

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

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.....: A CHAT ABOUT REPORTS WITH BOB IBALL;
(continued from last month)

(Ed:-- This series, of which the first instalment appeared in our last issue, has raised a considerable amount of interest. Thanks to Bob have come to hand from many districts and every writer is in complete agreement, save one alone who claims to have had better response from card reports than from long and detailed epistles. We have one correction to make to last months instalment -- the first word on page 6 should read "first" instead of "last". No doubt discerning readers will already have made their own corrections here)

Since the war years I have, with few exceptions, sent reports to Top Band stations only, but the theme of this chat applies equally to habitués of the HF bands. Very good results can be obtained by the discriminating listener on these bands.

Now then -- what is the object of a report? It is simply to TRY & CREATE THE ILLUSION THAT THE STATION IS LISTENING TO ITS OWN SIGNAL, and a compliment in these words has been paid to me by WLYV for my Top Band reports. Obviously then, there are only two kinds of reports -- good and bad, and I am going to be so bold as to suggest that the card type is the bad form as it contains insufficient information. It usually only tells the operator he was 5 & 9 at a given time -- useless! There seems to be a pet catch phrase running rampant with this type of report: "PSE BE A PAL & QSL". I am reminded of the war-time slogan, "Is your journey really necessary?" -- is it necessary to indulge in such practice to obtain a card? It has been my privilege to see the reports that a station received sometime ago and they had the usual characteristics; apart from the QTH of the listener all that was given was "Dr OM, ur fone sigs heard hr on ... at ... GMT on 3.5 Mc/s. Pse be a pal & QSL". Dwell on that phrase -- how utterly crude! Some even go to the extreme of inscribing "this is a genuine report" -- is it? Come, come, surely you can do

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better than this! Such reports should be treated with the contempt they deserve.

The detailed report can be used in two forms -- PERIOD and SINGLE. Admittedly it takes longer to compile such a report, but the results obtained are worth while. I shall be dealing with the formation of such a report later on (next issue, Ed:), so I think there is no need to dwell on that subject at this stage.

When a card drops through your letter box it always brings pleasure, or should do so. Try and look on its reception as a card EARNED & never gloat with the thought "another one for the wall".

A final word on those card type reports such as I have described. Is it any wonder that the average SWL is being looked upon as a pest by the amateurs who receive them? It's this sort of thing which spoils the chances of the more serious listener -- so do let us try and improve the situation.

CQ.CQ.CQ.CQ.CQ.CQ.CQ.CQ. -- S A R K -- CQ.CQ.CQ.CQ.CQ.CQ.CQ.CQ.

Between June 8th and June 21st GC3DVC/P will be operating portable in Sark -- an almost unrepeatable rarity! GC3DVC is the call held by the QAU Club of Jersey and the operators in this expedition to Sark, which is one of the smaller Channel Islands, being $3\frac{1}{2}$ miles long and situated 6 miles east of Guernsey, will be GC2CNC and GC2FMV, both members of FOC, TOPS and QRP Soc. Operation will be CW only and will be between 1.8 and 1.9 Mc/s. The transmitter will be a CO (1T4) PA (3S4), pi-coupled to the antenna, with 90 v HT. The receiver will be a i-V-1 using 1T4s.

It should be noted that both operators are ON HOLIDAY during this period so lay off a bit, chaps, and give them time for a swim and a very quick one (if there IS a local on Sark!). Don't clutter up the freqs -- they promise to work everyone they can and if a queue does form they'll

CLIFF BLATHERWICK is finding ordinary things (like work, for instance) almost more than his hobby can stand at the moment. He is very keen to resurrect some of the old circuits and try them out again. (Note the 30 year old bright emitter advertised in this issue, Cliff!)

MIET LAPINSKI (Toronto) deserves a very special word of thanks this month. In submitting his annual subscription he enclosed a voluntary contribution to the funds of the Society to the value of 25/-. Thank you, Miet, also, for your very encouraging remarks about the mag.

ALLAN HERRIDGE, G3IDG, has accepted the vacancy for a Publicity Officer created by the retirement at the end of last year of Vic Brand, G3JNB. Allan has already done magnificent work for the Society in this direction by his articles in QST and CQ which have brought us in many new W members. He has been active on Ten recently and, though he has worked only DL, he has heard CT1, DL, EA, HA, IL, LA, LU, OE, SM, Trieste and YU which, as he says, is not bad for a "dead" band! He also worked HB9QQ/MM on 21 Mc/s off the coast of Spain.

PETER AMY, ex-GC3IDP, after a short time at home following his demob, has collected himself a job in Basrah only 16 miles from Shaibah (Iraq) where he was stationed in the service. Having got fairly settled in he is hoping to get his new call through as soon as possible, but the gear (temporarily we hope!) seems likely to be an 1155 plus 1154!

JOHN CUSDIN is yet another ex-victim of 'flu and pneumonia. Glad to say he is now up again but he has been out of circulation since 1st Feb. While bed-ridden he was presented with two years back issues of SWM which made life bearable. Now that he is active again he is deep in the meshes of FM (but he'll come back to QRP, chaps, dont fret!)

"MACK" McINTOSH will be taking the XYL, junior ops and Rx to GM in June for 3 weeks -- thinks the smell of haggis and whiskey may do the Rx good (yes, certainly the C-Z score will count from there, OM). Reference Bob Iblaa's article Mack says a card seemed enough to bring replies when he was a VS9 (guess the "VS9" had something to do with it)

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GEORGE STOKES is mainly in agreement with Bob Iball on the matter of QSLs but seems to think a properly printed card is the answer (wait for the later instalments of Bob's article, OM). He is yet another who asks for a new Members List (I have a separate list in preparation, OM, but it is quite a lengthy job and may not be ready for a couple of months yet). He would also like to see a query column in the mag. He has been in the SWL game since 1912 -- anyone beat that?

TED STONESTREET has had no reports from any of his VHF Section members this month and thinks it may be due to condx. He has searched the 2 metre band nearly every night and has not heard a signal for a long time. Has got a new antenna up at last which has brought in sigs he has never heard before -- FM, FU, FO, PJ, KR6, TI, but he can't get any response from Zones 16, 17, 18, 19, 26, 27, 28, 29. Can anyone tell him the best GMT for these zones?

NORMAN BASON has some interesting remarks on the Peter Huntsman A.T.U. which he has made up, and we are including them elsewhere in this issue. Norman has found Twenty in increasingly good condition & is expecting a similar improvement in Ten. Can anyone tell him anything about KG1AA?

RON GOURDIE is looking forward to an advancement in his work which will give him more spare time for radio. Lately he has been so QRL that he has not even heard the Home Service!

JOE STEPHENSON found condx generally fairly good during April, his listening time usually being after 2130 GMT, and he caught 21 megs open at last. Some of the South Americans were particularly strong.

CLIFF LEAL, G3ISX, found the Bob Iball article on QSLing very interesting and has sent along a report and card received from an SWL which bears out the substance of the article. Before scrapping his antenna in favour of a VS1AA (as threatebed last month) he tried out the existing length as a W3EDP and the first call raised was a C05. Having gathered himself off the floor he managed to complete the QSO &

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since then has worked W1, W6, W9, ET, ZB1, 3V8, YI, LZ, EA, I, VE -- all new countries and all on 14 Mc/s. -- 12 countries and 4 continents in a week, which as he says is not bad for a noisy QTH and a ropey Rx, see- that he has never worked outside Europe before.

ROGER TAYLOR, G3JAL, has heard nothing at all this month from the Transistor boys. He suggests that, at this time of year it might be better if he wrote about cricket! Roger hopes to be more active himself now that the exams mentioned last month are over. He and your Editor are trying to cook up a certificate to be presented to any SWL giving proof of ten Transistor stations heard, to be added to by stickers for every additional ten TTX stns confirmed.

RONNIE HUNTSMAN, G3KBR, didn't bother to write to HQ this month. He dropped in in person instead! He has been doing a week at Bisley as part of his National Service training (he could not have picked a worse week for Wx). He and Vic Brand and yours truly spent an interesting evening hacking the new HQ Rx to pieces to try and find the cause of a juicy bag of raw AC on the HT circuit. Think Ronnie enjoyed himself -- we certainly did! (Found the trouble afterwards, Ronnie, It was the rectifier valve wired with the cathode/heater pin, pin 8, to the cold end of the tranny coil instead of to the hot end!).

VIC BRAND, G3JNB, has been busy with some private TTX tests of which more at a later date when the results are more fully available. He is still very QRL at work but is finding time to get some driving instruction in a friends car -- we wonder if this means that he will soon be fitting foot pedals to the transmitter controls!

GERALD MULLEN (New Bedford, Massachusetts) is one of the few citizens of the USA who are interested in O-V-0s and O-V-1s. He is 18 and still at High School, but he would have a W call by now except for his being a British subject. (What about some reports on G calls heard)

BRUCE BRIDGER, W0SAK :-- Hello there, Bruce! What about that article on you Tx, OM. Am still hoping to get that from you soon and

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hope that you have not been put off by getting no personal reply to your last letter! Sobry, but I am afraid a lot of members suffer that way each month and have to put up with an answer in the mag like this. Anyway, am anxious to get that gen when you can manage it, OM.

.....: STRAIGHT FROM THE STATES :.....
Reported by Bud Rugel, WØPRM

"Jerry" Mullen of New Bedford, Mass, mentioned in this column last month, reports FP8AK/VP2 logged on 40 cw with 1 tube receiver. Nice QSO from TI2CR.

"Lloyd" WØQHI, is welcomed into the Society this month. Lloyd is a Dx man with 107 countries worked and 91 confirmed. Uses a 2E26 final at 30 watts. Has WAC on 80 cw! Also WNACA, WBE, WASM, WAS, CAA. Uses a 2-element double dipole on 20 and window antenna on other bands. Also Dx on 20 and 15 metre fone. Lloyd is 43, with XYL and 3 YLs. Operates radio-TV shop.

"Bob" K6AHV, is interested in joining, but inactive as now in US Navy. Hopes to get Island duty in the Pacific and operate as Dx. Home set-up included a 30 watt final, all band cw with 66 countries worked and 44 confd. Two element beam on 20, dipole on 40 and longwire for other bands. Has WAVE, WAS, WAC. Bob is now attending radio school in San Diego.

"George" VE1AEE, also writes for information on our Society. QRP Dx is his main interest. 20 watts on 80 thru 15 metres. Uses doublet antennae with 51 countries and 21 zones. Some of his best Dx includes KA2JF, VQ3BC, I5LV, EA9DF, TI2BX, EA8BF, TI9MHB.

WØPRM now has all 48 cards for WAS. Worked KG6AFT Guam on 20 cw for new country. 40 metre QSOs included CM5HF and KH6ARA.

"Alf" Wilson, W6NIF/4, is the latest recruit to the Society -- big welcome to you, Alf! Is working for the USAF on the guided missile

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range and lives at Cocoa Beach, Florida. Will have the dope on his
stn next time.

Till next month, 73, Bud, WØPRM.

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

CRYSTALS WANTED:-- Extremely urgent and most important -- Top
Band Xtals between 1800 and 1900 Kc/s. Must carry certificate.
All offers direct to HQ (92 Rydens Ave, Walton-on-Thames, Surrey)

FOR SALE:-- Ham selling out offers the following at £5 THE LOT--
FS43 Tranny (Ashfords) 100 watt, with 2 807 valves and holders.
Partly constructed TV with VCR 97 tube. Nine valve resopner unit
adapted to receive 7 to 11 metres. 500 Kc/s crystal. 6 miniature
variables capacitors. 100 usable valves, all types, some new. Box
fixed capacitors. Box resistors. Box valve holders. Parts for two
and three valve TRF receivers with 1 unscratched miniature cabinet.
WRITE DIRECT to Mr E.W.Shackle, Garth House, Brickfield Lane, Harling-
ton, Hayes, Middx (Collector receives gratis one 30 year old bright
emitter, still serviceable, and one V24 unused since first World War
when filament blew up)..... Phone: HAY 1417.

FOR SALE:- 250v 250mA TV type metal rectifiers, 6/- each p.pd... 2x
125v 100mA personal portable type metal rectifiers, 3/- each p.pd....
100 assorted resistors, 7/6 p.pd.... 100 assorted capacitors, 10/6 p.pd
...TU5B in case, 10/- plus carriage... BC212D, USA amplifier, new,
10/- p.pd. (Write Spares Manager as below)

WANTED:- Mains on/off toggle switches, single or double pole...
Metres AC &/or DC, 1mA FSD or less... Xtals 1850 to 1950 Kc/s & 3500 to
3600 Kc/s... Power supply 300v 150 or 200 mA.
WRITE SPARES MANAGER, G3CED, 17 Ethel Road, Broadstairs, Kent.

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.....: THE 'KBQ AERIAL TUNING UNIT AGAIN :.....

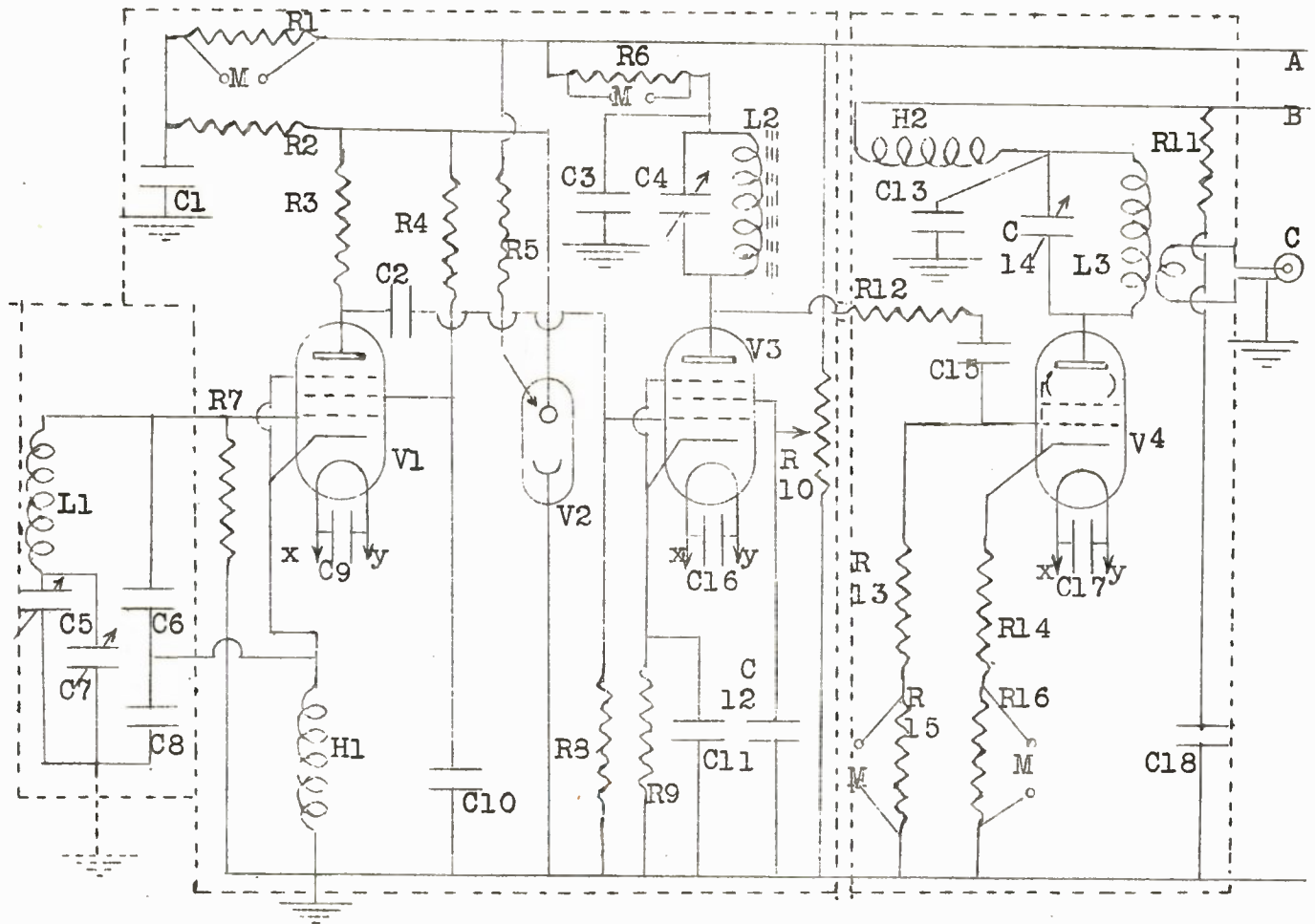
As mentioned elsewhere Norman Bason has put a copy of the ATU in use and has found it so beneficial that we feel his report must be published, especially as Joe Stephenson was unfavourably impressed last month. This unit (see page 10, March issue) is an adapted pi and Norman says:-- "I am very pleased with it, though it took some time to get the hang of it. I built it as a separate unit, in a screening can (a stout box, originally a lighter fuel capsule container). The coil I used is $1\frac{1}{2}$ " diameter but apart from that it is the same as Peters'. I soon found out the importance of having the whole unit screened. When I had finished it I thought I would try it out before I slid it into the box. Gosh! The band just disappeared and BC stns broke in from all over. But once in the box it soon cleared itself and now I wouldn't be without it especially on phone. I find that by varying C2 very slightly weak fone stns can be coaxed in at quite good readability. I wonder if Joe Stephenson made the connection to the aerial coupling coil. I tried mine onto the coupling coil on my O-V-1 and the results weren't so hot I will admit, but I have another terminal brought direct from the grid coil via a variable capacitor, and I took the coax to that and got the results I'm so pleased about, after shorting out the variable in the O-V-1

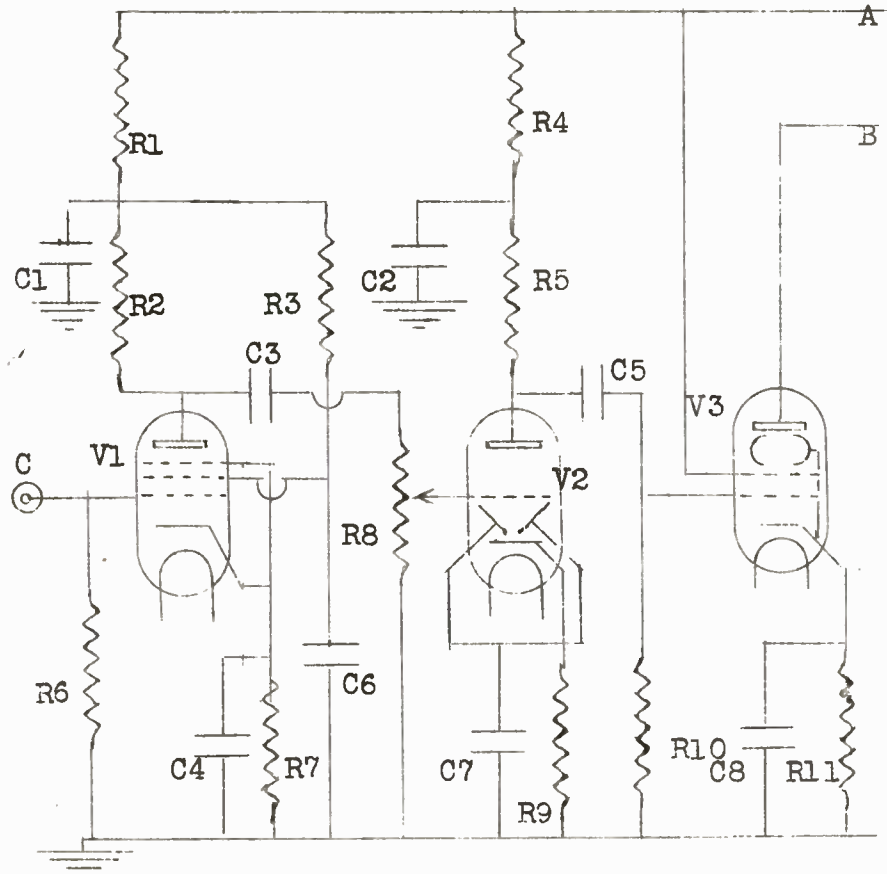
.....: THE 160 METRE Tx AT G3ISX :.....

The Top Band "works" at Cliff Leal's station, G3ISX, are an EF91 VFO/EF91 buffer/5763 PA, with a 6BR7-6AT6-6AQ5 mosulator. He has given us the most comprehensive set of diagrams that it has ever been our pleasure to work from and we only hope that we have done justice to them by making no errors in transcription. Cliff says his notes are "pretty rough" but the diagrams are so complete that few explanatory notes seem to be required and we have not tried to gild the whatsit. So

THE G3ISX VFO, BUFFER and PA

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THE G3ISX MODULATOR

let us go straight over to Cliff. He says:--

I have only included a rough layout as, given a circuit most types can devise their own layout.

The transmitter heaters are all wired with single screened wire and all are decoupled. The modulator heaters are wired with twisted pairs and all HT leads are screened as are all meter leads.

Each section is in its own screened compartment. I have used a separate antenna tuner and, when I go over to receive, the relay switches it to the Rx & gives me the advantage of a tuned antenna on the receiver.

All resistors are half watt except where

noted otherwise. The mod tranny is an SCR522 which gives the wrong match so that the rig is undermodulated, but I cannot get the right ratio with the right size, however as I only use phone for local contacts it is OK. The mike in use here is a deaf-aid crystal insert.

The VFO coil box is a 3" x 3" x 2" pressed steel conduit box.

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TRANSMITTER DETAILS:- The components list is as follows --

C1 .01 - C2 100 pF - C3 .01 - C4 4/24 pF - C5 100 pF - C6 .001 - C7 50 pF - C8 .001 - C9 .01 - C10 .01 - C11 .01 - C12 .01 - C13 .001 - C14 4/24 pF - C15 100 pF - C16 .01 - C17 .01 - C18 .001 --- R1 100 ohms - R2 22 K, 5 W - R3 2.7 K - R4 10 K - R5 250 K - R6 7 ohms - R7 100 K - R8 47 K - R9 100 ohms - R10 5 K, 3 W - R11 15 K, 1 W - R12 2 K - R13 24 K - R14 100 ohms - R15 100 ohms - R16 100 ohms --- V1 EF91 - V2 QS150/15 - V3 EF91 - V4 5763.

L1 is 50 turns, 34 swg close wound on 1½" diameter. L2 is an Aladin 7/16" former full up with 34 swg enamelled. L3 is 35 turns 24 swg enamelled close wound on 1½" diameter former with a 3 turn link wound over the earthy end. Chokes are Eddyastone 1010 type.

Points x go to the chassis and points y to the heater winding of the mains tranny. Point A supplies the VFO and BA HT and point B the PA HT while point C is the co-ax plug.

MODULATOR DETAILS:- The components list is as follows --

C1 8 uF - C2 8 uF - C3 .05 - C4 25 uF - C5 .05 - C6 .05 - C7 25 uF - C8 25 uF --- R1 47 K - R2 220 K - R3 1.5 meg - R4 47 K - R5 220 K - R6 1 meg - R7 1.5 K - R8 1 meg - R9 3.3 K - R10 500 K - R11 250 K --- V1 6BR7 - V2 6AT6 - V3 6AQ5 or 6BW6.

Note that all modulator heaters are wired as twisted pairs and that a good screen and earth is necessary for the 6BR7 grid circuit.

Point A is HT1, point B HT2 and point C co-ax plug.

In next months issue we shall give the wiring diagrams for the power supply, the antenna tuning unit and the metering circuits as well as outline sketches of the layout

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

THE C - Z CONTEST (for the Partridge Cup, now held by Peter Huntsman) is for the highest annual (Jan to Dec) score of countries & Zones heard on five bands with receivers of not more than 1½ watts HT

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consumption. A country or zone heard on more than one band may count once only in the total.

Mc/s: --	<u>3.5</u>	<u>7</u>	<u>14</u>	<u>21</u>	<u>28</u>	<u>COUNTRIES</u>	<u>ZONES</u>	<u>TOTAL</u>
NORMAN BASON	14	33	98	7	-	105	31	136
E. W. GARDINER	12	9	92	20	-	108	27	135
KEITH RANGER	-	59	94	-	-	101	28	129
TED STONESTREET	13	18	81	-	-	84	27	111
JOE STEPHENSON	15	2	73	10	-	80	22	102
D. G. GORDON	17	4	60	20	1	68	22	90
MACK McINTOSH	20	23	59	-	-	64	20	84
PETER HUNTSMAN	-	-	36	-	-	36	17	53

Congratulations to Norman! He has tried for a long time to gain that lead and has a nice increase of 23 points this month; but E.W.G. has not reported this month so Norman will have to watch his step! It must have been a good month for those who were able to put in some consistent listening as Ted has collected an extra 23 points and Joe is only one point behind with an increase of 22. Glad to see Mack has got his zones sorted out this month. As to Peter -- we certainly never expected to see you in THAT position, OM!

TOP BAND PANEL -- 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 1½ watts total HT.

	<u>COUNTRIES</u>	<u>COUNTIES</u>	<u>TOTAL</u>
BOB IBALL - - - - -	14	63	77
BILL IBALL - - - - -	11	53	64
D. G. GORDON - - - - -	2	27	29
NORMAN BASON - - - - -	5	22	27

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Well, there is certainly no doubt about Iball supremacy on Top Band! Bob splits his score as follows -- English counties heard (including Jersey and Guernsey) 41; Scottish counties, 13; Welsh counties 7; N.Ireland, 2; and countries heard, 14. He claims 32 countries heard since 1951.

.....: P A R E C :.....

Our Portable Amateur Radio Equipment Contest is gathering unexpectedly wide publicity in the U. S. A. thanks to the generous backing of The A.R.R.L., "Q.S.T." and "C.Q.". Being an open contest we may, in view of this publicity, expect a large entry from the States and we hope that our members, both here and overseas, will take this warning to heart. We shall be looking for a very high percentage of entries from our members to maintain the prestige of the Society.

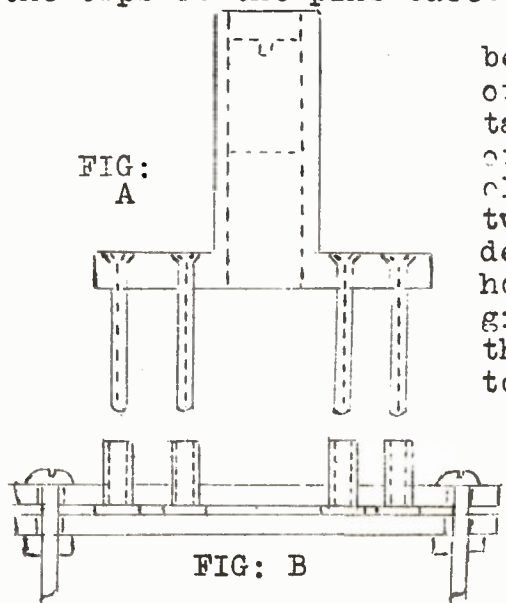
.....: MODIFIED ALADDIN COILS :.....

There is no doubt that the Aladdin coil former is universally popular and it has always been a source of regret to the writer that no plug-in type is available. Recently a receiver was under construction in which it was felt essential to incorporate plug-in coils but the junk box would throw up nothing but Aladdins -- necessity being the mother of invention, it followed that, after a period of thought and of experiment, a quite neat method of modifying the standard Aladdin was discovered. This involves the use of some of the pins stripped from an old valve base and an equal number of the "grips" from an old valve socket.

The first operation is to obtain the pins. They must be "salvaged" without damage, so it is unwise to try pulling them out of the old base -- much better to break the bakelite away from around them, which

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can be done quite easily with two pairs of pliers or, in tough cases, by gripping carefully in a vice and resorting to the hammer and chisle. Having got the pins out the top of each will heed to be straightened up a bit where it has been swaged over. Now, the former itself. If the existing fixing holes are too small to accept the pins they must be opened out with a drill but it is unwise to carry this too far or there will be a tendancy for the material to split. The International Octal type pin will be found best suited to the job and will fit the existing holes in the former without alteration. A second pair of similar size holes should be drilled through the base arms of the former just where the very small holes for anchoring the wire are situated. Now chamfer the tops of the four holes thus formed, insert the pins and swage over the tops of the pins carefully until they are firm.



The holder for the modified former can be made even more easily and consists simply of two strips of Tufnol (possibly cut from old tag strips) and a suitable number of grips out of an old valve socket. These should be the old fashioned circular spring type, not the two prong Amphenol holder kind. Bend the solder tag piece at right angles, drill suitable holes in the TOP tufnol strip, insert the grips with the solder tags protruding beyond the sides of the strip and bolt the two strips together. Fig "A" shows the modified former,

Fig "B" the section through the holder and Fig "C" a plan of part of the holder to show how the solder tag protrudes beyond the edge of the two strips.