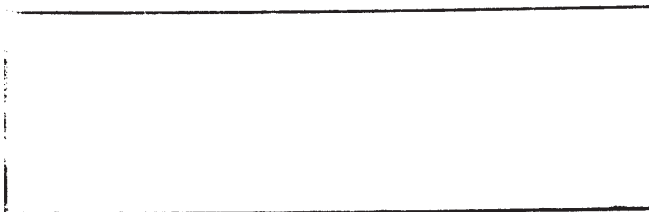
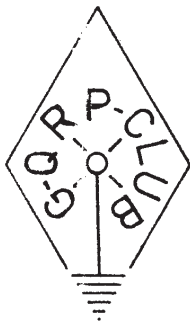


PRINTED RATE.



REV.G.C.DOEJS (G3RJV) "WILLOWDENE" CENTRAL AVE. STAPLEFORD. NOTTINGHAM. NG9 8PJ.

Devoted to Low Power Radio Communication



S P A A T

SUMMER 1978

ISSUE 15.



Cheap SSB Generator.
HW8 Improvement.
More Audio Filters.
Simple SWR Bridge.
Silver Tern Receiver.
Putting a Rig On Twenty.
A Bit Of Their Own Back.
QRP News.
Club News.

I3ESX Station.
Homebrew 20m TTX behind Key.

Rev. G.C.Dobbs (G3RJV) "Willowdene" Central Ave.Stapleford.Nottingham. NG9 8PU.

Tel: Nottingham 394790.

EDITORIAL NOTES:

The summer has so far proved to be very reasonable for HF band operation, as many members have written to confirm. At G3RJV, the trapped doublet has gone up, but lack of time has not really given me a chance to prove its worth. It has worked well into the States (579 from W4) and seems to get out to the east (569 from UH8). The next task is the long wire and so back to 80m again.

Alan and I are concerned about a number of members who owe back subscriptions. It has been decided that when a member is overdue after two issues (nearly 6 months) he will automatically be excluded. The subs system is simple. Members pay by number after each issue of SPRAT. After this issue (Summer) numbers 121-154, 223-232 and 293-325 are due. Numbers 91-120, 201-222 and 272-292 were all due after the last issue, so if any members with those numbers, who have not paid, do not do so before the next issue, they are excluded. With increased costs, we think that this is the only fair system. Subs please to Alan Lake.

Finally, again a reminder about the club operating times on 80m - Sundays on 3540 * QRM from 2pm clocktime.

best 73 and hpe cu qrp

G3RJV.

CLUB DATA SHEETS:

Available to club members for a large stamped addressed envelope to G3RJV.

Tucker Tin MK I valve SSB rig.
Minituner (40/80 RX)
HW7 modifications (various)
HW7 S Meter (a new sheet)
Minimite all band QRP TTX
SST1 transceiver for 40m
G8EPE 2m AM Transmitter
Club Awards Scheme

Tucker Tin MK II Transistor SSB rig
G3IGU 80m transceiver.
HW8 modifications (various from the US)
HW7/8 ATU
Transistor 1 - simple one stage TX
Ultramountaineer - transceiver for 40m
One Valve xtal controlled Transceiver
MFJ Audio Filter information/Circuit.

CLUB MORSE TRAINING COURSE:

Send TWO C90 cassette tape blanks and return postage, giving full name and QTH in block capitals to:

W.G.Jones,24 Underhill Cres. Abergavenny.Gwent.S.Wales.NP7 6DF.

SUBSCRIPTIONS: To Alan Lake (G4DVW) 7 Middleton Cl. Nuthall. Nottingham.
Cheques made out to: G.C.DOBBS RE: QRP CLUB.

CLUB OFFICIALS:

CHAIRMAN: Dr. Gordon Bennett. G3DNF.
CONTEST & AWARDS MANAGER: Mr. A.D. Taylor. G8PG/GW8PG.
TREASURER: Mr. A. Lake. G4DVW.

SPRAT:

EDITOR: Rev.G.C.Dobbs. G3RJV.
TEXT TYPING: Mr. A.D. Taylor G8PG and G3RJV.
ART WORK: Mr. A.W.McNeill. G3FCK and G3RJV.
ADDRESS LABELS: Connie Wade. G4WUY.

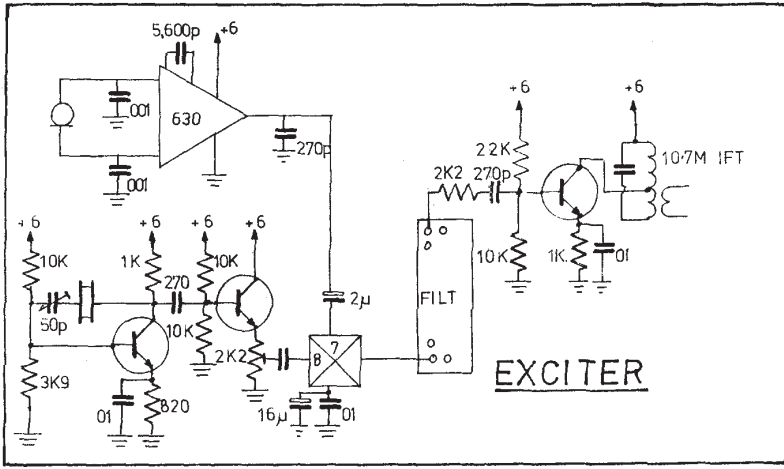
A CHEAP S.S.B. GENERATOR

Ian Keyser G3R00

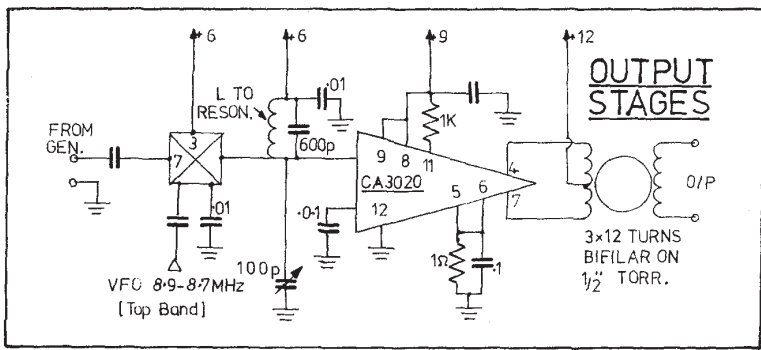
A small cheap generator was constructed using two of the many available 10.7MHz filters (Ambit) intended for FM use. The idea behind the project was not to build a rig but to prove that reasonable SSB could be produced, for this reason full constructional details are not given.

The filters used were 10.7± 3.75KHz units, one being pulled apart to use the crystals in the carrier oscillator. If a wobulator is available it would be wise to see which filter had the best slope for the generator itself.

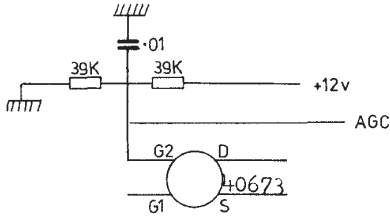
The unit was tested for USB, however the carrier crystals could be switched to produce both sidebands. The crystals are set 20dB down the sides of the filter, and this, with the balanced modulator gave over 45dB of carrier suppression. The output was 100mV into 300.



The unit was tested 'on air' by driving a SL641 with a low 'Q' tuned output which in turn drove a CA3020A to 1 watt on Top Band. Reports were all 'Good, clean but slightly tippy SSB'. Tests later proved that the audio was 3 dB down at 700Hz, but by sighting the crystal at 15dB down, the 3dB point came down to 500Hz. Using 'Birkett IC Specials' this makes a very cheap TX if you can raid friends junk boxes!



HW8 Improvement Hal Graepel EI1DA



Hal writes:

The HW8 receiver had always struck me as insensitive to weak signals. Looking at the circuit I realised that the product detector has a threshold (don't know what it is) which relies solely on front end FET (MPF105) for drive. Now the MPF105 has a slope of only 2000 mHo. Being annoyed at having to run the RX fullthrottle AF and RF all the time, I decided to use

a modification suggested by the Fox Tango club for the FT101B, to change the first transistor for an RCA 40673, with a slope of 11,000 mHo. I provide the necessary G2 voltage for this transistor via a potential divider from the B+ 12v line. I now get the same output with the RF gain at 0800H that I used to get with full throttle. Not to mention that I now copy signals at S5 which I could not hear before. Even on 7MHz at night there is an improvement with the RF gain set down.

AGC could be applied, but an AGC amplifier would be required.

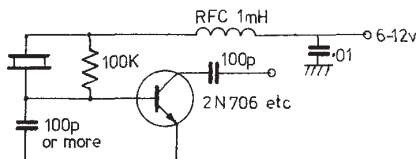
PUTTING A RIG ON TWENTY Gary Price W6IRA

An adaptation of the 40/80 meter transmitter by Caringella (Transistor Amateur Radio Projects - Sams) for use on 160 m was given in the SPRAT in the the Summer of 1977. If reduced output power is acceptable, the original circuit can also be used on 20 meters with 40m crystals (or VFO) by doubling in the final amplifier stage. Output power on 20m with this arrangement was measured as one-fifth that on 40m. For DX work, the superiority of 20m with recent sunspot activity, minimizes the reduced power penalty--both ZL and JA have been worked here on 20m, but the former remains elusive on 40m. The same antenna, a base-loaded groundplane vertical mounted on the roof is used on both bands.

In addition to a suitable antenna, 20m operation requires only the winding of an appropriate coil for the transmitter final amplifier stage. As a guide, the coil used here consists of 9½ turns of no. 16 en. wire, close wound on a one-inch former, with a 1¼ turn link (note - the link is on the transistor output side, rather than the antenna side, since the transistor impedance is low relative to the 50 ohm antenna) The transistor should be well heat sinked. Experimentation with the turns ratio may be worthwhile; the above have not been optimized for best output.

SIMPLE ROCK CRUSHER. Note by G3RJV.

This simple circuit - been around for a long time - will usually get most large inactive crystals to oscillate. I have used it for calibration points with junk box crystals. Draws less current when it takes off - short out crystal and current drain should rise if its OK.



MORE AUDIO FILTERS

G13XZM

G13XZM confesses that poor concentration and broadband ears have made him obsessed with audio filters! In practise he rarely finds himself using the narrow band position on the "Cheap cw Filter" described in SPRAT, Spring 1977, which has lead him to believe that for many operators better value for effort is obtained by using a simpler filter based on a single 88mH toroid and one capacitor. With this approach the circuit for low impedance phones is similar to the " cw wide " position on the Cheap cw Filter (Fig. 1). The circuits used with high impedance phones (Fig. 2) are crude tuned transformers which to some extent compensate for the mismatch between the low impedance output of the average receiver and the high impedance phones. The values shown peak about 750 Hz. Using a 1uF capacitor gives a peak about 500 Hz (Which helps the discrimination of the human ear. It would be worth experimenting with even lower frequencies - say 250 Hz. Ed.)

Bridged T filters are common in transistor receivers, but are not often used in valve circuits. If the existing circuit of a valve receiver allows negative feedback from the output valve to the cathode of the preceding audio stage (that is, if the cathode does not have delayed avc and similar circuits also connected to it) then a feedback loop consisting of a Bridged T circuit will provide the required response. If the existing circuit is unsuitable a new audio circuit of the type shown in Fig.3 can be used to replace it, perhaps in association with the fitting of a product detector. (it also seems possible that the new amplifier could be built as an outboard unit. Ed)The 6AC7 valves were used because they were to hand, but other valves could be used in a similar circuit. The output is under 1W, but this is more than adequate for most uses. A power output valve could, of course, be retained, but dispensing with it reduces ht current drain , thus allowing a voltage stabiliser tube such as an OA2 to be fitted in the receiver. The values used in the circuit were arrived at experimentally, so no guidance is offered on the calculation of values for different valves or circuits. It is felt that if some mathematically gifted member could supply the design calculation information it would be most useful.

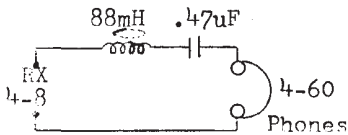


FIG.1

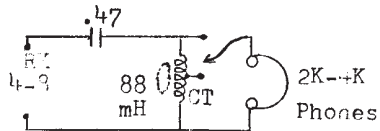
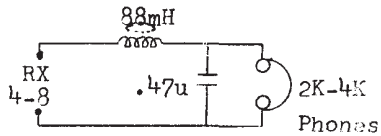
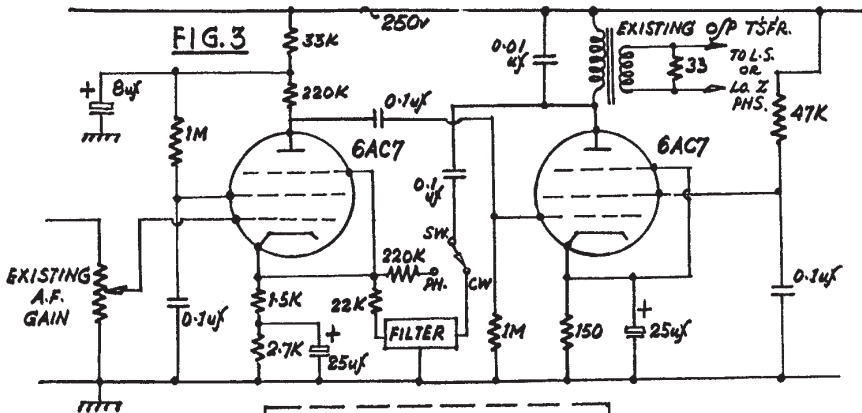


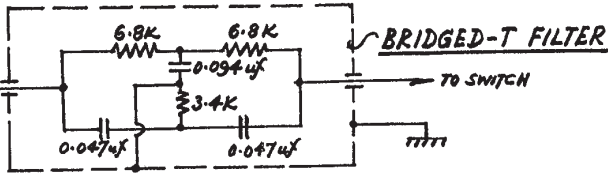
FIG.2

G13XZM AUDIO FILTER



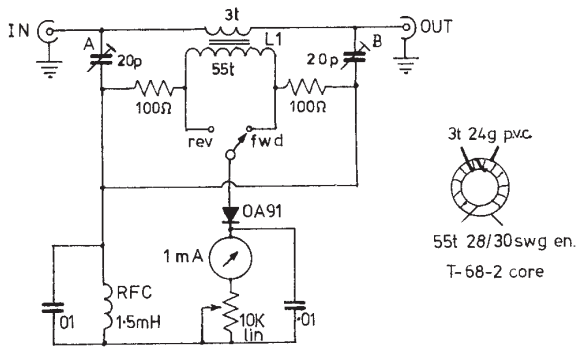
NOTE ~ CLOSE-TOLERANCE COMPONENTS BEST, IN FILTER TO 22K

USE $2 \times 0.047\mu\text{f} = 0.094\mu\text{f}$ (NOT $0.1\mu\text{f}$). USE $2 \times 6.8\text{K} = 3.4\text{K}$ (NOT 3.3K)



Simple QRP SWR BRIDGE

Tony Smith
G4FAI



Tony has sent this simplified version of the circuit I had in Short Wave Mag (G3RJV) some time ago. He does not use the DC amplifier. To adjust, terminate the bridge with a dummy load, feed in RF and, on REV, adjust trimmer A to best null. Reverse the bridge and repeat with B. This may be done several times on the highest band to be used.

WANTED _ MATERIAL FOR SPRAT. THE FILE IS GETTING LOW - HAVE YOU A USEFUL CIRCUIT OR IDEA YOU MIGHT SHARE, JUST NOTES AND A ROUGH SKETCH.

THE "SILVER TERN" 3-TRANSISTOR SUPER REFLEX RECEIVER

SM06259 (ex-SM7WK)

(Emil, SM06259, is now 71 years of age. He was SM7WK in 1929, and had achieved a 4W WAC by 1937. His list of DX heard on this receiver is very impressive, especially as his antenna is only 5 metres of wire nailed to the wall of a building in a very noisy location in Stockholm .)

The general method of construction and the circuit should be clear from the diagrams, except that Emil has omitted the aerial tapping switch from the layout diagrams. This switch was a late addition to improve performance on 21 MHz. There is room for it above the bandspread capacitor. When assembling the receiver note in particular that the receiver board (10-way tagstrip) must not be rigidly mounted on the panel, as this may cause microphony. Instead the board should be floated by means of sponge rubber or similar mounting pads. Emil stresses the need to use high quality capacitors for bandsetting and bandspread. Jackson Brothers capacitors controlled via Jackson epicyclic drives are recommended.

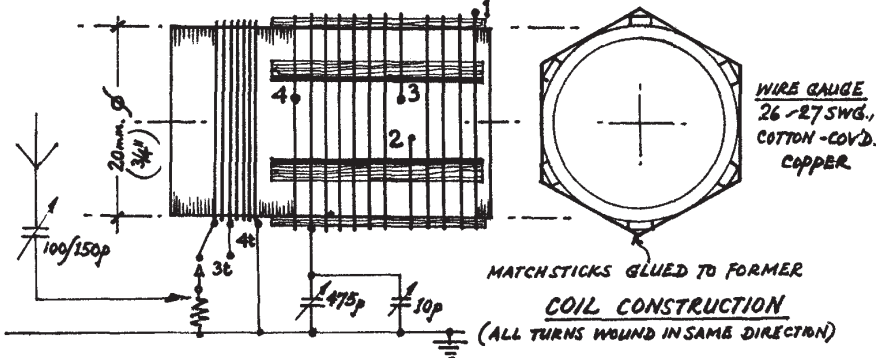
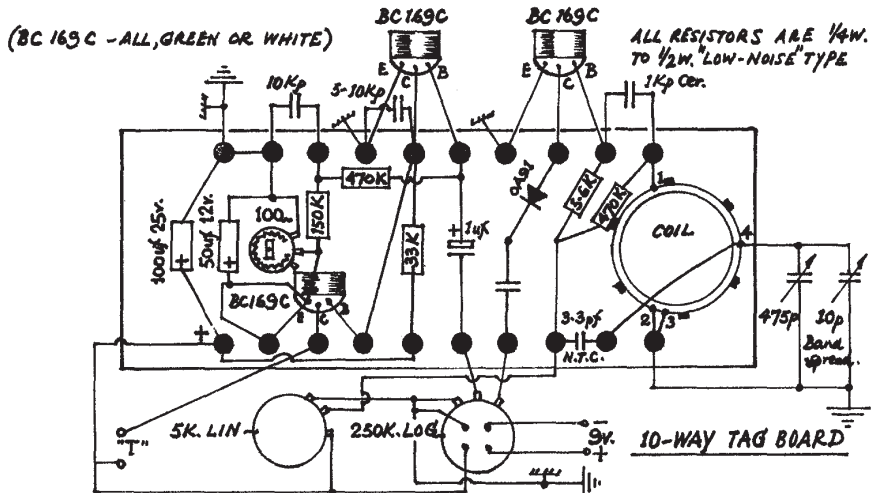
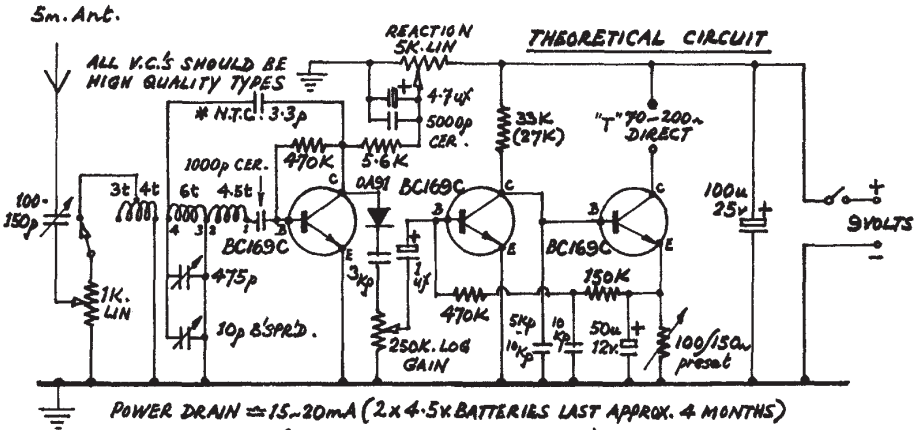
The coil is wound on an empty plastic pill container with match sticks glued around it as shown. It covers 5 to 21+ MHz. Certain "white" ("white spot"?) BCL69C transistors will not oscillate at 21 MHz, so if this type is used a transistor with high gain should be selected for the first stage. The other two transistors are not critical.

The differences between the original design and the modified front end shown in a separate diagram are as follows. The 4.7p fixed feedback capacitor is replaced by a 1-7.5 P ceramic trimmer, thus allowing the amount of feedback to be adjusted easily. This adjustment should be made with the 5K reaction control in its centre position, the antenna connected and the antenna series capacitor at its normal setting. The luf audio coupling capacitor has been replaced by a 3KP Milar capacitor, thus decreasing the bandwidth and improving cw reception. In the modified version the coil is mounted in a screening can. This can should have a diameter at least twice that of the coil former. Owing to his noisy location Emil has separated the aerial coil from the tuning/reaction coil, and put a Faraday shield between them. This consists of a grid of brass wires with one end soldered to the chassis. It eliminates all capacitive coupling between the coils, and Emil claims that in his difficult location it reduces electrical interference. In most locations it should be unnecessary.

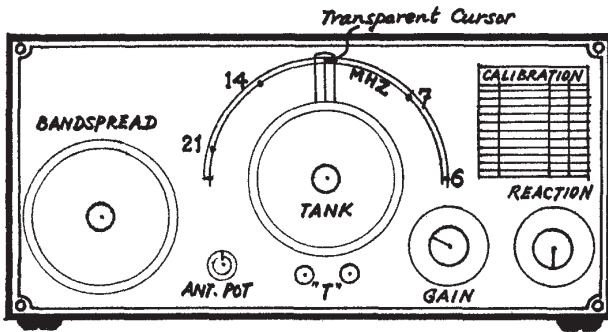
Emil does not state how he sets up the 100 ohm resistor in the output transistor emitter circuit, but it is suggested that it be set at maximum initially, then adjusted for best audio output.

In constructing this receiver build the first stage as if it were going to be used as a high stability VFO - the more rigid the mechanical construction the better will be the results. If the receiver goes out of oscillation at certain frequencies even with the reaction control fully advanced the trouble can usually be cleared by reducing the capacitance of the variable capacitor in series with the antenna.

"SILVER TERN"-3 TRANS.-SUPER REFLEX
15 TO 60 METRES "ALL-WEATHER" RX.
SM6259 (EX. SM7WK) ~ G. Q.R.P.C. 354

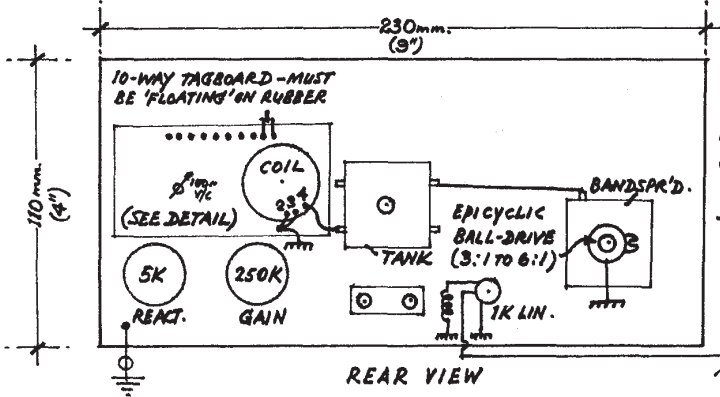


"SILVER TERN" SUPER 3 TRANSISTOR RX
SMØ6259 G-QRP-C NO. 354



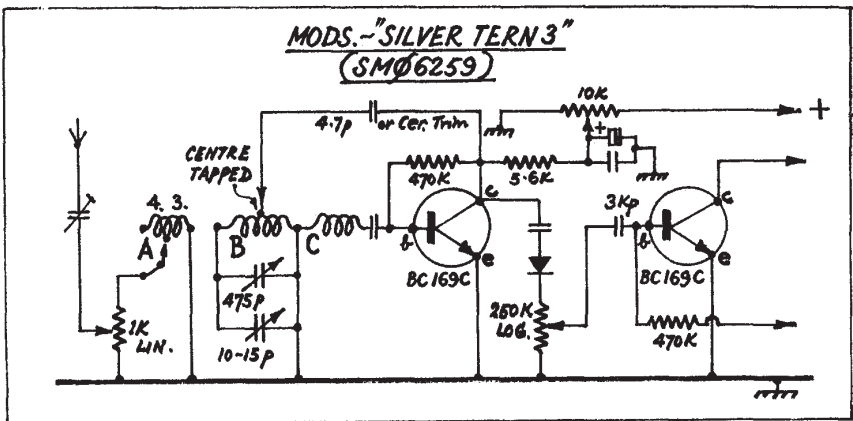
PANEL MADE OF
 COPPER SHEET,
 COVERED WITH
 BLACK 'FABLO' /
 OR SIMILAR

FRONT PANEL



RX 'BOX' IS
 CONSTRUCTED
 USING COPPER-
 GLAD PLYWOOD

REAR VIEW





AWARD NEWS

The following members are congratulated on qualifying for the Club Award indicated:

QRP Countries Award. Basic; G81B, G3SVO, OZ3XH, G4ERO, G4BUE, ZL1BLJ.
 50 Countries; GM30XX, OE1SBA, G3DNF, GM3RFR.
 75 Countries; GM30XX.

Worked G QRP Club. Basic; G3KPT, G4CQK, GM30XX, G4BUE, G2CP.
 40 Members; G3DNF, G8PG.

2-Way QRP Award. Basic. GM30XX, DJ1ZB, G8PG, G3DNF, G4BUE.

THEY DID NOT WIN THE WORLD CUP - BUT!!!

Scotland failed in their attempt to win the World Cup, but they succeeded brilliantly in the Winter 1978 DL AGCW QRP Contest with GM30XX/A a clear winner by over 6,000 points. George achieved this triumph with the aid of a 2w home built transceiver and a 400ft long wire at 150ft. We congratulate him (and also officially deny the rumour that the morning after the results reached Edinburgh the Walter Scot memorial was found lying on its side in Leith docks !). G3DNF was a very creditable 7th, DJ7ST 17th, G8PG 18th, G4GIE 31st, G3FNW 36th and OZ3XH 55th. There is some talk of altering the handicapping system for the Winter 1979 Contest. If you want your voice to be heard send your views to DJ7ST at Klein Ohe 5, D3201, Holle 1, West Germany.

THE MASTERS

The Club will issue a QRP Master Award, consisting of a plaque, to any member who has obtained; A QRP Countries Award with a 75 country endorsement. A Worked G QRP Club Award with a 60 member endorsement. A 2-way QRP Award with a 20 country endorsement.

MONEY WARNING!!!!!!

Your Committee has decided that any member six months or more in arrears will be removed from membership. In future we hope to publish lists of those 3 months in arrears in SPRAT, but this will be the only warning, so please check that you have paid your subscription.

QRP NEWS

G2NJ TROPHY 1978

On this occasion the Test and Contest Manager received a unanimous response. Every vote cast was for George Dobbs, G3RJV, in recognition of his outstanding services to international QRP by founding the G QRP Club and originating and editing SPRAT. Your Committee (less, of course, George who knew nothing about the matter) has therefore been very happy to award him the Trophy for 1978. Arrangements for a formal presentation have not yet been made, but we hope that one can be arranged in due course. To comment on the work done for the Club by George would be almost impertinent - apart from conceiving the idea of our Club and getting it off the ground, he has been indefatigable in his efforts to enroll new members and produce a bigger and better SPRAT several times each year. Bearing in mind the pressures of his calling - there is no 37 hour week for a priest- this represents a great drain on his limited leisure and he has given up many opportunities of QRP operation on the air so that the time could be devoted to Club affairs. The Award of the Trophy thus symbolises the recognition of this great work by his fellow members. (G8PG)

CORRECTIONS TO LAST ISSUE: In the GM3XNE SSB transmitter a few details were missing - p.10. Mic Amp. TR3 emitter to deck. p.8. Parts List R35=1k and R39=1M. L5 = Prim. 45t 26 swg, S1 8t centre tapped on centre of prim. S2 8t on earthy end of prim.

Hal Collard is very disappointed at the lack of response from club SWLs in submitting items to him for possible inclusion in SPRAT. So any SWL members with articles or items of SWL interest, please send them to Hal at 95 Hart Rd. Thundersley, Benfleet. Essex.

CIRCUITS: G8PG can supply information on the following equipments: PCR2, R109, R209, R1224A, R1154, R1155, RX78, TCS12 Tx & Rx, WS12, WS19, WS21, AR88, HRO, NC101X. Send LARGE sae with requests, please.

MEMBERS ADS.

G8IB, 29 Norman Ave, Abingdon. OX14 2HQ. has an HW7 to dispose of - it works well - no mods - Reasonable Offers.

John Raynes (SWL member 101) is looking for an inexpensive receiver at present John is in reduced circumstances and would be pleased to answer letters about reasonably priced short wave receivers.

Our treasurer, G4DVW, is keen to obtain any early - pre WW2-radio equipment or components or 'junk'. Letters to Alan Lake, G4DVW at 7 Middleton Close, Nuthall, Nottingham.

CC STATESIDE

Bob Curtis, W1EXZ, has decide that he is no longer able to be the USA representative for the club. Many I, on behalf of all members thank Bob for his useful work for the club. I would also like to thank him for the pleasant personal letters we have exchanged.

I would like to reappoint another US member to perform half of Bob's task. Bob handled most of our US subs for new members. We feel that this is probably no longer required, but it would be useful to have a US address for prospective members to send for our leaflet about the club. This would simply involve sending out the leaflet when enquiries come about the club, the membership subs would be handled in the UK. ANY OFFERS for this simple task to help promote the club in the USA ?

STOP PRESS NEWS: Skip Westrich WB8OWM has now worked KH6JHS and also KL7JAI and so has now worked all 50 for WAS with his HW7 - Well done!

MEMBERS NEWS



A photograph from the local Doncaster Evening paper showing Keith Coates - G3IGU - who was last years winner of the G2NJ TROPHY.

Keith won the trophy for his design of a CW Transceiver for 80m which appeared in SPRAT and has proved to be one of the most popular QRP rigs we have published. On his bench is the 80m rig with a 20m version, each a fine home brew station in its own right. The club offers datasheets with the original 80 transceiver design for a large SASAE



George Wood - SMØIN, at work broadcasting from RADIO SWEDEN in the English service.

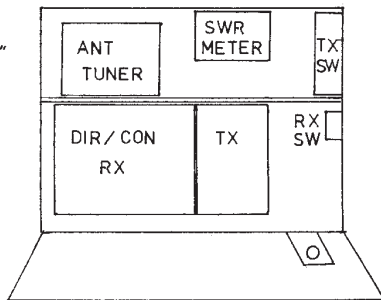
George recently wrote an article on the virtues of amateur radio, and low power operation in the alternative technology magazine UNDERCURRENTS.

George is American, from Berkeley, California, and has been an SWL since the age of ten.

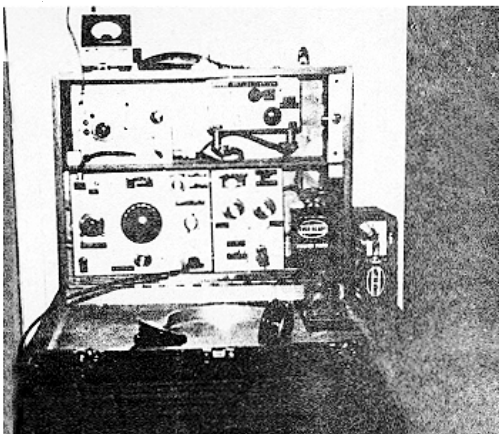
His article in Undercurrents resulted in several new members for the club

Remember Rock's (W9SCH) Shack In A Box in the last SPRAT, here is a 160m setup by G3AHS, Dawson Thompson. I hope the colour photo reproduces.

BOX
17"x13"



G3AHS 160/80M QRP "RIG IN A BOX"



FROM MEMBERS

FROM GI3XZM:
TECHNICAL TIP 1.

Excellent T0-5 heat sinks can be made from 4"x1" solid brass or aluminium barrel bolts obtainable from builders merchants or DIY shops. After removing the bolt, the barrel is cut into about 1/2" lengths, and if not already cut lengthwise on the back, this is done to give a spring grip on the transistor. If even more cooling is required the brass type can have fins soldered on and the aluminium type can be bolted to a piece of scrap. A dab of flat black car paint finishes the job. One barrel bolt (brass-60p, Aluminium-30p) makes 6 heat sinks. GI3XZM used a single BFY51 at 5w input for months in this way and judging by how cool it was, another BFY51 could have been plugged into the other end, giving a cheap and handy 10w PA.

TECHNICAL TIP 2.

The VFO/BUFFER/PA type of valve rigs which appear in Handbooks etc. are usually either shown with a very simple 250v power supply or else a 'suitable power supply'. Cathode keying is also usually shown.

This type of rig can be improved beyond recognition with a power supply using two transformers (from old domestic RXs) one for the VFO (vis neon stab) and buffer, the other for the PA only. In addition screen keying of the PA (as in RSGB handbook) will give a better 'shape' to your signals. My G3JKA rig (RSGB 3rd Ed. p.203) was described by EI0CF (from his professional QTH) as 'fully commercial' after these mods.

FROM G2NJ:

ONE WATT IN 1931!

There's nothing new under the sun, and that goes for QRP as well as everything else! Glancing through a copy of the old T and R Bulletin of 1931, G3KPO was amazed to find a report of a "one Watt Week" which took place nearly 47 years ago....

The week took the form of a competition to see who could work the best DX, and the winner was G2OL of Ealing, with a score of 165 points, second being G5FB of Bishops Stortford, and third G6XN also of Ealing.

The test showed that communication could be established and maintained with a fair degree of consistency over distances between 500 and 600 miles, when using 1 watt on the 7 MHz band - a band which seems to have been used almost exclusively by the participants.

FROM G3CWL:

I received a photocopy of the JOURNAL OF THE QRP RESEARCH SOCIETY, dated May 1953. This was a UK based club run by a SWL, John Whitehead of Walton-on-Thames. Several members have mentioned the society.

The journal has some calls in it, who are members of our club - G5GG, G3CWL, G2AOL, G3IQF, G2BOF, G3ESX, G3IDG and so on....

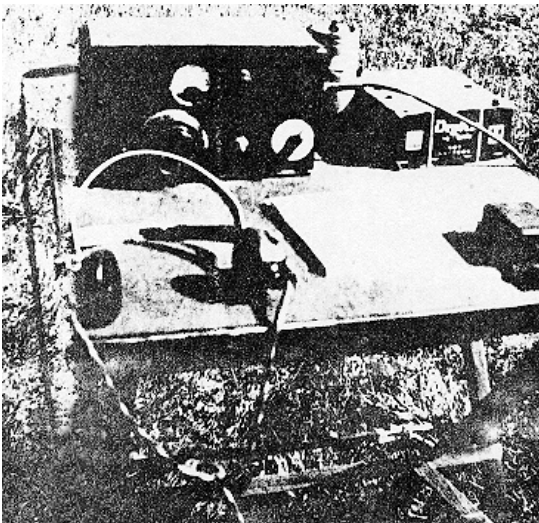
The journal contains a design for a TRF receiver (so do we!) a 'counties ladder', and a lot of reports on equipment and results from members.

We seem to have had quite a few mentions of vintage QRP work in this issue - I wonder if we have any more historical QRP notes for publication?

THE QRP ACTIVITY LEVEL DEPENDS ON US

G8PG

Sunspot numbers are rising and an increasing number of QRP-to-QRP contacts should be possible on the hf bands. To ensure maximum efficiency the existing QRP frequencies and calling times must be used to the full, however. The international QRP calling frequencies are 3540, 7040 (7030 as alternative), 14065, 21040 and 28040 KHz. The suggested calling/listening times are every 10 minutes, starting on the hour. Please try and call CQ QRP on these frequencies regularly - if nobody calls and everybody listens no contacts will ever be made! Pick a clear spot as near the exact frequency as possible for your CQ, and when listening always tune \pm 5 KHz to catch any off frequency or xtl controlled station replying. European stations are particularly asked to try 7040 KHz at 1130-1230 Sundays, and 3540 at 1400-1500 Sundays. So far there do not appear to be any agreed SSB QRP frequencies, but if anyone likes to suggest suitable frequencies we shall be pleased to publish them. The same applies to vhf/uhf. The whole idea of QRP calling frequencies only works if operators use them regularly, however, so please make special efforts to do so. The simple CQ machine described in SPRAT recently takes the work out of calling CQ on cw, and it is even easier for the phone man - just record a CQ tape and feed it into the microphone jack. CU QRP on the international frequencies!



QRP 1955 STYLE

In 1955 G8PG built this 750 mW Top Band TX/RX. It consisted of a VFO/PA TX and an O-v-1 RX, both using 1.5V battery valves. The HT supply was a 120V battery. It gave many QSOs, including a 300 mile daylight contact on 160. The set-up in the picture is GW8PG operating /P from the Conway Valley, North Wales. Other members may have photographs of QRP in the pre-transistor era. If so please send them along for publication in SPRAT.

SOME FREQUENCY SHIFTS OBTAINABLE WITH ORDINARY DIODES FOR VARICAP USE
 Supplied (I think) by G3DOP.

0A79 (Germ) @ 2MHz = \pm 1KHz	@ 20MHz = \pm 3KHz
0A91 " " " \pm 5KHz	" " " \pm 15 KHz
S10 25 (Sil) " " \pm 7KHz	" " " \pm 20KHz
0A20E " " " \pm 100KHz	" " " \pm 250KHz

NOTES FROM G3RJV:

Argonaut owners, you can obtain a 'spinner knob' as on their Triton, for the Argonaut from TenTec for 1 dollar. I also sent a few IRCs for postage. They generously Airmailed it (73c).

HELP! G3RJV has lost, and wishes to replace a flange for the tuning knob for a COMMAND rx/tx capacitor.

GIVING THOSE UA FELLOWS A BIT OF THEIR OWN BACK

Angus Duncanovitch

The basic purpose of the amateur licence is self-training in the art of radio communication. Our cw abbreviations make communication between people speaking a multitude of different languages possible, but any QSO becomes more meaningful if one can give the chap at the other end even a few words of his native language. This somehow personalises the QSO, and in my experience it also greatly increases the likelihood of a QSL arriving. Anyone who works QRP on the hf bands is inevitably going to contact a number of UA stations, a group who rarely hear the Russian language unless they are working amongst themselves. Judging by my own experience they are really thrilled when a ham from another country gives them a few words in their own language, particularly on the key.

The Russian language is based on a 32 letter alphabet originated specially for the purpose by Brother Cyril, a Byzantine monk, and only slightly altered in the intervening centuries. This alphabet consists of Greek, Latin and Hebrew letters, and sending it in morse involves the use of the normal alphabet plus accented letters. (Quite fun at 25 wpm when you are trying to remember the Russian spelling, and the Russian grammar, and which morse characters represent the Cyrillic letters you want!). Fortunately for simple information it is not necessary to use accented letters. In passing note that UA ops are well versed in all our normal cw abbreviations, these being contained in the Russian equivalent of the ARRL Handbook. We can thus intersperse these abbreviations with a few suitable Russian words transliterated into morse code, and so pay our contact the compliment of addressing him in his own language.

Hello and goodbye

The normal Russian greeting is a word roughly pronounced "Zdrasti", and equally roughly translated as "Hello , how are you ?" This of course becomes the ZDR that we have all heard on the bands. The "TOW" often heard after ZDR is an abbreviation for "Tovarich" which in this context means "OM". The often heard "DSW" means "goodbye".

Thanks

If you want to say this in Russian just send "SPASIBO". There is a more formal and polite form, but unless you are a Russian student you will not be able to remember it, and SPACIBO is quite adequate.

The weather

The Russian word for weather is PAGODA, but WX is quicker and the UAs themselves use it. As one may wish to combine weather states - for example "raining and cold"- remember that AND in Russian is simply the letter I sent on its own. Likely weather states can be sent as follows:-



Rain; DOV DX IDET ("The rain he goes"). Snow; SNEG IDET ("The snow he goes").

Sunshine; SOLNCE SWETIT. Hot; VARKIJ. Cold; HOLODNO. Fog; TUMAN.

Frost; MOROZ. A little NEMNOVKO. Much; MNOGO.

Radio terms

There is no "h" in the alphabet and it is replaced by "g". KHz and MHz thus become KGz and MGz. Valve is LAMPA. Watts are WATTY. Other common terms such as TX, RX etc are used as in English. The famous WSEM still sometimes heard during UA-only contests simply means "all". It indicates that only QSOs with other Russian stations are wanted. Radio is the same in both languages, and amateur radio is RADIOSPORT (You can become a Master of Sport of the SSSR if you are good enough at ham radio !). From that remark one can see that USSR becomes SSSR in Russian.

QSLs

PSE QSL is all that you need when asking for one. Sending QSL BUDET WAM BURO will let the other chap know that you are definitely going to send him a card.

Other Terms

"Yes" is DA, "no" is NET, "not" is NE, "but" is NO and "glad" is RAD. When saying "thanks for the QSO" send SPASIBO ZA QSO.

Example of use

First over (he has called you). UAl--- de G3--- = ZDR I SPASIBO ZA QSO = UR RST 589 = QTH Heckmondwyke = Name Outhbert = HW? UAl--- de G3--- K.
Second over. UAl--- de G3--- = R SPASIBO TOW ALEX = HR TX 2 WATTY I antenna dipole = WX DOV DX IDET I HOLODNO = QSL BUDET WAM BURO = HW? UAl--- de G3--- K.
Third over. UAl--- de G3--- = R SPASIBO ALEX UR SIGS VY FB = RAD QSO I HPE CU SN 73 I SPASIBO ALEX DSW = UAl--- de G3--- SK

Conclusion

More able Russian scholars may be able to pick holes in the above, but at least it has been understood by many UAs and very often their comment has been "Thanks for the QSO and the Russian". If you want to do the same thing on phone be prepared for several years of hard but interesting part-time study ! CW is much easier because accent and pronunciation do not enter into it. Now what about some of our experts in other European languages giving us a few useful phrases for use in cw QSOs ?

USSR ★ OREL		
To Radio <u>G3RJV/A</u>		
Mni tnx for CW <u>SS</u> QSO		Tx: <u>40w</u>
Date <u>2 08 76</u>		Rx: <u>1652/43</u>
on <u>14</u> Mc, RST <u>5.79</u>		Ant: <u>2ll</u>
Pse/tax QSL GMT <u>1900</u>		vly 73 es best ds <u>ARK</u>
ZONE 16.	PSE UR QSL VIA P.B. 88 MOSKOW.	REGION 147

G-QRP-CLUB NEW members since Spring 1978

391	WA6POC	Dick Fleming 732 Blackmer Circle, Sacramento. CA, 95825. U.S.A.	Active QRP
392	WB7EJD DA1JS	Richard Keefer 96th ORD, Co., A.P.O. 09169 USA.	General QRP in Germany
393	G4FJF	Mike Thacker 20,Bewsbury Cross Lane,Whitfield, Dover, Kent.	Active QRP (AT5)
394	RS 36304	C.R.Ayling 3,Ivy Way, Folkestone. Kent. CT19 6HW	SWL, QRP, Telemetry
395		Ian Keyser Rosemount, Church Whitfield, Dover, Kent.	General QRP Homebrewing
396	IV3ESX	Claudio (Claus) Stenta Via Carsia 14 Opicina I-34016 TRIESTE. ITALY.	Active QRP Homebrew TX
397	G3PQB	Sidney W.C. Harbour 43,Warbon Ave, Peterborough. PE1 3DS.	General QRP
398	G3GSY	Kenneth,Charles,Allen,Terry. 344 Mill Road, Deal Kent. CT14 9BQ	Active 80m QRP Homebrew (Junkbox)
399	G4EJN	Philip F. Cope 3 Walsall St. Canley, Coventry. CV4 8EZ.	General QRP
400	G4ERT	Harry V. Marriott 223 Markfield Lane, Markfield, Leicester.	HW8
401	WD4FZU	Don Schramm P.O. Box 153, Venice. Florida 33595. USA.	Active QRP Homebrew gear
402	G4GUW	Gordon Baggott 61 Sutton Road, Walsall West Mids. WS1 2PQ.	General QRP HW8
403	G3XVF	Dick Davy 30 Bacon Road. Norwich Norfolk. NR2 3QX.	Active all bands RNARS 40wpm award
404	G3KFZ	41 Waldeck Road,Norwich. Norfolk. Jack Pye.	Active all bands Homebrew
405	G4GJW	Fred Wall 23 Cecil House, Chingford Rd. Walthamstow,London. E17 5AQ	Homebrew

G-QRP-CLUB. NEW MEMBERS since Spring 1978.....Cont.

406	G3YLL	Ronald F. Brooks 10 Leopold Close, Bognor Regis. W.Sussex. PO22 8JJ.	General & CW
407	G4FLO	Ted Mappin 39 Clarence Drive, Filey. N. Yorks. YO14 0AZ.	Home Construction QRP Operation/Ants
408	G3BRL	Raymond Caws Jasmine House, Bellingdon. nr. Chesham. Bucks. HP5 2XW.	General QRP
409	G4CCB	Tony Brown 22 poplar St. New Ollerton Notts.	General QRP Homebrew
410		Alan Trevor Hopkins Bon Accord, Brewery Rd. North Walsham. Norfolk. NR28 0PU.	QRP SWL
411		Raymond Frank Cox 14 Craighill Rd. Leicester. LE2 3FA.	QRP SWL Homebrew
412	G3ZDE	Charles Joseph De Bourde 10 Dallin Road, Plumstead. London. SE18 3NU.	CW on HF/VHF
413	G3NIJ exVS1HY	Brian C. Barker 4 Glantlees, West Denton Estate, Newcastle upon Tyne. NE5 2PJ	Active QRP HW8 Homebrew on 10/2m Indoor antennas.
414	PA3ABA	Joop Stakenborg Oranje Bastion 30, 5361 EH Grave, The Netherlands.	Homebrew + HW8 Antennas, Contests
415		Stephen Hallam 15 Wootton Cres. Bristol. BS4 4AN.	QRP SWL Homebrew.
416		John Anderson 77 Ivyhouse Lane, Coseley. Bilston. W. Mids. WV14 9JU.	QRP SWL
417	G3YXB	W.A.B. Keay 46 Leyborne Park, Kew. Surrey.	Homebrew SSB
418		Robert P. de Vrey Meidoornlagn 36, 4871 TB Etten-Leur, Holland.	QRP SWL

CHANGES IN QTH.

151	G3TML	6 Bradstone Rd. Spondon. Derby. DE2 2JJ.
159	GM4EFR	37 Castlegreen Rd. Thurso, Caithness. KW14 7NB.
349	G4GMI	63 Portland Road, Edgbaston. Birmingham. 16.

A NEW CALL Charles Mercer number 327 is now G4HED (well done Charles)