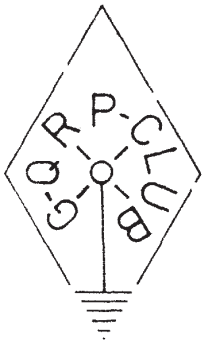
PRINTED RATE.

Rev G.C Dobbs,(C3RJV) 8 Redgates Court, Calverton, Nottingham. NG14 6LR.

Devoted to Low Power Radio Communication



SPRAT

SUMMER 1976. Number 7

Q.R.P. ACTIVITY WEEKEND: SEPT. 25th-26th

No contest-just FUN

any bands :try 3540, 7040, 14065, 21040, 28040. ± 5

S.P.R.A.T. The journal of the G-QRP-Club. Number SEVEN. Sum.'76.

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EDITORIAL NOTES.

Sorry for the delay....this issue of SPRAT appears at last about three weeks after the intended publication date; and all I have to offer is the old excuse about being busy. I hope that the Autumn issue will be out on time - early September - which will give a shorter than usual time between two issues.

The H.F. Bands have been a little more interesting during recent weeks. A few weeks ago I went /P to catch some 'Sporadic E' but only really caught sun burn ! Eighty has been ropey of late, and for the first time between issues of SPRAT, I don't think that I either worked, or even heard, another club member.

Last SPRAT G3ANQ offered the club a practical project under the title of the Wyndham Project. Although some keen interest was shown, the response for the scheme was not enough to mak e it a viable practical project. It may be - as I have heard suggested - that QRP operators are too much of a bunch of 'loners' to take part in a highly structured shheme. The outcome has been an interesting exchange of mail and ideas between myself, G3ANQ, Des Vance-GI3XZM, Gordon-G3DNF, and Gus-G8PG. Des estimates that over 15,000 words have been written on the subject.

Although a final outcome is yet to come - a lot of interesting ideas have been offered. It may be that the final practical project will include several facets of QRP interest. One suggestion is to set up a number of small researhh groups within the club - these could suit the skills and interests of a range of members, and might include: skeds to test the viability of longterm QRP-QRP contact - design and development of inexpensive, but viable, QRP equipment - investigation of possible 'alternative technology' power sources for QRP communication...etc. If you have interest in any of the above, or perhaps could suggest other useful areas of research - let us know...don't think you will be merely adding to the 15,000 words !

The summer DL AGCW Contest came...and went, without G3RJV, away from the home QTH. I hope that members who took part enjoyed the event - the results are yet to be announced. For members requiring advance notice (and the S.W.M. !!) the winter contest is on Jan.15/16 1977- I think that G8PG may have some rules stickers. For members who would like to do more QRP-QRP working, we are trying an ACTIVITY WEEKEND at the end of September - see the Front page, and later in this issue. This is not a competative event, and I hope that as many members as possible will come onto the bands, as often as possible, during the two days of the event.

Once more, I was in the happy position of having quite a few articles in hand for SPRAT, which should ensure full and informative issues for the future. If YOU have any interesting technical ideas, QRP circuits, QRP news items, hints, tips, advice....etc - I would be very pleased to receive the same, either in note form, or as complete articles - so that the standard of SPRAT may continue to reflect the fruitful and vital area of QRP amateur radio.

73's and hpa cu qrp,

George G3RJV.

Please mention the club in QSOs and 'eyeballs' and at your local club. Details of membership and sample of SPRAT from G3RJV - as above.

SUBS!

I am a little concerned that some members who owe their club annual subs, have not, as yet paid. The annual sub. is £1.50. Postal Orders and Cheques to be made out to : G.C.DOBBS, RE: QRP CLUB and sent to G3RJV, quoting, if possible, your club members number. The cost of postage is DOUBLE the amount when the club first opened, and the production cost of SPRAT seems to rise every issue. So, how about it ? If you wish to withdraw from the club, please inform G3RJV by Letter.

MEMBERS DUE FOR RENEWAL OF CLUB SUBS (BETWEEN THIS ISSUE AND THE NEXT ISSUE IN SEPTEMBER) Are those with NUMBERS UPTO 154.

DOUBLE SIDE BAND : Following the continuing saga of the DSB Mode, see last SPRAT, it would now appear that D.S.B. IS ILLEGAL ON THE AMATEUR BANDS!

QSL CARDS: Recently G4ETL ordered some QSL cards with the club badge from- COMPALITH PRINTING SERVICES, 115 PROMENADE, CHELTENHAM. GLOS. He was kind enough to pay for the printing block of the club insignia. This means that any member of the club can make use of the block when ordering sets of cards. Compalith will send samples for a large S.A.E. The club block is the same size, at matches, their small RSGB insignia which allows the two to balance out the card design on either side of a call sign etc. Please mention the club and SPRAT when sending for samples.

RADCOMEX. One of the unfortunate things about the delay in the production of this issue of SPRAT, is that I was unable to arrange any possible meeting of members at the RSGB exhibition. I am writing this just before I plan to go down on the Friday of the event. However, with luck, I hope to be able to meet any members present on that day.

I hope to announce a possible time and place at the Autumn exhibition at the Granby Halls Leicester, in October. More details in the next issue.

/+/+/+/+/+/+/+/+/+/+/

MEET THE MEMBER:

CONNIE WADE, G4CUY. Connie is assistant Matron in a small residential, specialised, school for junior boys. She discovered Amateur radio via a B.C. receiver with a marine band, and joined the RSGB in 1971, licenced in Jan. 1974, after pssing both RAE and morse test at the first attempt. Connie describes herself as "technically illiterate" but hopes that she will soon join the "genuine QRPers" by building some homebrew gear. At present she runs a KW2000, single 6146 at 90w pep and an EA12 to 132ft end fed wire. Main interest is 160m CW, with the odd trip onto 80m SSB for the Leeds White Rose RS Net. Connie is an active member of the White Rose Club and an RSGB area rep.

(P.S. Connie is also a good opertor with a typewriter, and types the address labels for each issue of SPRAT, which from my point of view is a great service to the club. Connie has also typed the stencils for the full members list and Gus' article on ATU's in the last issue. Keep your eye on SPRAT, any good typing is G4CUY, not G3RJV !)

WHAT ABOUT A TALK ON QRP TO YOUR LOCAL CLUB ? I recently gave a talk to the Nottingham ARS, and for this talk I compiled a folder of items, information, photos etc. Any member wishing to give a talk to a local club is welcome to borrow this folder for the duration of the talk. Available from G3RJV with reasonable notice.

DID YOU KNOW that the small clip available from W.H.Smith & Sons, called letter clips are ideal for holding the pins of IC's (over the top) when soldering ?

SIMPLE ANTENNA TUNING UNIT FOR QRP TRANSMITTERS

By Hans-Joachim Brandt. DJ1ZB. (First published in German in QRV. Feb '75)

It has become common practice to design all transmitters for a 50 ohm load impedance, because coax-fed antennas are less critical in respect to bci and tvi. With QRP rigs however, these problems are less severe, and for QRP portable operation the 'old fashioned' wire antennas are often more practicable than coax fed aerials.

The simple unit shown in the diagram is capable to match end-fed wires and the windom antenna to 50 ohms or to any other value depending on the resistor being used for R3. There is just one condition that must be met: the antenna impedance must be some-what higher than the coax impedance.

The values for C1, C2 and L permit operation from 3.5 to 29 MHz, for 160m, they should be doubled. The coil switch must have at least 5 to 8 positions for sufficient L variation.

For tuning indication, a resistive bridge has been incorporated. It may be omitted, if a low power SWR meter is available. If R1 and R2 have the same value, and the transformed antenna impedance has been made equal to R3, no voltage can be detected by the diode circuit D1/D2/C3/C4. If 1 to 2 watt resistors are used for the bridge, qrp transmitters can be fed into the tuner at full power. As long as the antenna is not yet tuned, the resistive load of the bridge will help those transmitters which are sensistive to extreme mismatch.

M is a meter for phono volume indication. Because the data of these meters vary widely, no exact values can be given for the resistors R4, R5 and R6. R4 should be at least several kilo-ohms. R5 depends on the sensistivity of the meter (25 to 100 K) R6 is to act as a meter limiter in co-operation with the silicon diode D3. For those who like simplicity, however, D3, C5 and R6 may be omitted (C5 is to avoid rf pick-up by D3).

To determine R6, it is replaced by a variable resistor (10K)and first set to minimum value. The rf is applied to the bridge with C1 set at minimum and R5 adjusted so that the meterreads full scale. If R6 is being increased and R5 re-adjusted formaximum reading, a value will be reached which makes itmimpossible to increase the meter reading by decreasing R5,·becausethe diode D3 will take over any additional current. The value of R6 is then measured and a fixed rsistor soldered into thecircuit.

For tuning, the slide switch is set to the 'Tune' position andrf from the transmitter fed to the bridge. R5 is adjusted for fullmeter reading, just before limiting. Then C1 and C2 are tuned anda suitable position of the coil switch is selected, until the meter shows a dip. By further adjustment of C1 and C2 the meter reading can be made to almost zero (a bad zero may indicate high harmonic leved from the transmitter !). The exact null is very sharp. At last, the slide switch is set to 'Operate' and the transmitter re-adjusted for maximum output.

If C2 should reach maximum or minimum value during tuning, the L switch must be changed correspondingly. If C1 should reach maximum, the antenna impedance is too low to be tuned. The antenna length should be varied somewhat. If C1 reaches it's minimum value (possible on the higher bands only) the antenna impedance is too high, and antenna length variation should also help.

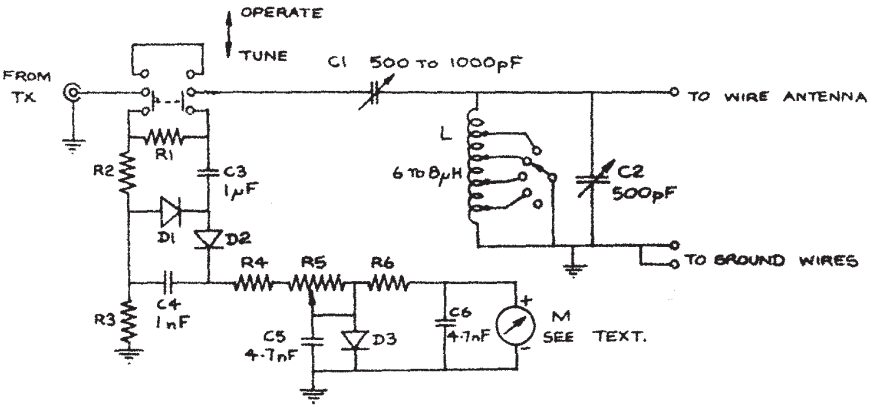
****

ATTENTION HW 7 OWNERS !!! (and other TTX owners too)

I have just received from Ha-Jo Brandt, a very good article on HW7 modifications. He considers these modifications to be the minimum necessary to operate the HW 7 satisfactorily in the EU area. They are Part 1 - Doubly Balanced mixer and receiver muting, Part 2 - R.I.T. Part 3 - Oscillator shift compensation. Part 4 - Hum suppresion in the HWA-7-1 P.S.U.

I plan to publish these, probably at a couple of parts per issue, from the next SPRAT onwards. Full PCB details are included, and it will be possible to obtain transparancies from the club for those who can manage photo-etching of their PCB's.

ALSO COMING IN SPRAT—— How does G3DNF manage to work PY with 2 watts ? Gordon swaers by his aerial - THE LOOP AND LEG - Full details coming in SPRAT.



R1 = R2 = 47 Ω OR 56 Ω OR 68 Ω D1, D2 GERMANIUM DIODES

R3 - THIS RESISTOR MADE UP AS FOLLOWS:

2 × 100 Ω IN PARALLEL FOR 50 Ω INPUT IMPEDANCE
2 × 120 Ω IN PARALLEL FOR 60 Ω " "
2 × 150 Ω IN PARALLEL FOR 75 Ω " "

D3 SILICON DIODE

R4, R6 - SEE TEXT R5 VARIABLE RESISTOR (POTENTIOMETER) SEE TEXT

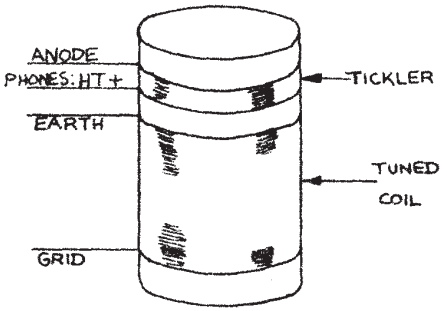
Simple Antenna Tuning Unit to match Random Wires to Transmitters requiring 50Ω Load By DJ1ZB

KA5 3.7.1975

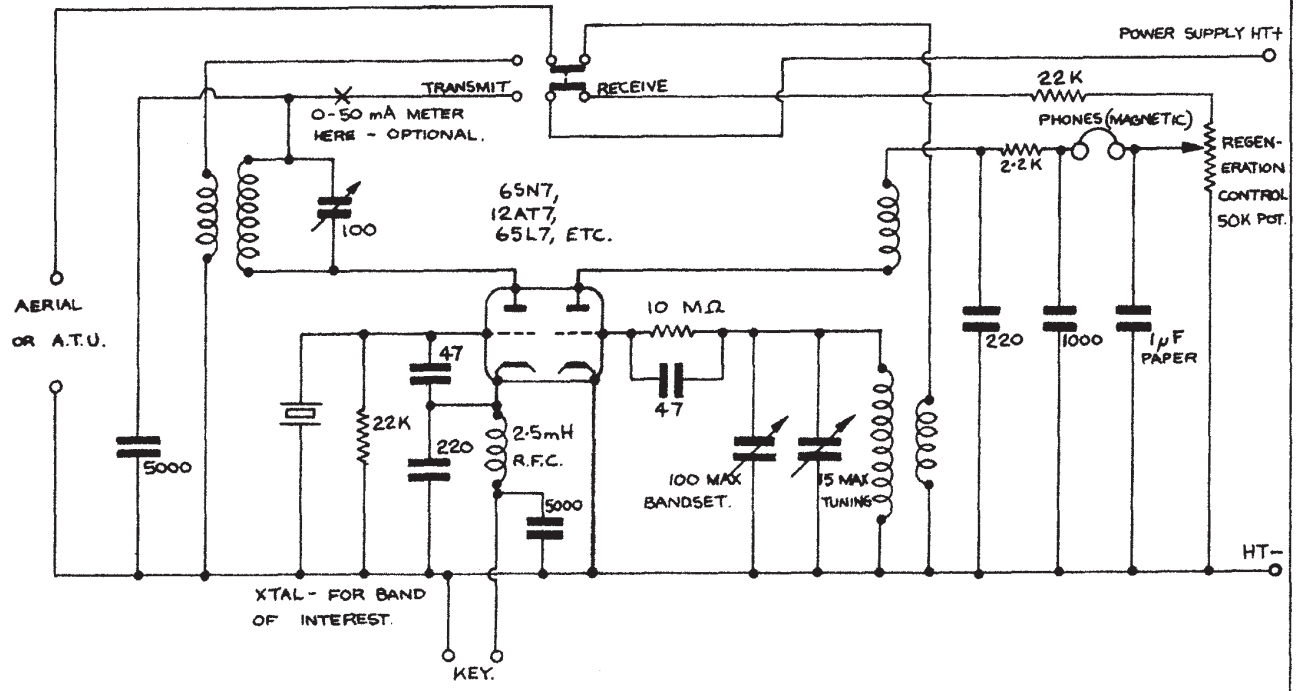
ONE TUBE STATION by W9SCH.

BAND	No. TURNS.
20 M	6
40 M	12
80 M	24
160 M	50

Coil suggestions :



HOW TO CONNECT COILS TO ASSURE OSCILLATION. (BOTH WOUND IN SAME DIRECTION)



A ONE TUBE AMATEUR STATION, COMPLETE.

BY W9SCH

A COMPLETE AMATEUR STATION WITH ONLY ONE TUBE.(could it be VALVE ?!)

By C.F. Rockey. (W9SCH)

For those of us who long for simplicity, here is a suggestion. One could hardly think of a simpler PRACTICAL setup.

Don't laugh; those of us who have used one extensively in former times can testify firsthand to the sensitivity and selectivity of a CAREFULLY built and operated Regenerative Detector. Young fellers brought up in this tinselled age may be in for the surprise of their lives when they try one, after all, when set 'on the edge' of oscillation, a single tube with positive feedback cab easily realize a voltage gain of thousands IN PRACTICE. (Ask any oldtimer the number of VK's and ZL's he's copied with one, back in the 30's - good ideas are slow A-dying !)

One half of any double triode can run nicely, on CW, at 100 volts and 20 MA. This is two watts input, and any active QRPer knows what can be done with two watts input and a good antenna; no arguments about this.

One of the genuine deficiencies of the regenerative detector is it's poor strong signal handling capacity. As a result, one cannot 'spot' one's own transmitting frequency, normally when using one. This precludes the use of a VFO in this setup - ergo - the transmitter must be crystal controlled, if we are not to run afoul of the law.

Please remember that the schematic diagram is just a SUGGESTION. Feel free to modify it in detail, as your taste or experience justify. (No GOOD radioman ever follows a description literally anyway, rather he uses it as a stimulus for his own thought, usimg the parts at hand - so it should be in this case.)

The electronicically boisterous condition of theamateur bands in the U.S.A. precludes success with crystal controlled qrp here (we've tried it, and its 'bad news'). Therefore, we hope that either someone in the U.K. or Europe (where the bands are more tranquil, we trust) will try a rig of this sort, and report upon his success therewith. To try such a rig in the U.S.A. is to ask for a case of frustrated fidgets, or worse.

SUGGESTED COIL DATA - see drawing.

For a tuned-circuit inductor suitable for either transmitter or receiver, use B&S gauge No. 22 to 26, close wound on 1.25 inch (3.2 cm) former, as diagram. (Suggest one gauge less for S.W.G. - G3RJV.)

FOR THE RECEIVER: START OUT WITH a plate tickler coil of about 1/3rd of the tuned circuit turns and remove for smoothest regeneration control and best signal strength. The antenna coil may be one turn for the 20, 40 and 80m bands abd, say, 5 turns for 160m. Keep the antenna coupling LOOSE for best stability and freedom from strong signal blocking. Adjust individually for best performance.

FOR THE TRANSMITTER: One or two turns around the 'cold end' of the tank coil, should suffice for antenna coupling. Adjust individually for best keying and output.

****

NEW DATA SHEET +++ NEW DATA SHEET !!

Thanks to the kindness of G3NTM and the valiant photocopying of Gwyn Williams, the club can offer prints of-

THE TUCKER TIN MARK II By ZL2AMJ (Electronics Australia - Feb. 1972)

This is ' an SSB rig of SIMPLE DESIGN ' - a phasing rig using only 3 boards and capable of up to 7 watts pep. Full constructional details are given. I have had a little experience of 5 watts of SSB on 80m and 20m and have been pleased by the results, in what is usually thought of as being a QRO mode.

The complete article will be sent to as many members as I have copies (abt 50) To make matters easier will you please send a FOOLSCAP S.A.E. to G3RJV asking for the 'Tucker Tin'. I would be pleased to hear of results and ideas for this rig, as indeed I am about any 'club' qrp rigs.

There are still limited numbers of the former data sheets named in past SPRAT's.

HAVE YOU GOT CIRCUITS IDEAS ETC. FROM 'DIFFICULT TO OBTAIN' SOHRCES ? I WOULD BE HAPPY TO MAKE THEM INTO CLUB DATA SHEETS.

++++++++++

Have club DSB users read the SWM note about that mode?..... it's gone !

Advert:

-

QRP NEWS QRP NEWS QRP NEWS QRP NEWS QRP NEWS QRP NEWS QRP NEWS QRP NEWS

QRP ACTIVITY WEEKEND :

This new event comes of an exchange of letters between Gordon, Gus and myself. It is indended as a chance to get on the air, work as many fellow members - QRP to QRP - as possible , see what QRP activity we can stir up, and have a lot of fun.
The event will last for two days Sept. 25th and 26th. It is suggested that as many members as possible come on the bands. Choose any band to suit the conditions try using the International QRP Frequencies (3540,7030 or 7040,14065,21040,28040) call "CQ QRP" or listen for club calls. Look up and down the band a little for any "rock-bound" activity. Please try to give accurate reports - don't flatter ! A 100% QSL Policy would be helpful, for the "Worked Members Award". Arrange skeds if you wish. This is NOT A CONTEST so please don't rattle along at contest speeds- give the newer calls a good chance to join in. JUST JOIN IN AND ENJOY YOURSELF. THIS IS NOT DESIGNED AS A CONTEST OF ANY SORT : THERE ARE NO PRESSURES : SO YOU CAN "RAGCHEW" OR WORK AS MANY STATIONS AS YOU WISH.
So that we can judge the success of the event - I would like to receive any logs, comments, conclusions etc. which emerge from your activity. This may also give some idea about possible qrp/qrp activity on the busy weekend bands.
Although (repeat) this is not a contest, we may award one or two small prizes to the more interesting/amusing/useful reports and comments sent to G3RJV.
So - Get on the bands yourself, Encourage non-members to give it a go - Have fun

HPE CU QRP SEPT. 25-26 th.

WORKED MEMBERS AWARD...The first certificate has been won by Gordon, G3DNF. Not the only holder for long, we hope after Sept. 25-26 !

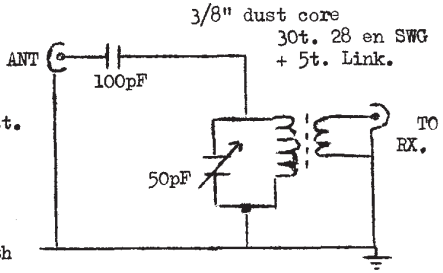
I am reminded by GW8WJ and G2CAS that keeping the BAND PLAN is very much in our own interests - so encourage others, by being Gentlemen ourselves !

G2NJ says he will remember his 80m QSO with G3JKY/P on 11th April for two reasons
1) G3JKY/P operating from London was using only half a watt
2) It was his (G2NJ) QSO number 34,000.

WELL DONE !! No sooner had member 142 (James Finnagan - Armagh) told me that he had become GI8KYB, than he wrote to say that he is now GI4FFL. James is using a 'modded' 19 set with good results - He asks, Has anyone in the club any 19 sets, 19 set PSU's or spares or bits and pieces ? 65, Barrack Hill, Armagh, N.I.

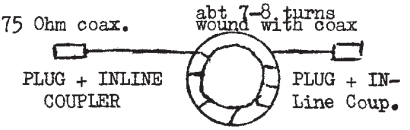
MEMBERS NOTES AND IDEAS :-

Miles Salmon. G2ckm :
I have recently built the RADCOM Feb.'75 Direct Conversion RX by J.Young with some slight modifications which may be of interest. I built the circuit ommitting the AF amp. I get signal strength in Excess of Comfort on Stenographer Stethoscope type earpieces. I have put an ATU on the front end to peak the RF with various odd lengths of wire. The SSB quality is superb comparable with the main station FT200. I have extended a mini co-axial point from the emitter of the oscillator buffer for a TX VFO.



On the front end of the ATU I use a wide band RF amp or active aerial to boost the RF for use with a 3 foot whip (broken car antenna) In hotels in Europe I was able to copy W and 6W8 as well as my 80m SSB skeds in the U.K.

Alec Anderson. GD3HQR :
I was troubled recently when a local QRO station was breaking in on both my QRO rig and my HW7. I tried as a desperate measure to include in the coax from my rig one of the anti-TVI devices I have for TV sets. This is just a length of 75 ohm coax toroidally wound on a ferrite ring - thus: It reduced the local breakthrough by a good 50% on both rigs and on a later test I found that the hum on the HW7 from the Heath Power Supply had been reduced to almost zero ! So since then I have left the device in circuit on both rigs. The ring is a SPACEMARK Ferrite Ring - about 2" dia.



P.S. GD3HQR will always welcome a 'buzz' from any QRP station on any band.

G3ZOF :
Articles for Info: 'Pipsqueak' G3XWG. RADCOM. AUG. 1973.
Transistor Low Powered TX. WIRELESS WORLD. OCT. 1968

*********MEMBERS WANTS AND AD'S??********

G3ZOF would like would like a source for the BUY11.

GM4EWM : Wanted 80m CW crystals (CW section) to BUY or SWOP for Hc6/U : 12.700, 11.155 8097, 8081, and ATM 47.125, 47.375.

**********Please send wants, swops, and sales for free inclusion in SPRAT**********

80M QRP-QRP SKEDS.

Last issue G3ANQ wrote about QRP CW work and invited G3DWW and GI3XZM to try (Monday evening) skeds over a 380 mile path. To date 4 skeds have been tried and contact established each time, but QRN and commercial QRM so far remain undefeated and only a limited amount of traffic has been passed. GI3XZM's RX and G3DWW's antennas are presenting problems and the skeds have been interupted to allow improvements to be made, but hopefully they will resume with more success !

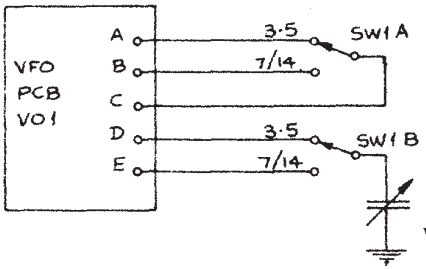
GI3XZM would like to hear from anyone wanting QRP-QRP contact with GI later in the year. Write to Des. Vance, 10 Appollo Rd. Portstewart, Co. Derry or telephone 0265 83 3243.

****

REMEMBER THE QRP FREQUENCIES :
3540 - 7030 & 7040 - 14065 - 21040 - 28040 - all plus or minus 5KHz for QRM.

REMEMBER THE G-QRP-CLUB ACTIVITY TIMES:
SUNDAYS 1400 onwards (Clocktime) on 3540 to 3550 - Look for members calls or call CQ QRP. Also G2NJ and sometimes other club members are on around 3575 at noon most weekdays.

KEEP 2 METRES CW ACTIVITY GOING:
Have you tried 2m CW with QRP ? A fair number of stations seem to be on CW on Monday evenings. Why not build a CW version of the G8EPE rig. (Data sheet from G3RJV)



NOTE : SW1 IS THE EXISTING ON/OFF SWITCH WHICH HAS THE POWER LEAD DISCONNECTED FROM IT AND WIRED STRAIGHT THROUGH.

FIG. 1.

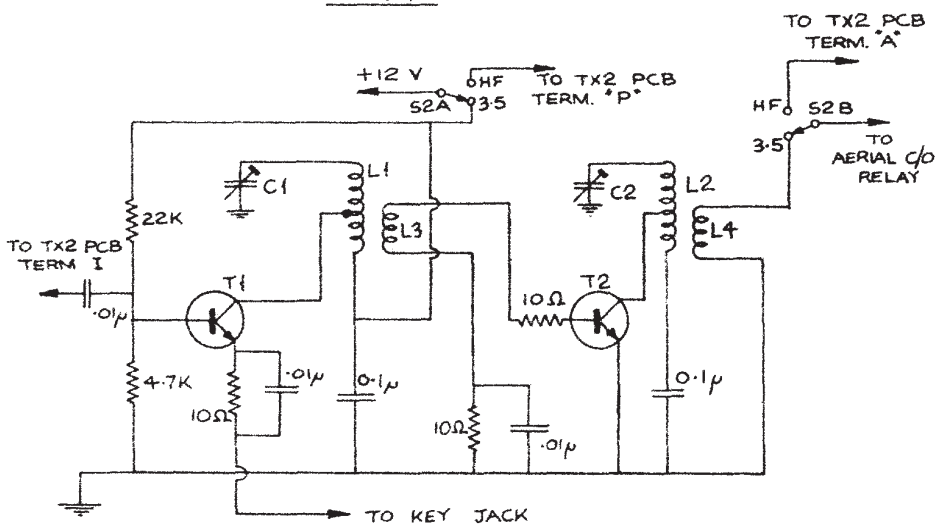


FIG. 2.

C1, C2 = 500 pF trimmers
L1, L2 = 35T tapped at 25 turns on T68 toroids all 24SWG
L3, L4 = 15T close wound over L1, L2, all 24 SWG all enamelled wire
T1, T2 = 2N3053 with clip-on heat sink (see note in text re T2)
S2 = this switch was previously the OPR/TUNE switch. ~use OPR position for 3·5 and TUNE for H.F.

MAKE YOUR PM3A INTO A PM3X by G8PG.

Adding 80m to the PM3A is a fairly simple operation if the following sequence is carried out :

CAUTIONS 1. Before attempting the modifications ensure that you have available. the correct, double-ended hexagonal trimming tool to re-align the VFO.
2. When modifying the wiring to the front panel switches, exercide great caution to avoid damaging the drive dial cord by touching it with the hot soldering iron.

Start by making the modifications necessary to convert the receiver to 80m operation which are as follows:

Disconnect the 12 volt leads to the ON/OFF switch, solder them together, tape them up and tuck them out of the way. If desired, fit an ON/OFF switch in the 12 volt + lead between the battery and the battery plug. Using the two wafers of what was the ON/OFF switch, wire the internal wiring shown in Fig.1. to the VFO module. Use the ON position for 3.5 MHz and the OFF position for 7/14 MHz. On completion of the wiring, set the switches for 7 MHz operation and adjust the lower slug in the vfo coil screening can (reached by passing the small end of the trimming tool through the other slug) to restore the 7MHz calibrations. The additional wiring capacitance will probably shift the calibration by several Hundred KHZ. Next, switch the old ON/OFF switch to its 3.5 MHz (ON position) setting the RX RF peaking control to maximum capacity. Signals should be audible. Adjust the upper core in the vfo coil can, using the other end of the trimming tool, until the 7 MHz point corresponds to 3500 KHz. It will then be possible to tune over the 80m band. If the rf peaking control will not resonate on 3500 KHz, adjust the slug in the RX mixer module (MX1) until it does peak. The coil/capacitor combination are designed so that 14 MHz resonance occurs at almost minimum capacity, on the RF peaking control and 3.5 MHz at almost maximum capacity. Note that for 3.5 MHz operation the left hand 40/20 wavechange switch must always be in the 40 position.

To convert the rig to provide a 3.5 MHz transmitter facility the TUNE/OPR switch must be converted into a drive/PA changeover switch, and an 80m driver/PA board must be constructed. This board must be of a suitable size to fit into the space above the existing hf band driver/PA board, (TX2) and should be fitted with lugs which allow it to be attached to the brackets which support the board which mounts the changeover relay and its delay circuit. Almost any low power driver/PA circuit is suitable. Fig. 2 shows a simple circuit using two 2N3053 transistors which will produce a couple of watts. With this circuit do not hold the key down for more than 15 seconds at a time to avoid overheating the PA transistor. The wiring of the ex-TUNE/OPR switch (which was only a shorting switch for the key, and thus not of much use) is shown in Fig 2. One bank on the switch is used to switch the 12v+ supp y between the existing TX2 board and the new board, and the second bank similarly switches the aerial. As only one board can have 12v on it at a time, the keying terminals of both boards can be permanently connected to the key jack, and the drive inputs from the vfo buffer/doubler board (AC6 board) are also permanently connected to both boards. As the new driver/PA has no front panel controls it is adjusted to give maximum drive into the station atu with the case off the PM3A (now a PM3X!) and then left at these settings. If adjustment is made at 3540 KHz the fall off of power at either end of the cw band will be small.

While making these mods there are two others which are well worth while, the first of which I described some time ago in the MILLIWATT. If a little heat is applied to the cement at the back of the front panel (using a soldering iron) it is possible to remove the TenTec emblem, leaving two small holes. These can be enlarged sufficiently to take two midget sockets. The lead to the A terminal on the RX mixer board can then be unsoldered and connected to one of these sockets, and a new lead run from the second socket to the A terminal on the board. It is then possible to either plug in a small link, giving a direct connection, or a series capacitor to reduce the aerial input. I use a Phillips 3-30pF trimmer and, while not providing a complete cure, it eliminates a loy of the BC station splashover problem encounted with this RX. The second mod is even more simple - just wire a 120 pF capacitor in series with the vfo tuning capacitor, and re-align the RX as above. It now just nicely covers the cw portion of each band, with much improved spread. This bandspread is not quite linear. Note - regarding the 80m mod, with 2-3 watts, 21 EU countries have been worked in 3 years - so it does work !

J.BIRKETT

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MEMBERS. ADDITIONS AND CHANGES. SINCE EASTER 1976.

201	WB2EUF.	Kenneth Land 337 Mile Harbor Rd. East Hampton L.I. N.Y. 11937. U.S.A.	QRP General QRP Contests
202	G4EUW.	Bruce M. Keeling 135 Tower Street,Brightlingsea Colchester, Essex.	HomeBrew 160/80
203	WB9LGZ.	Brice Flockenstein. R.R.7. Box 39, Greenfield, Indiana. 46140. U.S.A.	HW7 + Audio Channel Award Chasing Contests.
204	GW3HAI.	Chris Mayfield. c/o 39 Parkdale, Bounds Green Rd. London.N11 2HB	Home construction. Aerials etc.
205	G4FAM	E.A.M. (Ted) Minton. 17 Owen Ave, Long Eaton. Nottingham.	HW7 QRP CW
206	G4DGX	Jim Stirrat. 35 Sandringham Rd. Wordsley, Stourbridge, W. Midlands.	HW7 Homebrew 80m TX EC10 PR40
207	ZC4AU	SSGT. Gerry Brennan. Atlo, RAF Akrotiri. BFPO53. Cyprus.	General QRP KW2000 (On 10w) Hon.Sec. Cyprus ARS.
208	EIØCF G4DPE	Finbar O'Connor. Malin Head Radio, Malin Head, Lifford, Co.Donegal. Eire	80m QRP Xtal Cont. TTX.
209	F3IM	Paul Hecketsweiler. 'Les Coccinelles' Pav.43, 57-SAINT AVOLD. France.	QRP techniques.
210	G5OW.	William (Bill) Oldbury Wigg 152 Derby Rd. Long Eaton, Long Eaton, Nottingham.	QRP CW Home Constr.
211	G3AHS	Dawson G Thompson 17 Fairbank Way, Baughurst, Basingstoke. Hants.RG26 5NT.	160/80 3w transceiver. HW7 Eddystone 888 160/80 Valve TX, B40C.
212	WBØHMN.	Joseph P. Frommel Rt.2, Thayer, Missouri 65791. U.S.A.	Building 'old' tube type gear 160-20m CW QRP-QRP contacts.
213	G4EYE.	Anthony Gethro Free 3 Litchfield, Dovercourt. Essex. CO12 4TT.	CW-160/10m. FM 2m TTX's 160/80 VFO .5to2watts VFO/XTAL 20m 1watt, .2w 2m FM.
214	GM3WIG.	George Shankie 8 Ettrick Terr, Hawick. Roxburgh.	General QRP work.
215	G3KII.	George Derek Lively 26 Priory Rd. Cheltenham.Glos.GL2 5AA.	General QRP Operating/Constr.
216	G3XPM.	Richard H. Tinson Newington, 92 Leeds Rd. Harrogate. N.Yorks.HG2 8HB	TenTec XPM-1, PM3 (with mods) CW on DX bands + 2m 4yrs in W1 with 2w. qrp.

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217	G4DRB	Byeways, Mill Lane,,Crowborough. Sussex. TN6 1DU. BILL PICKERING.	General QRP
218	G3UWZ	Maurice Newman 26 Highbank, Westdene Brighton. Sussex BN1 5GB	Home Constr. Design & Const of Small Aerials
219		J.C. Brett Ride 20 Paradise Lane, Hall Green Birmingham. B28 0DS.	Home Const. RAE etc.
220	WN4AEC	Sam Roy Morgan Jr. 330E Salisbury St. Asheboro, N.C. 27203. U.S.A.	/P working,Antenna design Skeds with EU stations. Home Constr.
221	W8LCU	Ralph L. Burch 281 Crescent Dr. Portland. Mich. 48875. U.S.A.	General QRPp
222	OE1SBA.	Ing. Bruno Settinger Franz Koci Strasse 47/7/29 1100 Vienna, Austria	Ten Tec Argonaut for /M SSB /p at home

197 OZ8SO. NEW QTH Skrejrup 8410-RØNDE. Denmark.

005 G2BS NEW QTH 39 High Riggs Barnard Castle, Co. Durham.

124 Mistake in Name - WOOD not Ward.
064 WA2TLQ NEW QTH 5800 Elkridge Heights Rd. Elkridge. Md.21227 USA

047 G3ZXK/PØHX/C31DV. NEW QTH 8 Rue de Soule,31520 Ramonville St.Agne. France

079 Callsign K7BD not K9BD.
63 BP not BF Castle.
142 NEW CALL - G4FFL.

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STOP PRESS NEW MEMBER

223	VS5MG	Michael David Groom Police HQ,Royal Brunei Police Gadong, Bandar-Seri-Begawan, Brunei. Borneo.	Constr. QRP transceivers Antenna Experiments

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MEET THE MEMBER.....
FINBAR O'CONNOR. EIØCF/G4DPE. 27 yr old radio officer at Malin Head Coastal marine radio station. Trained as radio officer 1966/68, worked with Marconi Marine at sea, then Ministry of Defence and freelance on Greek tramp cargo ships. Test technician with PYE in Dublin 1974, until returning to government work. First came on bands in 1971.with commercial gear, then disallusionment led to interest in QRP and home brew rigs. Would like tests with GI and S/W GM members.

PETER SILS. WB8PJR. aged 25, licenced in 1973, just past Advanced Class Licence. TenTec Argonaut with 5 watts. Anttenas 2el triband beam/Quad at 40ft. ground mounted trap vertical for 80 & 40m. Hope to gain QRP DXCC - 32 countries so far. Born in Eccles, Near Manchester, moved to States with family at the age of 9. Revisited birthplace in 1970 and hopes to return in the future with XYL.

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Although I have quite a few MEET THE MEMBER items in hand, I am always pleased to receive details from members for this section. Also any other newsworthy items G3RJV.