MODULATION SYSTEMS, Part 1, by GW2DDX.

To the amateur who has just completed his first twelve months probation on the air, to the man who has built a new rig, and even to the QRP man who has never had quite enough "juice", comes eventually the perplexing thought: "What system of modulation shall I use?"

As a rule the chap who can afford to go QRO builds himself a nice 6L6 or 807 audio stage, with plenty of head amplification for a xtal mike, and matches the output into his final with the appropriate transformer, and away he goes. But sometimes (I nearly said quite often!) his 807s, on peaks, go well over the 100% modulationcondition, and ..... but that is another story.

Let us look at this modulation business.

Our oscillator, or PA (depending on which stage we use to feed the aerial), is generating an RF carrier. After having broken this RF into dots and dashes for the past twelve months by means of a key, we now desire to transmit speech. This is where the trouble starts!

With the PA delivering it's rated wattage it was simple enough to stop and start these wavetrains to the aerial. But now we have to increase the amplitude of the RF to twice the carrier condition. This increase takes the form of sidebands, of which there are two -- the "upper" and the "lower".

In this condition the extra power required amounts , theoretically, to 50% of the power applied to the stage being modulated. To take an example -- our PA has an input of, say, 20 watts. We will require a modulator capable of delivering 10 watts of audio, correctly matched, into the PA plate load to anode modulate 100%.

An important point here. Meters register RMS values only, and peak conditions reach four times this value, therefore initial adjustments with an oscilloscope, to ensure that the average condition of modulation is, say, 60%, rising to just under 100% on peaks, will provide for correct operating conditions. It is also true that some systems are not capable of overmodulation -- the "choke" or constant current system is an example -- in which no voltage dropping resistor to the PA is used. This holds good provided drive conditions to the PA stage remain unaltered.

The intelligence conveyed in the amplitude modulation system is contained in the sidebands. These are shown diagramatically in Fig 1C which is an example of a 100% modulated carrier. Fig 1A shows the same carrier unmodulated, while 1B is the audio signal imposed on the unmodulated carrier.

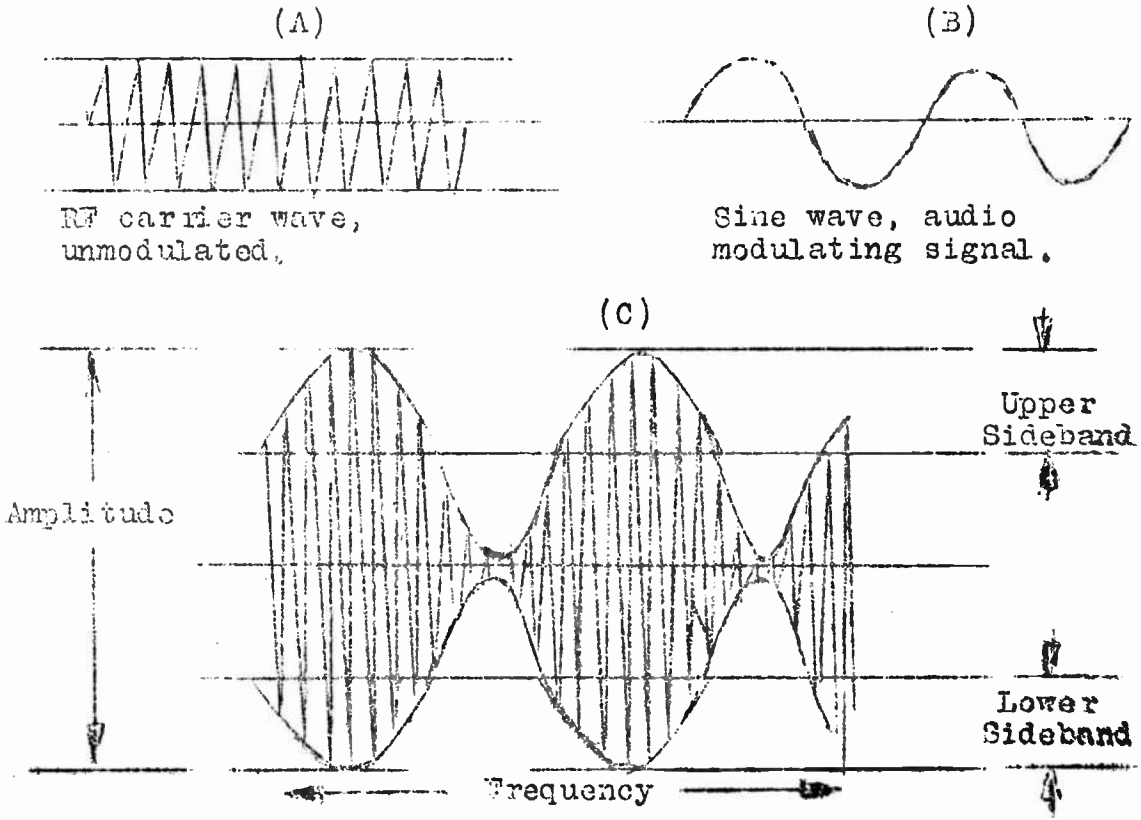
When modulation is applied the carrier amplitude begins to vary according to the audio voltage impressed upon it. The degree to which it rises and falls, in comparison to the original carrier is determined by the amount of audio voltage supplied by the modulator valve or valves.

A small amount of audio produces small sidebands, while heavy audio gives sidebands with more power, a condition which is referred to as the percentage of modulation.

The power in the modulated wave varies as the square of the current or voltage involved. In our case we have doubled the voltage, hence the power in a 100% modulated signal is equal (at the instant of peak output) to four times the unmodulated carrier power.

Next month we will discuss sources of this extra power needed to modulate the PA, together with some efficiency systems that need only a fraction of the input power to the power amplifier for nearly 100% modulation.

FIG: 1



RF carrier 100% sine wave modulated.

Q R P Tx ACTIVITY.

Station GW2DDX, Cadoxton, Barry, reports the following QSOs on 40 using a simple triode CO with an input of 1 watt:--

G3EGH, Leeds,	449. CW	G3ENY, Walton-on-Thames,	449. CW
G3FYQ, Pontefract,	569. CW	GM2FNF, -	569. CW
G3BCC, Cheltenham,	449 CW	G3FZG, Wallasey,	559. CW

On 160 metres, with an MO PA rig using 1.5 watts, GW2DDX had:-

G3FYX, Bristol,	558. CW	GW2DFR, Swansea,	559 CW
G3ESY, Hereford,	559. CW	G3PU, Weymouth	569 CW
G2FDX, Mon:	599. CW	GW3CJR, Mon: (Zone)	453/4

Station G3EDW, Rayleigh, Essex, using a 6SH7 Clapp and a 6AG7 PA with 1 watt input, reports QSOs as follows:--

3.5 Mc/s:	ON4YB,	Antwerp,	approx 170	miles,	56/79.
"	PAØZD,	Voorburg,	" 170	"	589.
"	HB9II,	Zurich,	" 460	"	579.
"	DL1FV,	Nr Koil.	" 450	"	569.
"	LX1RR,	Wiltz,	" 260	"	559.
7 Mc/s:	PAØKC,	Amsterdam.	" 200	"	469.
"	GM6RI,	Forfar,	" 375	"	559.
"	EI2D,	Dublin,	" 320	"	559.

Q R P TWO-WATT Tx TABLE.

Station	Input (W)	-- 1.7Mc/s -- Countries	Counties	3.5	7	14	Total
G3EDW	1	1	3	6	11	--	13

"MORE POWER" to LOW POWER.

We are certainly not alone in our championship of QRP technique. In the July issue of the RSGB Bulletin Mr A.O.Milne, G2MI, opens his column, "The Month On The Air", with the following comments:--

"LOW POWER:-- No apology is made for returning once again to this subject. Prompted by the success of Field Day and by the enthusiastic reports of those who regularly use QRP, we urge all members who want a new interest in Amateur Radio to give low power a fair trial. There are many advantages, not the least of which is less TVI. Again, the real performance of a beam aerial can most readily be checked when the energy supplied thereto is a fraction of a watt! There is considerable scope to be found in the development and construction of truly miniature equipment. And endless fun in getting results! Some may even rediscover the art of using a straight receiver! Consider the work of G8DL who, using 5 watts, worked all continents during April of last year and includes among his contacts UA1, UA3, UA9, UB5, UI8, CX, VK5, ZL4 and ZS. The transmitter originally consisted of a 6C4 MO - 6AK5 doubler - 6AK6 PA. A later development is a 9002 MO - 6AK5 PA. Input 0.9 watts. This little transmitter is overshadowed in size by a packet of 20 cigarettes!"

Apart from developments on the Tx side, such as the above remarkable example, there is, as I have so often pointed out, an enormous amount of experimental work waiting to be carried out by our SWLs. The Carter Shield Contest is, you will remember, devided into four categories covering, (a) "Personal" SW receivers, (b) UHF QRP receivers, (c) QRP mains receivers, and (d) QRP super-hets.

Any of these categories can be again devided into a number of specialized fields of research, of which the development of Automatic Reaction Control for TRF circuits is an urgent example.

Another matter of great moment is the development of QRP TV receivers, though here of course we are primarily in the hands of the CRT manufacturers. No doubt they are fully alive to the certainty of a heavy future demand in this direction.

Still another field which offers a vast amount of absorbingly interesting exploration, and one which is essentially QRP, is "Radio Control". Radio control of marine and aircraft models is rapidly growing in popularity but far more important are the many applications in industry and daily life which clamour for attention in this direction. The average enthusiastic QRP SWL can achieve invaluable work here.

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[illegible] C - Z PANEL.

	MEGACYCLES				TOTAL	
	3.5	7	14	28	C	Z
A. Glass	14	18	131	52	133	37
R. Brocker	12 (2)	10 (1)	101 (8)	56 (9)	[illegible]	36 (12)
D. Gordon	12	15	62	84	110	31
P. Huntsman	12	14	93 (4)	--	93 (4)	32 (2)
P. Short	9	8	79 (10)	--	79 (10)	31 (8)
F. Herridge	15	38	59	33	76 (1)	23 (1)
R. Murray	5	7 (3)	58 (7)	--	58 (9)	19 (5)
A. Looney	--	--	57	--	57 (15)	19
M. Wassell					43	22
I. Glenn	--	2	15	--	17	6

Note: The figures in brackets indicate the number of countries or zones verified by QSL. Countries or zones heard on more than one band can only count as 1 in the Total C-Z column.

RECEPTION REPORTS FOR JUNE / JULY.

The bracketed reference following the date of each log indicates the TIME by number and the OPERATOR by initial, thus:--
TIME: (1) 0001/0559, (2) 0501/0600, (3) 0601/0900, (4) 0901/1200, (5) 1201/1500, (6) 1501/1800, (7) 1801/2100, (8) 2101/2400.
OPERATORS: (PS) Peter Short.(3468), BAOR 15, 0-V-1 (0.13 watts); (MW) Mike Wassell (3982), Birmingham, SH4 (1.2 W) and 0-V-1 (.2W) (SB) S.Beharrell (321), York, 1-V-2 (1.2 W); (AL) Arthur Looney (2959), Liverpool, 1-V-1; (RB) Bob Brooker (3457), Herne Hill, 1-V-1 (0.8 W); (RT) Ron Turner (2985), Brierly Hill, 0-V-1 (1.05W)

1.7 Mc/s Logs

14/7/50 (MW7): G2DQ, 2IK, 2MM, 3ECS, 3FGI, 3MT, 3PU, 4AK, 5FJ, 8FF, 8SU, 8TR; GC2MBU; GD3UB, 5CZ; GM3DZB; GW2BG.
15/7/50 (MW5): G2ABB, 3AWL, 3BKV, 3EES, 60A, 80K.
16/7/50 (MW4): G2FLK, 3EKT, 3UD, 8XY.

3.5 Mc/s Logs.

16/6/50 (RT8): DL1FF, 1QA, 1VT; LA3JC, 7ZB; ON4TK; OZ3MJ.
21/6/50 (RT8): DL1QE; SM5AST
22/6/50 (RT8): DL1GQ, 3TJ; OZ5DY, 7RM, 7RP.
29/6/50 (RT8): DL7DG; OZ7MP; YU3FLL.
30/6/50 (RT8): DL1HA, 3XA; SM7ASQ; YU3FLL.
3/7/50 (RT8): DL3KB, 6DA; HB9TAP.
6/7/50 (RT8): HB9LQ.
7/7/50 (RT8): DL6KV; HB9II; ON4KC.
11/7/50 (RT8): DL3BA; PAØDV; SL4AP.
24/7/50 (RT8): DL1ZC; HB9II; LA8J; SM5LF.
27/7/50 (RT8): DL3LM; LA8J; SM7BV.
29/7/50 (RT8): DL1IR, 3TH, 3WW, 6JB; LA5DB, 9ZB; OZ5BS; SM6BNE YU3FLL.

14 Mc/s Logs.

11/6/50 (MW8): LU7AE; VQ8BDF.
12/6/50 (MW3): FA3CH; MP2ARK; VK2NS, 2US; W6SZ, 7DJ, 7EEF, 7HIA.
(SB8): MP2AA; PY7VA; W7AJN, 7HIA; ZB2A.
14/6/50 (MW7): HS1SS; LU1AC; MP2AA; SVØAM; VE1CR; VQ4BJ; ZB2A.
15/6/50 (SB3): CX2CO; LU6AJ; W9HHI, ØUZ.
(MW8): EK1QV; MD2MD; PY3GC, 4VY, 7GV, 7XC; PZ1AA; W9CFS
16/6/50 (MW3): CN8BA; UP2ZH; VE3OZ; W6HUH, 7DR, 7DXR, 7MBX; ZC6UNJ.
17/6/50 (MW3): FA9MA; TA3GVU; VE7HO; VK2BT, 3HO, 5WF; W6NIG; ZL4AG.
(RB8): VP7NH. (RB7): FK4DA; TF5TP.
18/6/50 (MW3): CN8EE; CR5AC; LU9MK; TF5TP; VK3JM; W6KPC, 7AUS, ZC6 (BJ.
(RB6): OQ5BR. (AL8): LH2A; TF5TP.
19/6/50 (MW3): TI2DA; W7ABX,ADS,AZR,JEN,MDX, 8NU; XE1IY; YN4CB
(RB7): CS3AA; OX3ED. (AL8): TF5TP.
(MW7): CS3AE, 3EE; LU6AJ; SVØAM, ØWL; VQ4AI; W2WDK; YK1AC.
20/6/50 (MW3): EK1AD; FA3ZH; MP2AA; MP4BAE; VE7EZ, 7PM; VK2QR;
W6GT, 8UDR; YN4CB. (AL8): MP2AA; PY4PQ.
21/6/50 (MW3): EK1JC; FF8MH; PY7AD; TG9AI; TI2TG; VE8MB; W6IPO,
7MBX, 7KSM; YN1LB, 4CB; ZD1BB, 4AK.
22/6/50 (RB2): YS1ES; XE1KB. (SB3): CE3AE; VK3HW; VQ4AH.
(MW3): SVØWL; VE7VO; VK2AGW; W6APV, 6IDY, 7IWH, 8LRE, 9EOH,
ØSW; ZL2CV. (MW7): FA3ZH; OQ5AZ; VQ3BDF,4IS,4RF.
23/6/50 (MW2): HC1FG; HK1DZ; KV4AA; VP3CMB; W6YX,6GT; XE1CQ; YS1ES.
27/6/50 (RB7): HI8EC; VQ4RF.
28/6/50 (RB6): UI8KAA.
29/6/50 (SB8): PY1ATI,2AY; VP3MCB; W7AVS.
30/6/50 (RB6): OQ5CF; VP1QG; VS1AX; ZD1SS,4AD.
1/7/50 (SB8): LU7DO; VE1CR,1CS; VP6SD.
2/7/50 (MW3): EK1MD; HK1DZ,1CL; LU5CZ; OQ5CF; VK3HF; VP3HAG;
W6DFG,6EZ; YN4CB.

3/7/50 (RB6): AP2N; UL7AB; VS1BJ.
(MW7): CX1CR; HI6EC; MD2AM,2MD,2PJ; PY1MT; VP5MU; W4EMR; (ZP2AE.
(SB8): PY1FT; TA3GU; W6BUC.
4/7/50 (SB8): CE3CZ; PY4PI,6CO; SVØAG; VQ4RF; YV5AB.
5/7/50 (MW8): CE3CZ; CN8EI; LU6DR,4BH; PY8RK; TF5TP.
6/7/50 (MW3): CR4AE; FA3ZH; VE8MB.
7/7/50 (MW1): CN8EE; OX3BD; VK5NG.
8/7/50 (MW3): CN8MU; TA3GVU; W6IKQ,6TG;
9/7/50 (MW3): FA3JZ; LU4DL; MF2AA; MD2MD; TA3GVU; VK3KX,5YO; VP1FGC,3HAG.
10/7/50 (MW3): FA9ML; IS1H; SL1BB.
11/7/50 (AL8): FA9OW; LU4BH.
13/7/50 (RB7): VU2SC. (AL8): CN8EF; EK1JC.
14/7/50 (MW3): VQ9CL; W6ACE,6SZ,7BEG.
15/7/50 (MW3): FA3ZH; MD2PJ; VE3MB. (RB8): MI3GH
(AL7): LB2SA; OZ3FM; TA3TVU. (AL8): ZB2A.
16/7/50 (MW3): CE7ZG; FA3ZH; MF2AA; OX3BD; VK2AB,3EE,3HG,3HW,5NG, 7AG,7JB; VP8AO; W6MRM,6SAC,6YI,6ZXB.
17/7/50 (RB3): W5QS,ØNFA. (RB7): UA9KCC,9OB; UF6AC.
18/7/50 (RB3): W6SZ,7AJS,7BEG.
22/7/50 (RB7): OQ5CF; OX3BD; VQ3BVF; VS2BS,7WL; ZD4AD. (RB8): CT3AK
23/7/50 (SB8): CE2AE; PY7CJ; VP3MCB; W2LYQ,8RLT; ZD2JHP. (AL8):
24/7/50 (AL1): FA9RZ. (AL8): CX2CO; FA8DO; PY1RK; VQ3BDS. (ZB2A.
27/7/50 (RB7): ZS3K; UF6HAF (CW).
29/7/50 (RB1): YS1MS. (RB3): FO8AB. (RB7): PK1RI; VS1AX; VQ4KRL.
(AL8): PY4OR; YV5AY.
30/7/50 (RB1): VP3MCB. (RB7): VU2JP; ZE2JQ.
(AL8): FA9RZ; LU6DG; PY4BU; VP6SD.

HINTS ON THE CODE, Part 2, by F.A Herridge.

RECEIVING:-- Practice is essential, in the proportion of three times as much receiving as sending. Use the RSGB Slow Morse transmissions, government or Press stations, or tuition from an experienced op. Don't try to guess what is coming when copying plain language. Try to copy speeds slightly in excess of your limit. Concentration on copying through QRM should be cultivated later.

SENDING:-- Make up a practice oscillator. Listen to your own sending at first. Have your sending checked by an experienced op or model it on the sending from the stations used for receiving practice. At first send characters at fast speed with exagerated pauses between them, gradually shortening these pauses as your speed increases. Never try to hurry on your speed unduly. Avoid adopting mannerisms, such as clipping DAHS short. If you make repeated mistakes over a certain character send it over to yourself 50 times, at slow speed, saying the DITS and DAHS aloud to yourself during the process

(And if you seem to be making no progress at all don't get despondent-- nearly everyone has waded through the "hopeless" stage. Only practice will make you perfect -- Ed.)

C O N G R A T U L A T I O N S to

Bob Brooker,
Ted Holt,
Verna Stent

on their R A E successes. Bob still has his morse test to come, but Ted has collected the call G3NZQ. Verna is still our only YL member.