

SPRAT

THE JOURNAL OF THE G-QRP CLUB
DEVOTED TO LOW-POWER COMMUNICATION

ISSUE NR. 33

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Winter 1982/3



KC5EV of the Houston QRP Club in the U.K.

*Left to right: Ian (G6BAI), Fred (G4HOM), Leo (KC5EV), George.
Photographed in the G3RJV Shack by Norman (G4IQF). 2.11.82*

*Tuned Balun ATU-Wee Rig-G3LDO 20[20-18]24MHz TX
HF Preselector-Sidetone-TTL TX-Argo SWR Failure
OK1DKW Antennas-VXO-VMOS PA-160m Converter
Club News Members News....*

QRP GUIDE For 1983



Rev. George Dobbs
G3RJV
17. Aspen Drive,
Chelmsley Wood,
Birmingham.
B37 7QX. 021-770
5918

Editorial:

Dear Member,

What an amazing lot of people QRPers are! So much has happened since the last issue of SPRAT not least of all the social meetings of members. A fair number of us 'took over' a Chinese Eating house in Leicester after the ARRA Exhibition for an evening of eating and laughter. Gordon, G3DNF visited me during a recent trip to Birmingham. Perhaps the highlight of this autumn was a two day visit by Leo, KC5EV, and his wife Sharon. This included a little sight seeing (what-around Birmingham!) and a small gather of members as shown on the front cover. Leo and Sharon helped to bring our trip to Houston next year into greater reality.

The quarter year ahead looks equally exciting with a club stand booked at the RSGB Exhibition, see later in this issue. Also look out for the issues of Practical Wireless this year which are to feature QRP and QRP equipment. Tony, G4FAI, and I have been preparing material for the PW issues of 1983.

This issue brings two more circuits from the G3RJV 20/20 competition. These are the two VFO circuits which were offered as entries. We have the final two circuits in the next issue. I am also pleased to be able to include a circuit for the new 18 and 24MHz bands. Are there any more ideas around for the new bands?

You may well receive this SPRAT during our 1982/3 Winter Sports. I hope to be slipping away from the mother-in-law to work as many members as possible! May I wish, on behalf of the club officers, every member a good year in 1983.

73 fer nw.

G3RJV

Subscriptions

Renewal (Rates now £3.50 or \$9 US) to Alan Lake, G4DVW, 7 Middleton Cl. Nuthall, Nottingham. NG16 1BX. PLEASE QUOTE MEMBERSHIP NUMBER. Cheques to 'G QRP CLUB'. European members may use Giro Cheques. A reminder will automatically be stamped in sequence onto copies of SPRAT, if you have already paid ignore this notice.

Due 0-90, 178-200, 254-270, 351-392, 466-524, 619-771, 1000-1081, 1257-1314.

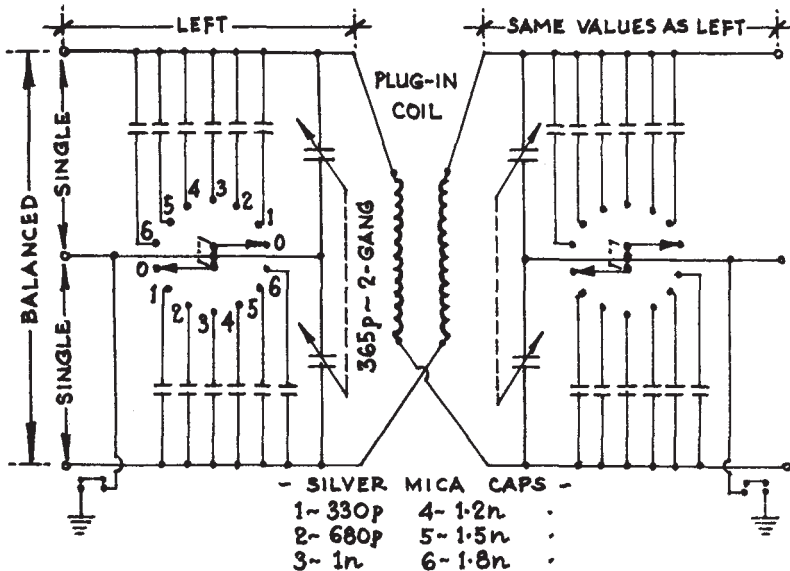
Overdue 155-177, 133-253, 326-350, 445-466, 616-690, 891-1,000, 1210-1256

DELAYS: WE REGRET DELAY IN SUPPLYING THE CLUB CALLSIGN BADGES. THIS IS DUE TO THE COMPANY WHO SUPPLY THE BLANK BADGES GOING OUT OF BUSINESS, OUR SUPPLIES ENSURE US THAT A REPLACEMENT IS SOON ON THE WAY.

THE HEAVY DEMAND FOR THE G QRP CIRCUIT HANDBOOK PRIOR TO PUBLICATION HAS LEFT G4DVW WITH A LARGE BACKLOG OF ORDERS WHICH ARE BEING PROCESSED AS QUICKLY AS POSSIBLE.

FOR SALE: HW8 Kit, complete with PSU Kit, completely untouched as received from Heath. Ring Tamworth (0827) 893024 or write: Larry Robinson, G6EPT, 82 Grassholme, Stoneydelph, Wilnecote, Tamworth. Staffs. B77 4BZ.

• THE G3CCB TUNED-BALUN A.T.U. — AS BUILT BY GM30XX •



ALAN CHESTER · G3CCB & GEORGE BURT · GM30XX
 G·ORPC 626 G·ORPC 126

Ever wanted an ATU that really works? Then let me recommend the one by Alan, G3CCB as per the Radio Communication article of November 1980. Having tried for ages to match my 44 feet top centre fed zeppelin on all bands has never been easy as with some ATUs using different values of coil and capacitor it is possible to get what appears to be a good match, also it is not easy to measure the current in each leg when using QRP.

So, on finding an ATU on which one can set the exact values on the transmitter side, leaving only the antenna side to find seemed a good idea. So a quick lash up was made using two old twin-gang 365pF tuning capacitors and an old bit of air dux coil converted into a bifilar wound coil. The capacitor on the transmitter side was set to the correct value for 50 ohms on 14MHz, then a quick tune on the antenna side and a perfect match, so I was hooked, hi. So after using the ATU for three months spread all over the bench, it was decided to make a proper version with plug in coils and banked switching of the capacitors.

The coils were made on two inch internal diameter plastic drain pipe and RS twin flex used for the coils making the bifilar winding kid's play! The two switches are two pole ten way with the stops adjusted to suit. It would have been nice to find switches with follow up shorting rings, so then one value of fixed capacitor could be used. You can of course use twin 500pF capacitors with the corresponding change in the fixed capacitors. I have five coils of 1, 2, 4, 8 and 16 turns and can match my zeppelin on all bands including top band. I even worked a DL on top band at the first call. In fact the ATU is the best I have used, and can be used to match a wide range of loads, single ended to balanced, balanced to balanced, balanced to single ended and single ended to single ended. What more could one ask from an ATU, "canny" see me building any more ATUs for years to come, thanks Alan.

An 'RJV Twenty Project

DESIGN AND BUILD A TRANSCEIVER FOR THE 20M. BAND USING NO MORE THAN 20 COMPONENTS IN THE TRANSMITTER AND 20 COMPONENTS IN THE RECEIVER AND SUBMIT A LOG OF 20 DXCC COUNTRIES WORKED WITH THE EQUIPMENT....
(A COMPETITION TO MARK TWENTY YEARS OF THE G3RJV CALLSIGN)

THE WEE RIG

George Burt GM30XX

After having built The Super OXO as an entry for The RJV 20/20 Award, it was decided to have a go at a VFO rig. The circuit was originally designed using grounded gate fets in the double and driver, but it was obvious that no way was there going to be enough drive to turn on the PA. So the circuit of The Wee Rig was the result.

The oscillator uses a BF 256LA Fet on 7.0 - 7.050 MHz, the tap on L1 is adjusted to turn on the BC108 doubler and should be found by trial, but keep it as low as possible other wise stability and pulling will be poor.

A grounded base BC108 is used as a doubler and is biased by the RF from the oscillator, this in turn, turns on the BC108 driver and this provides enough drive to run the PA at two watts input. It is possible to run much more power by increasing the tap on L1 or using a hotter driver, i.e. a ZTX82 drove the PA to three watts input (QRO!), so BC108s are used in most places.

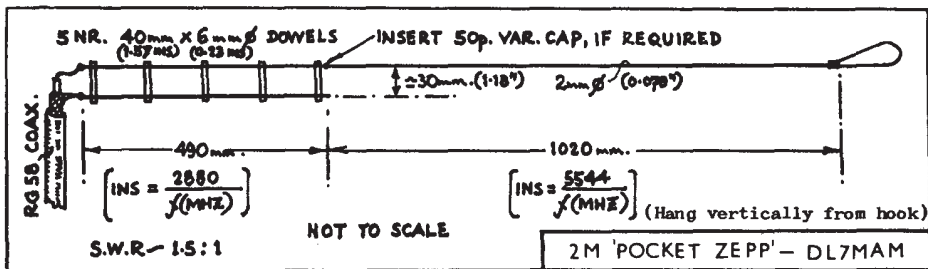
In the PA base the 220uF capacitor has a reactance of approximately 50 ohms, also the coil in the MD108 provides the base choke return.

When using the lash up, no band set capacitor was used, and the keying transistor was left out and the PA supply was keyed by a reed switch in the keyer. The PA is a small computer switching transistor, but any small PA device would suit.

A single pi network is switched between the PA and the receiver MD108, the 220uF capacitors in the pi network and driver are the small ceramic plate type.

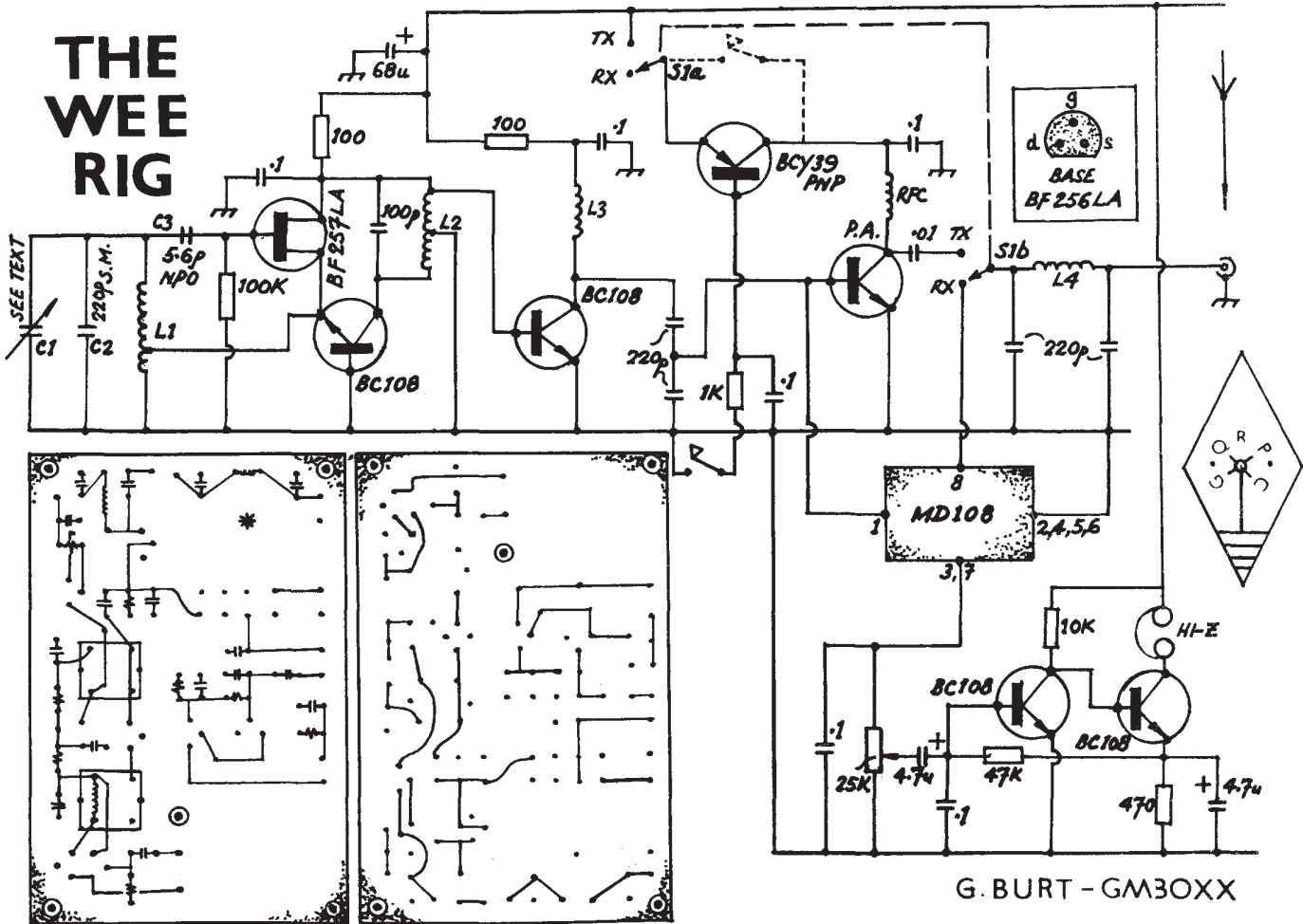
The receiver is just an MD108 with a two stage DC coupled audio amplifier, with high impedance headphones. In its lash up form nearly 20 countries were worked in two days,

It would of course be easy to add RIT and Audio filtering, also it would be easy to move to most bands, and would make a nice simple transceiver for 10MHz.



I have had good results from this antenna hanging vertically from a tree on 2m. FM /P.
(G3RJV)

THE WEE RIG



VFO and RIT

This has a frequency range of 13.95 to 14.14 MHz. An oscillator which operated on the fundamental frequency of around 14MHz was chosen for two reasons:

1. To limit the number of frequencies getting into the receiver double balanced mixer because only a simple tuned circuit was available for input signal tuning.
2. To dispense with the need for a frequency multiplier in the effort to reduce the number of components.

This required careful design of the VFO. The coil is wound on a glass former made from a B7C valve envelope and the two frequency determining capacitors are air spaced. The oscillator requires one minute to settle down when switched on, however, the long term stability is good.

When the initial setting up was done on the transmitter I noticed that the oscillator frequency varied as the collector tuned circuit of the 2N2222 driver was adjusted. A capacitor has deliberately switched in on receive to vary the frequency of the VFO on receive only (RIT +2 to 4 KHz).

Receiver.

This comprises an SBL1 double balanced mixer feeding an LM382 amplifier via a step-up transformer. The LM382 is a low noise, dual amplifier designed specifically as a stereo pre-amplifier; with a built in resistor matrix that allows the user to select a variety of closed loop gain options. It also has the facility to select response characteristics by adding capacitors to the feedback loop. I found that the best way to obtain a suitable receiver frequency characteristic was to add capacity across the transformer and the headphones. The LM382 was originally connected in push-pull, using a transistor radio output transformer to do the impedance step-up. This arrangement was found to be very noisy and the arrangement shown in the diagram gave the best results for the number of components used.

The setting of the VFO level (50R) is fairly critical to get the best AM rejection

Transmitter Power Amplifier

A valve was chosen after much experimenting with transistors, for two reasons:

- 1 The high impedance output of the valve ,at three watts input, enables a much simpler antenna matching circuit to be used.
- 2 The isolation between the input and the output of a valve is much better than a transistor and this had less effect on the VFO frequency when tuned or keyed.

Sidetone and Monitoring

The 12 v supply to the amplifier is left on during transmit. This amplifier has poor RF rejection which allows the transmitter output to be monitored. The sidetone is a soft 100 HZ note. The amplitude of the output is related to the PA tuning so it is easy to set optimum tuning. Any key clicks or other PA malfunction, other than chirp, can be monitored this way. PA parasitics cause a very unpleasant rasping sound - this way I found the PA parasitic suppressor essential.

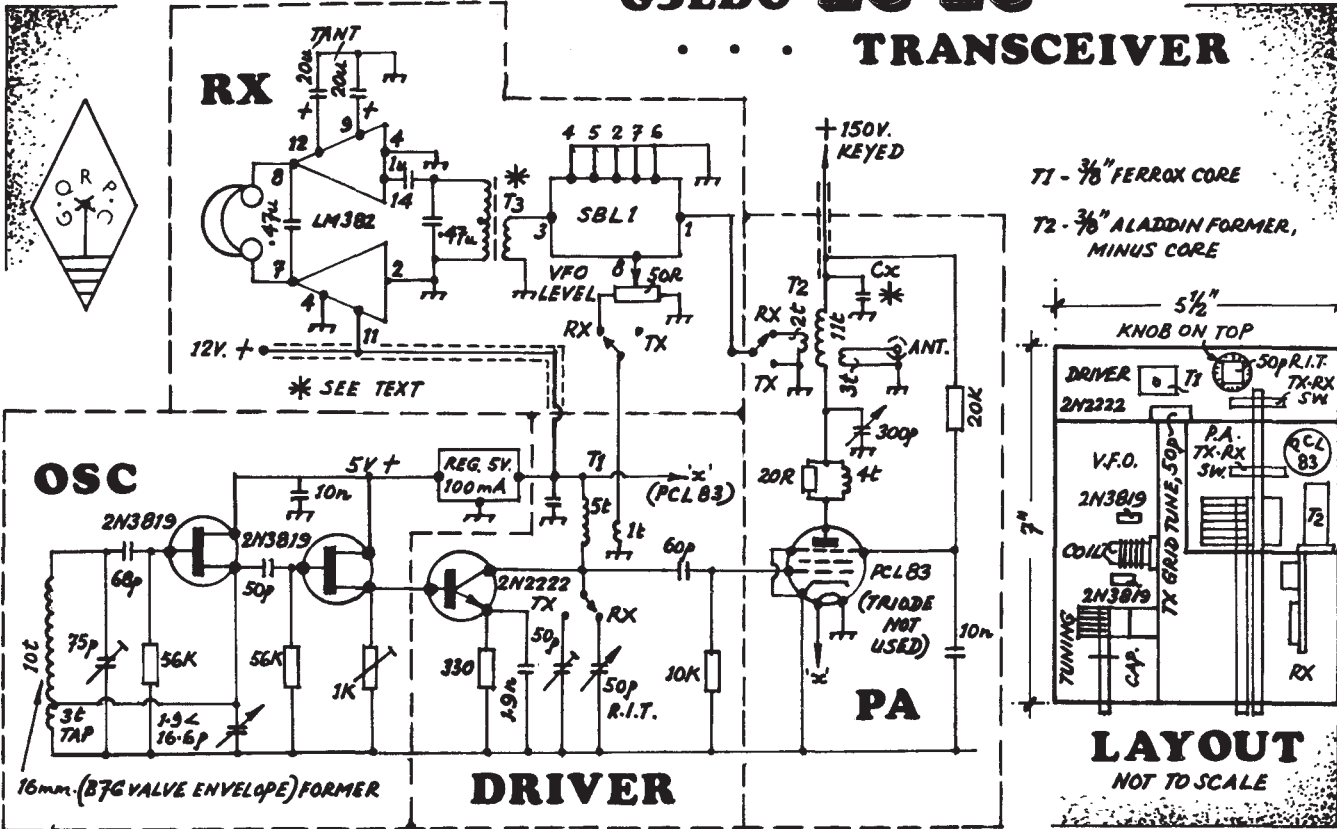
General

All the different sections are in separate screened compartments. All power leads are screened.

We regret to announce the death of Harry, G5LS, G QRP 224, at the age of 62. Harry had retired from his job as lecturer in micro wave techniques at University College, London. Up to his death Harry was experimenting with computer programmes suitable for QRP use on the HF bands. G4CQK mentions a very successful ZX31 programme for use with the Argonaut.

G3LDO 20·20

TRANSCEIVER



LAYOUT
NOT TO SCALE

18/24MHz Version of the Lagos QRPeter

Ha-Jo Brandt DJ1ZB

The Lagos QRPeter, originally designed as a single band transmitter for either 14, 21 or 28MHz (SPRAT, Summer 1980), was modified later to work on 14 and 21MHz because these bands offered most reliable QRP communication between Southern DL and The U.K. With the opening of The WARC bands in DL, a separate transmitter was built for 10MHz, whilst the two band Lagos was converted to 18 and 24MHz.

VYO and Crystals - As proposed in the original Lagos article, 27MHz CB crystals are used in their fundamental mode and doubled to 18MHz. No attempts were made to maximise the tuning range of the VXO, because the crystals are easily available spaced 10KHz at 27MHz. With a 10uH molded RF choke in parallel with a 15pF, the tuning range was more than 20KHz, so five crystals between 27135 and 27255 are needed to cover the band. Luckily a similar solution had been found for 24MHz. Two sources in DL are offering HC 25U third overtone crystals around 37.4MHz, also spaced every 10KHz, which are also excited in the fundamental mode and doubled to 24.9MHz. In this case, the VXO coil is operated without a parallel capacitor (S1A). Five crystals between 37370 and 37490KHz are needed to cover the band. As usual in this circuit, VXO resistor RB is selected to set the drive level to the doubler and PA stages.

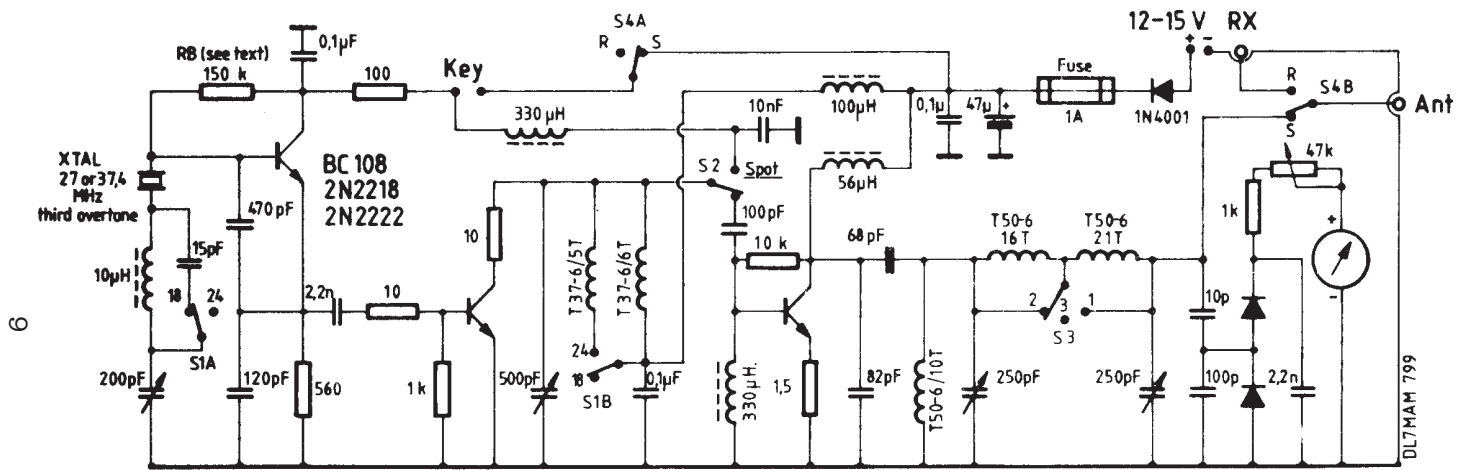
Doubler Stage - First it was tried to tune 18 to 24MHz without switching, but parametric oscillations were noted on the higher band. To avoid this a high loaded Q must be maintained in the doubler resonant circuit. Therefore, a relative high variable C setting and separate coils for each band are used. A miniature DPST switch can be employed to switch the VXO and doubler stage (S1A and S1B). In the 'Spot' position, switch S2 detunes the doubler output and also feeds supply voltage to the VXO. A substitute load such as in the 10MHz transmitter (Sprat, Summer 1982) is not necessary because the tuning range of the VXO is much less, and its stability better than in the 10MHz version.

PA Stage - The only switch in the PA stage (S3) is a miniature switch with a third open position to provide three values of inductivity in the PA tank. Position 1 is for low impedance loads at 24MHz, position 2 for high impedance loads at 24MHz and low impedance loads at 18MHz, and position 3 is for high impedance loads at 18MHz. Therefore coax fed aerials can be tuned as well as high impedance long wires or windoms. This solution was chosen because tapping a toroidal coil would lower its unloaded Q and short-circuiting a toroid between tap and free end would severely deteriorate its unloaded Q. This solution ensures high unloaded Q and low matching losses in all switch positions. For good power output (two watts RF), especially at 24.9MHz, a 2N3866 or 2N5109 is recommended in the doubler stage, and a well cooled 2N3553 or its stud mount version the 2N3375 in the PA stage. The VXO transistor is not critical.

Receiving the WARC Bands - The author has used the Kenwood R1000 receiver in several QSOs on 10, 18 and 24MHz. This receiver is quite suitable for this purpose, if a preselector (mandatory) and an audio filter are added. The 24MHz band is practically free and CW activity concentrating between 24890 and 24900KHz. 18MHz is still extensively used by commercial stations, and amateur activity is distributed on free spots between 18100 and 18125KHz or at the lower band edge.

A RALLY WITH A DIFFERENCE: Pontefract & District ARS Components Fair. In which traders will only have components, test gear and second hand stuff, no expensive boxes! Sunday March 13th (11am-4.30pm) Carleton Grange Community Centre, Pontefract. Further information from: G4AAQ. QTHR tel: 0977 791071.

HOW IS YOUR DRAWING/GRAPHICS ? After the request for inexpensive PCBs being made for club projects, we now have a viable source of these boards. The only remaining problem is the preparation of good artwork for the boards. Any member who thinks he can convert a sketch to a master for PCB production, will be pleased to contact G3RJV.



2N3866
2N5109

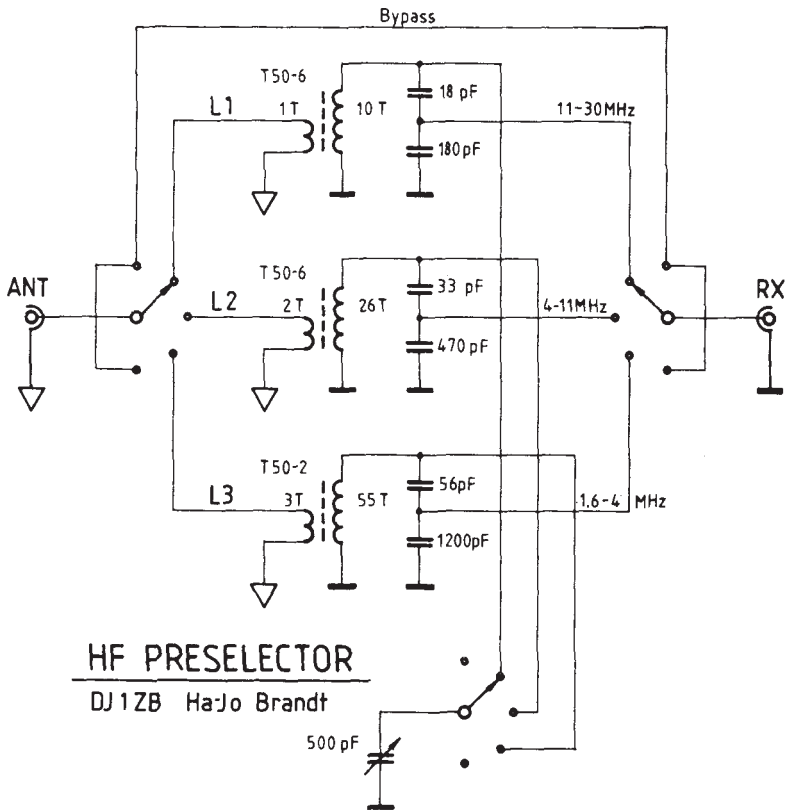
2N3553 with Jermyn cooler 1101A
2N3375 stud mount

Diodes 1N914
or similar

LAGOS QRPeter 18/24 MHz TWO-BAND-VERSION

DJ1ZB

DL7MAM 799



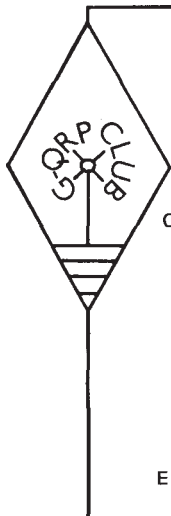
A TUNABLE PRESELECTOR FOR MODERN GENERAL COVLRAGE RECEIVERS By Ha-Jo Brandt, DJ1ZB

In amateur radio it is common practice to use the same aerial for transmitting and receiving, but if this is done with modern receivers such as the popular R600, R1000 and NRD-515 or similars, they mostly suffer from input overload, and strong stations can be received only with the input attenuator at several tens of dB.

Experience has shown that a single resonant circuit is sufficient to avoid receiver overload and to retain the full sensitivity of the receiver. They can be used to listen on the new WARC bands or even as a station receiver if a separate transmitter has been built to get QRV on these bands.

The preselector shown in the diagram covers the range 1.6 - 30MHz in three overlapping ranges. In a 50 ohms line passband attenuation is about 3dB at the upper end, increasing to about 10dB at the lower band edge. An air variable capacitor will cause less attenuation than one with solid dielectric, especially at the lower end. The difference however may not be important in practical operation. Inductive input and capacitive output coupling avoids parasitic resonances and results in a stopband attenuation of more than 40dB. The fixed capacitors should be of low loss ceramic, mica, styroflex or polystyrene.

The preselector is housed in a metal box. Note that the ground leads of the aerial coupling coils are directly connected to the input jack ground (triangle ground symbol). All other grounds are connected directly to the output jack ground (normal ground symbol). Ground connection of the variable capacitor however may be via the metal of the box.



CLUB OFFICERS

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Datasheets: G3VTT Mr Colin Turner, Hurley, Weaving Street,
Maidstone, Kent

CW Tapes: GW4KJW Mr W.G. Jones, 24 Underhill Crescent,
and Training Abergavenny, Wales

EUCW rep: GM3OXX WQF rep: G3VTT RSGB Affiliation: no. RS38364

G QRP CLUB QSL EXCHANGE: G4BUE will distribute cards for other club members via the mailings of SPRAT. Please add the club number of the recipient of the card on the back, the service only applies for interclub member QSOs. Cards to: Chris Page, G4BUE, Alamosa, The Paddocks, Upper Beeding, Steyning, West Sussex.

G QRP CLUB DIARY 1983

SPRING QRP CW ACTIVITY WEEK-END

19th/20th March 1983

1983 QRP WINTER SPORTS (CW)

26th December 1983/1st January 1984

The times and frequencies for both of the above events are as follows:—

0900 – 1000	14060	1500 – 1730	21060/28060
1000 – 1100	21060/28060	1730 – 2000	14060
1100 – 1200	7030	2000 – 2100	7030/10106
1200 – 1300	3560	2100 – 2200	3560
1300 – 1400	10106	2200 – 2300	14060
1400 – 1500	3560		

LATE SPRING QRP SSB ACTIVITY WEEK-END

7th/8th May 1983

The times and frequencies are as follows:—

0900 – 1000	14285	1500 – 1730	21285/28885
1000 – 1100	21285/28885	1730 – 2000	14285
1100 – 1200	7090	2000 – 2100	7090
1200 – 1300	3690	2100 – 2200	3690
1300 – 1400	14285	2200 – 2300	14285
1400 – 1500	3690		

LATE SUMMER QRP CW ACTIVITY WEEK-END SPONSORED BY THE WORLD QRP FEDERATION

10th/11th September 1983

The main purpose of this Week-end is to promote intercontinental QRP QSOs, and member Clubs of W.Q.F. are invited to suggest their own times/frequencies in accordance with propagation conditions. For Europe the following are suggested:—

0700 – 0800	Europe – Oceania)	
0800 – 0900	Europe – Japan)	on the highest
1600 – 1800	Europe – North America)	HF band which
1900 – 2000	Europe – South America/Africa)	is open.

The remaining times for general QRP QSOs on 3560, 7030, 10106, 14060, 21060 and 28060.

G ORP Club Members Callsign List (Dec. 1982)

A SPRAT Pullout

<u>G1</u>	CVA	CWL	HWX	KPP	NTD	RZP	VOM	YVZ	BDQ	CQC	EAM	EYF	GER	GZS	HWZ	JDF
2DZG	CVV	CWX	HZM	KPT	NTM	SCE	VRM	YXB	BHO	CVE	RAN	EYS	GFK	HAQ	HYY	JDL
3GTR	CYN	DBU	ICH	KQT	OAZ	SGY	VTD	ZDE	BJS	CVF	EAX	EZF	GFT	HCP	IBK	JEA
3HXH	FMO	DMC	IEB	KRR	OEP	SMV		ZDR	BKQ	CWS	EBO	FAI	GHM	HED	IBX	JEP
3NZZ	FRZ	DNF	IGI	KSK	OIN	SSJ	<u>G3</u>	ZEE	BLG	CZB	EBT	FAM	GHU	HEP	ICC	JFN
3POS	HCP	DOP	IGM	KTX	OJM	SVO	<u>VTE</u>	ZGN	BLM	CZX	EDG	FBA	GIE	HEY	IDG	JIM
3VYY	HII	DRS	IGN	LBT	OJX	SYC	VTT	ZHP	BQC	DBN	EEM	FBZ	GIQ	HFP	IDL	JUN
4CBG	HKU	DRP	IGU	LDO	OKY	SZW	VTZ	ZJJ	BQV	DBU	EEQ	FCU	GJA	HFS	IIN	JLW
4CRQ	HKZ	DWW	IGX	LGX	ONW	TBT	VXJ	ZKU	BSS	DDX	EFE	FCO	GJW	HGJ	IJH	JKO
4FFL	HLL	EBA	ILO	LHJ	OQF	TEV	VYM	ZIA	BUE	DED	EFJ	CEI	GJY	HHB	IKR	JNW
4HVI		EDW	IOI	LJF	OQJ	TIS	WBO	ZLT	BVU	DEP	EHT	FGK	GLQ	HHT	ILU	JQT
4HXL	<u>G3</u>	ENB	IQF	LOE	OSJ	TKO	WCE	ZNK	BWP	DES	EHU	FIE	GLV	HIH	ILR	JRE
4IVI	<u>AM</u>	EPU	IRM	LQI	OVJ	TKU	WFV	ZOF	BXL	DFV	EIA	FIK	GKC	HJT	IMG	JRO
4IYO	CJ	ESB	IRW	LWM	OZC	TML	WHU	ZOH	BXN	DGX	EJN	FJF	GKW	HJV	IMH	JUC
4JLF	GB	FCK	ITL	LXQ	PDL	TOG	WMN	ZQA	BYM	DHF	EJT	FKH	GMI	HKD	IMN	JQX
4KJT	JU	FMW	IUJ	LYE	PLB	TPI	WOV	ZUL	BZB	DKS	EKH	FKR	GOE	HLP	IMQ	JXX
4LXL	RD	FNM	IVF	LYK	PKQ	TSS	WQW	ZWH	CCB	DLJ	ELZ	FLO	GOF	HMC	INM	JZM
4NMZ	VA	FTQ	JAD	LYU	PQB	TTB	WWS	ZXC	CCW	DMB	ENA	FLQ	GOT	HMD	IQD	JZO
6AEJ	AHS	FRW	JBA	MAM	PTO	TVU	WYF	ZXK	CEB	DMH	ENK	FMD	GOY	HME	IQR	JZV
8RME	AIP	FUH	JFH	MBW	PVQ	UBS	WXL	ZZD	CEJ	DNP	ENQ	FMH	GRP	HMH	ISU	KDW
	AMF	GSR	JFM	MDQ	PXS	UDA	WZA		CEW	DOP	EOE	FMK	GQL	HNE	ITA	KCB
<u>G2</u>	AMO	FVD	JIS	MJW	PYU	UOV	XFH	<u>G4</u>	CFW	DOU	EOL	FNL	GRR	HNI	ITC	KCH
<u>BS</u>	ANQ	GAQ	JKB	MPW	PZP	UFZ	XFG	<u>AL</u>	CGF	DPM	EPW	FOL	GSA	HNR	ITL	KFG
CP	ASE	GBD	JKY	MXN	RDO	UHQ	XMI	HG	CIA	DPY	EQB	FQE	GSC	HOM	IUP	KGY
NJ	AVN	GET	JLY	NEO	RDU	URU	XPM	LV	CIB	DQA	EQC	FQQ	GTD	HOR	IUX	KIK
UV	AWO	GGL	JRD	NHC	RFE	UTI	XVF	OO	CHL	DQF	ERA	FRE	GTU	HPQ	IVJ	KJA
ZU	AWZ	GUV	JSP	NII	RGF	UWZ	XXR	ABF	CKG	DQP	ERE	FSP	GUO	HPV	IVP	KJB
ASF	BFR	GWI	JXT	NIJ	RHI	UXE	YCC	ADE	CLD	DRB	ERO	FST	GUW	HQE	IVY	KKB
BON	BGR	HCM	KAN	NJC	RII	UYM	YHM	AEM	CIN	DRW	ERT	FVE	GVH	HQH	IWC	KKI
BOF	BOK	HCT	KDL	NJR	RIS	UZI	YJM	AHF	CLR	DRZ	ESF	FXI	GWV	HQJ	IYE	KLQ
BGG	BRL	HCX	KFE	NKH	RJF	VBS	YLL	ANF	CMY	DTB	ETJ	FZO	GXA	HQV	IYI	KMC
BYP	CCB	HDL	KFS	NKS	RJV	VFA	YMM	ASL	CQK	DTE	ETS	FZS	GYA	HSG	IZK	KOV
CAV	CCL	HKO	KGL	NNR	ROO	VFP	YNA	ATN	CRI	DUS	ETZ	GBE	GYM	HSO	JAT	KFE
CCH	CED	HMF	KFZ	NPJ	RRD	VTJ	YOO	AWQ	CRN	DUT	EUW	GBR	GYQ	HSU	JBR	KIN
CCQ	CEL	HRD	KII	NQU	RUG	VKM	YOV	AYN	CSM	DVW	EYA	GCU	GYU	HTM	JBL	KPH
CGL	COQ	HSU	KJC	NRO	RUN	VMT	YQB	AYS	CUF	DXN	EYD	GDR	GZI	HTP	JCY	KQG
CKM	CSC	HWJ	KKO	NSG	RYP	VMU	YUQ	BCY	CUY	DYF	EYE	GED	GZJ	HWU	JDB	KTI

KRJ	LZZ	NVC			OXM	ZNC	4HBG	41YG
KUU	MBP	NVH	<u>G6</u>	<u>G8</u>	PEW	ZPE	4HBM	4GIU
KUQ	MDU	NYK	AB	DV	PUD	ZRY	4IAO	4GJI
KWO	MEW	NZY	RO	IB	PWJ	ZSM	4IIR	4KJJ
KWW	MHY	OFB	AAL	JR	RCA	XWW	4ITH	4IFF
KXY	MIJ	OHM	ABO	KB	ROO		4JGG	3IZJ
KYG	MJO	OHQ	ALJ	PG	RRK	<u>GD</u>	4JLR	4KJW
KZL	MKF	OJF	AVW	QM	RVD	<u>3FXN</u>	4JMU	4NNF
LBY	MKL	OJN	BAI	VN	SEQ		4LFZ	40XB
LCH	MLI	OJR	BSF	AAL	SNG	<u>GJ</u>	4LHA	6ESP
LDG	MMG	OJZ	BYG	APR	SRL	<u>3IT</u>	4LLY	6ICM
LDY	MOU	OOA	CUN	ASW	TAK	<u>3EML</u>	4JFN	8PG
LEG	MPD	OPE	DGL	AXO	TBF		4PON	8GBJ
LGX	MPM	OPQ	DQC	BAF	TOZ	<u>GM</u>	4PUQ	8GLG
LIB	MQR	QQQ	DUN	BZT	TRN	<u>3KMG</u>	4OSS	8HZW
LJW	MQV	OSE	DVS	DOQ	TUR	<u>3KNX</u>	6BZF	8PBO
LKT	MRK	OTW	EPT	DWE	TXA	<u>3MXN</u>	8CH	8WJ
LKV	MSN	OWD	EQL	EAS	UAT	<u>3OXX</u>	8FHV	
LLO	MWM	OWE	EOO	EJK	UBO	<u>3RFR</u>	8GUX	
LOP	MWN	OWY	FPZ	FGY	UED	<u>3RKO</u>	8JQF	
LPF	MWO	PCL	FRZ	GRT	UFY	<u>3RFQ</u>	8LDK	
LQF	MZC	PEP	FSR	HED	UQY	<u>3SPT</u>	8ODL	
LQL	NAJ	PFK	GKN	HJS	UXH	<u>3UWX</u>	8WMU	
LRL	NBI	PJZ	GFP	IGZ	VJA	<u>3VTH</u>		
LRY	NCJ	PUU	GTC	IQT	VQQ	<u>3WIG</u>	<u>GW</u>	
LSE	NCZ	PWS	GZD	KEN	VYJ	<u>3XNE</u>	<u>3CIJ</u>	
LTZ	NDE		HTH	KKS	WEW	<u>3ZTA</u>	<u>3COI</u>	
LUN	NEG	<u>G5</u>	ISD	KMV	WVB	<u>4CIP</u>	<u>3DEX</u>	
LVK	NQF	BH	LEJ	KNA	WOQ	<u>4CXP</u>	<u>3EIM</u>	
LVM	NFR	FF	MCZ	LPI	WZV	<u>4EFR</u>	<u>3HAI</u>	
LVT	NHK	IC	MRB	LVZ	XAB	<u>4EVL</u>	<u>3ITT</u>	
LWF	NJK	OW	KDV	LWY	XIP	<u>4EWM</u>	<u>3NNB</u>	
LWO	NIL	RV	KYL	NGY	XQA	<u>4FDD</u>	<u>3SB</u>	
LWP	NNJ	CRD	OCH	NJZ	XSC	<u>4FNE</u>	<u>3SSY</u>	
LYC	NOL	CSU	OMZ	NLQ	XSS	<u>4FPR</u>	<u>3YDX</u>	
LYJ	NSJ	DQK		NMQ	YRO	<u>4FQE</u>	<u>3YWE</u>	
LZA	NTK	EEC		OQX	YUD	<u>4GIF</u>	<u>3ZFY</u>	
LZJ	NUI	EFL		OWL	ZBB	<u>4GNB</u>	<u>4CNM</u>	

EUROPE

CT1DP	EA7AAW	HB9BCO	ON6KE	SM4KL
CT4CH	EC6HS	HB9BWR	ON6LJ	SM5ENX
DA1JS	EA8ADV	HB9BYU	ON6NF	SM6EUZ
DA4DY	EA8EY	HB9IK	ON6WJ	SM6FQE
DF10Y		I10UE	ON7CH	SM6GWM
DF3PT	EA80A	I2VRF	ON7IR	SM7BNG
DF5AD	EA8UP	I3ESX	ON7LO	SM7EHK
DF6IA	E11DA	I3MDU	ON7SD	SM7GUY
DF7MV	E11DG	I5WUO	OZ3XH	SM7KNM
DJ1ZB	EI3CY	I7CCF	OZ8SØ	SMØFSM
DJ4HR	EI3DY	I7NFE	PA2LIA	SMØGHU
DJ5QK	EI3EA	I7QBH	PA3ABA	SMØGKF
DJ7ST	EI3EM	I7SVY	PA3AJU	SMØGMG
DJ8FU	EI4DZ	I7SKK	PA3BDB	SMØIIN
DK2EV	EI5ETB	IV3BOZ	PAØGG	SP5AGU
DK2NV	EI5BA	LA2QAA	PAØCWA	YO2SB
DK2TK	EI5EJ	LA3BX	PAØCWF	YO6HQ
DK3YH	EI6AKB	LA4RA	PAØDST	YU2JK
DK5RY	EI6BA	LA7YW	PAØINA	YU3TFW
DK6AJ	EI6DH	LX1BK		YU3TPQ
DK6AO	EI8CE	OE1SBA	PAØJHS	YU3TVN
DK5FN	EI7DN	OE5PGL	PAØPLM	YU3UQR
DK9TZ	EI9EP	OH2KF	PAØWX	YU7EC
DL2FI	EIØCF	OH3CN	PAØYF	
DL3GBQ	F3IM	OH5TF	PE1CWU	
DL4YCD	F6FWF	OH5WH	SM1CNS	
DL7DO	F6FZL	OK1DKW	SM1JBH	
DL7MAN	F6GLP	OK2BMA	SM5CCT	
DL9CE	F9YZ	ON1GR	SM5CO	
DF8CL	FØHX	ON1OP	SM6AQQ	
EA1QJ	HA5PI	ON4PQ	SM6AWA	
EA2SN	HB9ALF	ON5AG	SM6AWZ	
EA4AOY	HB9ANW	ON5LJ	SM4DXL	
EA5ME	HB9ASJ	ON6GA	SM4PPF	

U.S.A. AND THE REST OF THE WORLD OVERLEAF

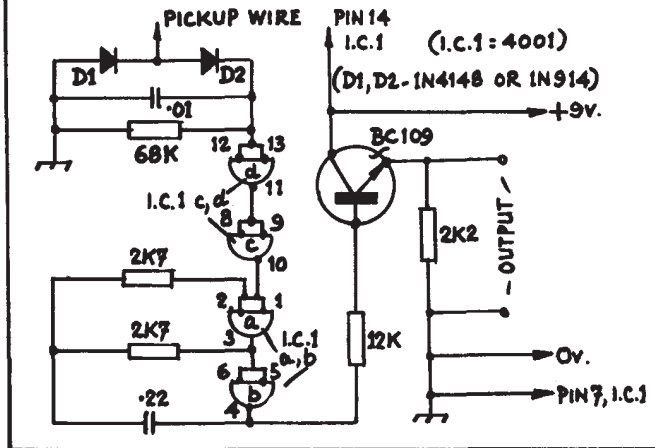
U.S.A.

1	WA2AHP	K4DFP	KB5LT	7	WA8TCG	Ø
AC1P	WA2JOC	K4DHJ	KB5OX	K7BD	WA8TER	KØTBB
AJ1Q	WA2KSM	K4HTJ	KB5EPU	K7BWD	WB8BHU	KØUBA
K1DDC	WA2LZZ	K4JHP	KC5EV	KC7IG	WB8AWM	KAØDGN
K1EQA	WA2VZL	K4GVQ	KC5YY	N7BJU	WB8PJR	KAØEDJ
K1GKR	WB2EUF	KA4KXX	N5AMQ	W7EL	WD8AZF	KAØEGJ
KA1BPC	WB2ONA	KA4NRM	N5EM	W7ZOI	WD8BMQ	KAØKDR
KA1CZF	WB2OUQ	KC4IG	W5QJM	KA7CKU	WD8LJF	KBØWF
KA1DYT	WB2QOH	KD4XX	WA5TFU	WA7ZBL	WD8NOY	KBØZA
KA1FEX	WB2RZU	N4FLC	WB5CVE	WB7BZQ		KMØY
KA1GPG		N4FRX	WB5NGB	WB7BZR	9	NØART
KA1MF	3	WA4BTL	WB5VXH	WB7PFB	AA9N	WØGK
KA1ST	AF3S	WA4KEG	WD5BUG	WB7QWA	AE9G	WØON
N1AQK	K3TKS	WA4YMQ			A19N	WØCGA
N1BKX	KA3EIN	WA4YRN	6	8	K9PNG	WØCH
W1EXZ	N3CUD	N4GR	K6MA	K8AEM	K9ZWH	WØPFR
W1FB	W3AEC	WD4DSS	KA6FRM	K8EEG	KA9B	WØVS
W1SZJ	W3QF	WD4FSX	KA6IDI	K8IF	KA9KOW	WAØYED
WA1JVY	W3TF	WD4FZU	KA6RGC	K8KIR	KK9Z	WBØHMM
WA1THQ	WA3BME	WD4NGD	KD6NL	K8LJQ	N9CFZ	WBØOKY
WA1ZKP	WA3FNK	WD4AEC	KD6VR	K8MX	W9AYH	WBØROT
WB1GMM	W3NQN		N6HY	KA8BUE	W9JFK	WBØWGS
WB1GMA	WA3MWR	5	W6IRA	KA8DDI	W9PNE	WBØWKY
	WA3TKU	AB5L	W6PQZ	KA8EDG	W9SCH	WDØEAO
2	WA3VVG	K5BOT	W6RCP	KA8HAN	WA9FPP	WDØEDH
AI2H	WA3YZW	K5HGB	W6SKQ	KA8NRC	WA9KFR	KH6CP
K2JT	WB3JEZ	K5NT	W6YVK	KM8X	WB9FRU	KL7IBT
KA2ETN	WH3AAA	K5VOL	WA6POC	N8BF	WB9LGZ	KL7PF
KA2KOA		KA5EDG	WB6MTR	N8ALE	WB9QPS	
W2BKH	4	KA5DXI	WB6WKM	N8CQA	WB9VKU	
W2BYO	K4AHK	KA5ELD	N6WR	W8JGK	WB9WIC	
W2JEK	K4AJF	KA5NLY	N6BVZ	W8LCU	WD9CIX	
W2YJR	K4BNI	KB5B	N6CDQ	W8WCS		

THE WORLD

A3SDE	VK4AIN
CN8CY	VK4ARJ
JH1HTK	VK4EGT
PY2EGM	VK4KOL
PY2FNE	VK4IO
PY2NGL	VK4APN
PY2RLQ	VK5ME
PY2TU	VK6JS
VE1BFL	VK7VV
VE1QH	VS5MG
VE2EZI	ZC4AU
VE3ABT	YD3EBM
VE3EYH	ZE3JO
VE3JFH	ZL1ABS
VE3KTZ	ZL1AF
VE3LDW	ZL1AO
VE4QL	ZL1BTT
VE5JQ	ZL1BHT
VE6AAN	ZL1BLJ
VE7BMR	ZLHV
VE7CKF	ZL2ASW
VE7DHD	ZL2AUJ
VE7DHM	ZL2BJC
VE7DZR	ZL2BJS
VE7FBL	ZL4HX
VE7FFX	ZL4IZ
VK3DFI	ZL4NL
VK3NQQ	ZS6BTY
VK3VEU	ZS6PT
VK3YNM	3B8BJ
VK4PM	7P8BT
VK5ADG	

YET ANOTHER SIDETONE - GM4JMU

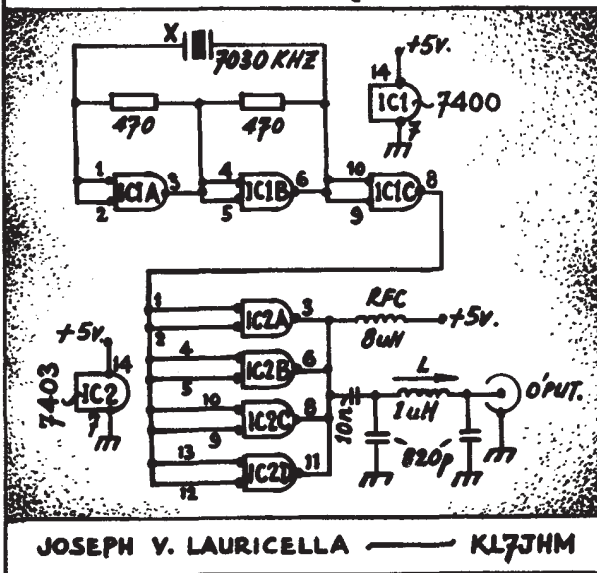


The output can be put directly across 2000 ohm phones in parallel with the receiver output, or attenuated and introduced in the receiver AF amplifier.

The current drain is 12.7mA when the tone is on when transmitting and less than 1uA quiescent.

Pick up wire, in the transmitter case or near the open wire feeder or antenna wire.

40M. TTL QRP TX



TTL QRP 40M TX - KL7JHM

From an idea of W0XI, this little TX has worked well into an inverted Vee dipole. With five volts the output is about 250mW and with six volts is about 360mW.

The circuit is in two parts. A 7400 oscillator with the four sections of a 7403 in parallel as a PA. The Z out is about 50 ohms.

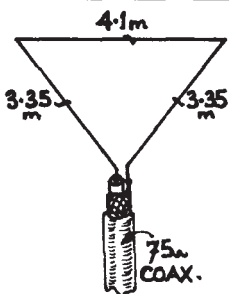
From : NOTIZIARIO QCA
(QRP ARI)

VALVES: These are offered for club funds:- QQV02-6 (£2 ea) 5763, 6BW6, 12AT/U/X 7, E88CC (all at 75p ea) PLUS POSTAGE. G8BAF QTHR. tel:0376 514912 (Essex).

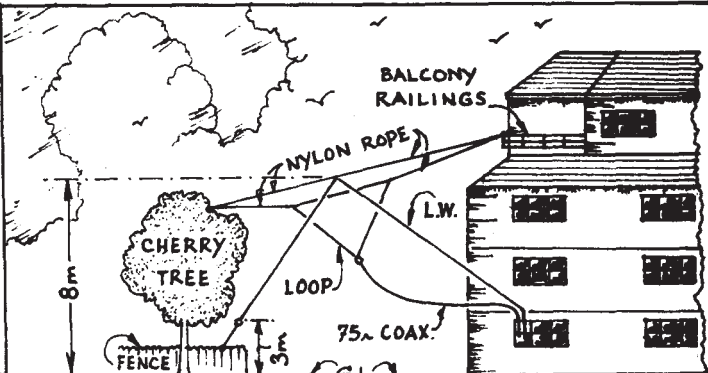
WANTED: Circuit diagram for Canadian 58 Set. G3FCK QTHR (Newbury 40750)

20M. END-FED 'INVERTED-V' & 10M. LOOP

OK1DKW



FULL-WAVE LOOP



The New
OK1DKW
Antennas

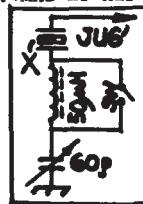
3.5 MHz ~ FED DIRECTLY BY 75 Ω COAX
7 < 21 MHz ~ FED VIA 'L'-NETWORK A.T.U.

OK1DKW now operates from a basement shack in a block of brick built flats in Prague. Fig. 1 shows the antenna systems which consist of a 20 metre wire in inverted Vee shape, which is brought into the shack and end-fed, and a 28MHz delta loop fed via 75 ohm coaxial cable. As shown the catenary supports, made from nylon rope, both run between the building and a tree. On 3.5MHz the 20m wire is fed directly from the pi-output on the transmitter. On 7, 14 and 21MHz it is fed via an L network, but this does not load properly on 28MHz. (A conventional Z Match should certainly load and match it on 28MHz. Ed.) The delta loop is fed via 75 ohm coaxial cable and it is orientated to fire east and west.

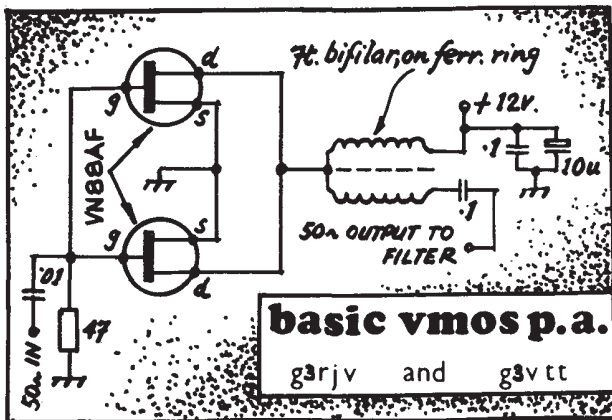
Both of the antennas are below the gutter level of the flats and surrounding buildings (mainly 13 metres high brick buildings), but they have given very good results. During the 1981 Winter Sports the antennas were used for 67 QSOs in total, 47 of which were with QRP stations. 8 of the QSOs were with DX QRP stations, these included WB2 and WBØ plus VE3 on 28MHz using the loop, and JA on 21MHz using the long wire. This was with powers of 0.17 watts to 3 watts output. Many European QRP stations were worked on 14MHz. The antenna functions well on 7 and 3.5MHz also. OK1DKW feels that the inverted Vee arrangement offers a useful alternative to the inverted L where end feed has to be used, and that it has excellent DX potential.

CRYSTAL PULLING IDEAS By John McDonnell, G3DOP and George McDonald, G3IEB

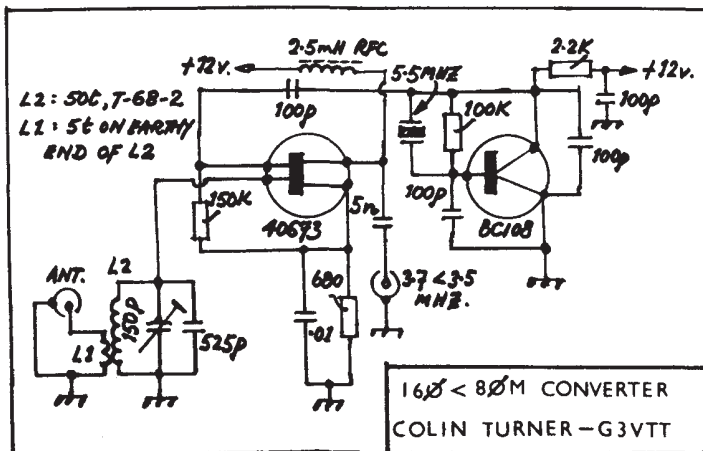
John and George have been obtaining some remarkable VXO results based on original ideas by Ha-Jo, DJ1ZB. John says that with experiments on 10.1MHz he has been getting a greater pull on the VXO circuit by including a variable inductance in series with the crystal tuning capacitor (see diagram). He has used this idea on his JU6 for 7, 10, 14 and 21MHz. The variable slug control is brought out to the front panel control and it becomes a fine tuning device. George managed to pull a 10500MHz crystal down 536KHz before overheating transistors, he has now settled for a lower figure.



FOR SALE: Pye Vanguard, Highband, unmodified AM25B Radiotelephone with manual, PSU, mod boards and data for 14.4MHz FM.
Woden 320v. 175mA @ filled transformer, 6.3 & 5v. + matching smoothing choke.
Les Smith G8BAF, tel: 0376 514912 (Essex)



What do 63RJV and 63VTT do when they get together? Play with VMOS PAs.... What else? Simple circuit, both devices find their own level, seems linear, works well. Ideal upto about 3-5 watts after that it needs at least 24 volts. Seems OK 80-10m-output from .1 to fixed pinet for band in use.



As Colin puts it... Dead simple, Got Gain, Stable, No Tuning, Ideal ahead of a direct conversion receiver on 80m

ARGONAUT SWR BRIDGE FAILURE By Colin Turner, G3VTT

The Argonaut range of transceiver utilise a built in SWR bridge which makes them a very useful 'tool' indeed.

The SWR bridge is built into the 'low pass filter and SWR bridge' module on the underneath side of the chassis, and the board is numbered 80260. As the SWR bridge has to give an indication of low power levels special diodes are used, type HP 2835. During a recent storm both the diodes, D1 and D2, in my Argonaut 509 were destroyed by a local lightning strike, despite the station long wire being earthed. Although I have not found any information on the diodes used, I believe them to be hot carrier types, and a suitable replacement was sought.

I tried normal silicon diodes such as the 1N4148 and although these worked, they gave an incorrect power reading, (the Argonaut is arranged so that a full scale forward reading on the inbuilt SWR bridge gives an output of two watts, pretty neat huh?). The output power using the 1N4148 diodes was about 3.5 watts.

A suitable replacement has been found in the hot carrier diodes sold by Birketts of Lincoln (England) in the type HP 5082 - 2800. These are entirely suitable and give the correct power output with a full scale reading. I hope membership with Argonauts will take note of this as I have yet to see the HP 2835 available in The U.K.

Important Club Notice!

RSGB Exhibition 1983

As many members will know the RSGB is moving its annual exhibition to the National Exhibition Centre in Birmingham and it will be held on Saturday/Sunday March 5th/6th, 1983. What a sensible move! The N.E.C. is sited within 100 miles of half the population of England...and 1 mile from the G3RJV QTH.

The G QRP Club have booked a stand for the exhibition where we plan to feature home built equipment, circuit ideas and SPRAT. We hope the stand will also be a social meeting place for members.

We hope that as many members as possible will be able to attend. Most of the club officers hope to be there. We require members homebuilt equipment to put on the stand. It does not have to be "flash gear" in fact we need to convince many that they are capable of building equipment with ordinary facilities. If you are able to supply such equipment please let G3RJV know as soon as possible. If a brief description can be supplied labels will be made for the display. We also require members to man the stand throughout the two days - want to help? Any Birmingham members who are free on March 4th and can help set up the stand will be welcome.

So make a note:

RSGB EXHIBITION. MARCH 5th and 6th 1983. N.E.C. BIRMINGHAM.

WQF NEWS

Please note that from 1 January, 1983 the WQF Secretary will be Jack Swiney, VK6JS, 59 Collava Way, Wattleup, 6166, Western Australia, and the G QRP Club WQF Representative will be Colin Turner, G3VIT, "Hurley", Weaving St, Maidstone, Kent, ME14 5JJ.

1982 has been a recruiting year for WQF Member Organisations, and this has been going well. At least one of the smaller organisations has already doubled its membership since the beginning of 1982!

1983 will be the WQF Year of Technical Development when all those who belong to Member Organisations are asked to undertake at least one project in the areas of either home construction, antenna experiments, or QRP propagation experiments, and to report details of it to their own QRP Club. It does not need to be original work - the fact that you have successfully completed a project means that both you, and through you your Club, have made a technical contribution.

The September WQF Activity Weekend was well supported and those taking part had a ball. The appearance of a 2w CN8 station, Willi with his mountain boots on a5DK5RY/HBo, and excellent signals from KA1GPG all helped to keep the interest high.

The WQF has now agreed to accept an upper limit of 20w pep for QRP ssb operation, but recommends lower limits for awards etc. Our own Award limit remains 10 watts pep.

The WQF event in July produced a good turnout. Leading stations in the European section (run by DL AGCW) were; 3w class, 1 K4LTA, 2 GW8PG, 3 DK3EN, 4 I7CCF; 9w class; 1 OK3AUI, 2 W1HHV, 3 OZ1HXL, 4 EA8ACL. The results of the US section are not yet to hand.

EUCW NEWS - 1983 YEAR OF NOVICE; SPECIAL AWARD FOR NEW OPERATORS

To encourage newly licenced operators to become proficient in cw, 1983 is the EUCW Year of The Novice. As part of the Year, G QRP Club will offer the G QRP CLUB CW NOVICE AWARD, the rules of which are as follows. Eligibility; only open to stations licenced on or after 1st June, 1982. Period; all contacts must be made during the year 1983. Contacts may be made on any band for which the applicant is licenced, but they must all be on cw. Required contacts; the applicant must have contacted 50 (fifty) other amateurs stations. Classes; Class A; all contacts must have been made when the applicant was running a dc input not exceeding 5 watts; Class B; Any licenced power may be used. Award applications; Applications shall consist of a list of the stations contacted, including date and band used. The list must be signed by the applicant and countersigned by another amateur who has seen the log entries. For Class A the applicant must certify his input did not exceed 5w during the contacts.

Continued on Back Page.....

SSB News Ian Keyser G3R00

I am doing this early this time as it is teaming with rain, the bands are terrible and I have already got a lot to get in and must not miss the deadline this month.

Firstly, an SSB Activity Week-end. Ever thought of trying to organise one? Well, look at the contest calendar! The 1983 CW Spring Activity Week-end is on 19/20th March so let us set it for the week-end of 7th/8th May and call it The Late Spring QRP SSB Activity Week-end.

Next in the pile is The Marconi SSB Contest on the 5th/6th February 1983. This was very poorly attended in 1982. For the time I could get on I was on 80 metres, but did not work any other QRP stations! I had a great time though telling everyone about the Club. I think that this year I will settle for 14MHz single band, more chance of meeting other QRP stations. Full details of the Contest are given below.

This raises another issue on which I would like comments. I am not a keen contest man, but enjoy going on for a few hours and I have often thought of a contest lasting about three hours, over sunset time to give continuously changing conditions.....any takers? If you do not like letter writing a card with a yes or no is sufficient!

I have had two letters so far, any others that arrive I will include in the next Sprat. The first is from Tony, G4LLY to tell me I am too late for the Club application for 6 metre licenses....but also raising the issue of power measurement on SSB. I think the only way is to use a unit similar to the article of mine in Short Wave Magazine a few months back. I will have to try and persuade George to run it in Sprat! Tony is active on all bands, 80 metres to 70 cms, so keep a look-out for him.

The other letter is from Helmich, PA0HEL, he is active with a three band verticle and an Argonaut. He is not yet a member of the Club (at the time of typing this), but heard about Chris, G4BUE through his article in CQ Magazine and decided to write to Chris to see if the Club had interests in SSB. He can be found on 14, 21 and 144MHz bands. Finally, SSB frequencies, the ones in brackets are Club frequencies, the others international - (1900), 3690, 7090, 14285, (14333), 21285 and 28885 KHz.

SKED: 1730 GMT on 14333 - I am on every possible evening.

73's

Ian

THE G. MARCONI QRP SSB CONTEST 1983

Starts at 1500GMT on 5th February and ends at 1500GMT on 6th February. Single operator, single band and multi-band entries on all bands 80 through 10 metres with a maximum power of ten watts PEP output. Scoring is 1 point for QSO with own country, same continent is 2 points and EX is 5 points. Multipliers are DXCC countries worked on each band and the final score is the points multiplied by the multiplier. Contacts made using non directive antennas count double points. A power bonus is then multiplied against the final score to give the grand total score and the power bonus is as follows :- 0.9watts is 3, 1 watt to 3.9 watts is 2 and 4 to 10 watts is 1. Logs must contain usual information and details of rig and antennas and should be sent to I00AY, Massimo Capozza, Via Sierra Nevada 99, 00144 Rome, Italy not later than 30 days from the date of the contest. Awards will go to the first three places in the general list and to the first in each single band entry.

This contest is organised by our friends in The QRP CLUB ARI, which is the official QRP Club in Italy. Club member I0SKK is their QRP Manager. Give them your support.

AWARD NEWS

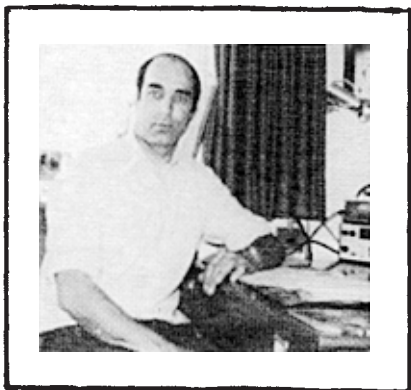
WAC on two-way QRP; G4BUE.

QRP WAC; Y02SB, KA1GPG, I7CCF, PY2FNE.

QRP Countries; 75 Y02SB; 50 I7CCF, KL7LBT; 25; G4MIJ, G3WWS, DF6IA, DK2EV, KA1GPG, PY2FNE, G8JR.

Worked G QRP Club; 120 G8PG; 80 I7CCF; 60 DK5RY; 40 G4JJG, G4ELV; 20 G5CSU, G4MIJ. Omitted from last list; 40 OK2EMA.

Members News:



Chris Page
G4BUE

know your suggestions for International QRP Calling Frequencies on these bands. Gordon, G3DNF hopes to be on 18MHz soon, as his convertor is working fine.

The lean Summer conditions seem to have given way to improving Autumn conditions for DXing. Many members comment on the better conditions which (for once) have coincided with the start of the Contest season. George, GM30XX worked all continents on a Saturday at the beginning of November on 28MHz, and Dave, GM4ELV worked 9K2 and CN8 on the same band. Aga, EA8EY is now up to 119 countries worked with one watt and Felix, I7CCF is 123/83 having found a big improvement in antenna performance due to a change of co-ax. He has been trying milliwatting and has worked W9 and JA4 with 100mW output. Another to try milliwatting is G3YCC. After doing some mods to his 515 Argo, he tried it out with just 250mW on 21MHz and worked W2 and W8. Several members have commented on the amount of milliwatting on 7MHz recently with several members working each other in Western Europe with power levels down to 100mW.

Now for a moan! One of the Clubs most active members has mentioned that he has worked 40 Club members who were running power levels in excess of five watts. Your scribe has also worked a very large number of members who were running QRO, and agrees that it can be very frustrating. I appreciate that many members use QRO and QRP (I do myself) but can I suggest that if you are operating QRO and hear a member calling "CQ QRP", you drop your power down to five watts before calling him, and not call him at the QRO level.

The social scene within the Club continues with a nice visit here at Upper Beeding from Leo, KC5EV and his wife Sharon. Leo is well known for publishing the Houston Area QRP News and it was nice to meet him in person. Leo and Sharon also visited the two Georges, G3RJV and GM30XX during his visit. Whilst on the social scene, Tony, G4FAI apologises for not making the "do" after the Leicester Exhibition, and suggests the Club have a small stand at future exhibitions where members could book in and meet each other. An excellent idea Tony!, as your committee have already arranged to have a stand at the forthcoming R.S.G.B. Exhibition at The National

The big news this Autumn is that as from 1st October amateurs in The U.K. have been permitted to operate on the new 18 and 24MHz bands. Power is limited to 10 watts output on CW and the antenna must be horizontally polarised and have no gain over a dipole. The only people who seem to be moaning about this are the QRO types, apart from the antenna restriction QRPers seem very happy with the new bands.

One problem with the new bands is that there are not very many other countries operating on it. One country that is allowed is West Germany and DJ1ZB has sent a very interesting report of his first impressions of the new bands. On 2nd October Ha-Jo had his first contacts with The U.K. including Club member GM30XX using a home-brew all band transceiver on 18MHz and says that conditions are very different, often with deep QSB within a short time, but often S9 plus signals when conditions are optimum.

On 24MHz Ha-Jo also worked into the U.K. but finds the band is only rarely open for short distances. Most 18MHz activity is at the lower band edge, and on 24MHz is from 24890 to about 24910. The Club will shortly be in contact with The W.Q.F. regarding QRP frequencies for the new bands, so will those members who are active on 18 and 24MHz let us

Exhibition Centre in Birmingham on 5/6th March 1983. Book the date now as this is going to be "the" QRP event of 1983. George's (RJV) QTH is already booked up for the week-end in the shape of your scribe, GM3OXX, G3ROO and G3VTT, and G4DVW, G3DNF, G8PG also intend going.

There are several QRP events coming up to start 1983 off. Although I have not received confirmation, The AGCW-DL Winter QRP Contest is scheduled for 15/16 January, the rules as in previous years. The CQ WPX SSB Contest with QRP Section is 26/27 March and the R.S.G.B. Low Power Contest on 3.5MHz on 17th April. This last contest always attracts many members of the Club. If you are still trying to work two-way QRP with the U.S.A. or Canada for the first time, try looking during the late afternoons or early evenings on 21060 and 28060 on the first week-end of each month. The A.R.C.I. Club hold their monthly QSO Parties then and many (genuine five watt) QRPers from that side of the water are on, including many USA/Canada members of The G-QRP-Club.

G4MIJ and SMØFSM have now notched up a total of 17 hours of two-way QRP on 14MHz on SSB and CW. Rod and Per have succeeded through thick and thin with OK2BMA and G4HOM often joining in. G8JR is a newcomer to QRP who is QRV with a HW8, having put all his other gear away. Pete has worked 54 countries with a very bent piece of wire indoors, and asks if any members have any ideas for an indoor antenna for 80 metres. G8PG has been trying for ages to get ZL confirmed, typical Gus no half measures, two ZL cards arrive in the same post recently, well done Gus. Eric, G4EBO mentions a decline in recent QRP activity and suggests a weekly activity period one evening on 3560. Members are reminded that 3560 from 2000 local time on Wednesday evenings has been listed for QRP activity for the U.K. and Western Europe.

Colin, G3VTT will be pleased to know The Bren is very popular in the Bristol area, with G4KUQ having built one together with four others in the area. Mark is also QRV on UHF/VHF and together with members G4OPQ and G4EIA are interested in having a social QRP get together in the Bristol area together with other members who may like to join them. DK5RY asks me to mention that he will be QRV between 1200-1230 and 1500-1530 each Sunday on 10106 looking for other members. John, G4BCY wants to try a half size quad loop for 80 metres and asks for ideas from members. He has been looking at the mini quad by OK1DKW which was recently published in Sprat. Petr's last letter to me was dated 30 September, the day before he went away to the military for one year, so activity will decrease. He did add F6FIZ/TZ for a new before he went.

New member, N4FLC asks us to mention that QRP is alive and well in Southern Alabama, Felix being active with a dipole to a HW8. Despite looking for Club members, Felix has only been able to find F6FZL. The weekly and annual Activity Periods are designed to enable members to meet each other. Try and support them and you will find meeting other members can be easier than you think (remember that GM3OXX has over 200 members confirmed). Eric G4EBO after having a QSO with Matt, KK9Z, received a nice letter from him in which he says that he is a member of Fayette County DX Group who are interested in acting as QSL managers, especially for QRP stations - anyone interested?

A piece of late awards news is that after the Leicester Exhibition, at the Club QRP get together, George, G3RJV was presented with an award for cookery, after eight attempts. He received 11 endorsements to it verified by Rich, G5CSU. Watch this column for further information!!! On a more serious note G4NNJ has been awarded the Km/W award, Allan using a xtal rig. Adrian, G4GDR has worked a ZB2 who was running an Argonaut, and just about everyone (except your scribe) seemed to have worked new member Roy, CN8CY during the September WQF Week-end. Charles, GW3SB recently made a visit to Dyfed and worked 20 countries with his HW8 and a whip, including EA6 and EA8 through pile ups.

Finbar, EIØCF, has recently built a JU6 for 14MHz into a 1oz. round tobacco tin, and the first QSO with it was NP4P. New member DL9CE, Manfred has worked over 400 QSOs around Europe with his 7MHz Optimum QRP Transceiver in QST, and G4FAI tells me that 9H1CD, Henry is keen to work QRP stations, and often drops to 500mW. Look for Tony's article "The World of QRP" in the January 1983 edition of Practical Wireless. As a result of hints from Tony, your scribe spent a little time on 3.5MHz during The HA QRP Contest during the first week in November. I was very surprised at the large number and excellent operating procedures of East European QRP stations. If Western European QRPers support the contest in the same manner, 1983s event could be quite an event. More details nearer the time. Just space to wish you all a happy Christmas and don't forget the Club's CW Activity Week-end on 19/20 March, Pest 73, Chris

NEW MEMBERS:

- 1464 G4KXX M. Hadley, 42 Holmwood Rd., Small Heath, Birmingham, B10 9QJ
- 1465 G3VTJ H. Bradshaw, 63 Bunbury Rd., Northfield, Birmingham, B31 2DS.
- 1466 YO2SB A. Hartau, P.O. Box 82, 2900 = Arad - 1, Romania.
- 1467 D. Turney, 2 Beult Meadow, Cage Lane, Smarden, Kent, TN27 8PZ.
- 1468 G4FCO D. Stevens, 3 Boyleston Rd., Hall Green, Birmingham, B28 9JN.
- 1469 OH5TF P. Termosnen, Oksatie 5, 45120, Kouvola 12, Finland.
- 1470 VK7VV R. Taylor, 25 Twelfth Ave., West Moonah, Tasmania, Australia 7009.
- 1471 G6DVS R. Wright, 35 Warwards Lane, Selly Oak, Birmingham, B29 7RA.
- 1472 OE5PGL P. Gruber, Dr. Rudolf Schuh Strasse 23, A-4863 Seewalchen am Attersee, Austria.
- 1473 R. Marriott, Ferndale, Plantation Cl., Curridge, Nr. Newbury, Berks.
- 1474 G3KGL J. Tickner, 68 Long Rd., Kinson, Bournemouth, Hants.
- 1475 DL9CE M. Hempel, Frankenweg 2a, 2190 Cuxhaven 13, W. Germany.
- 1476 DE1EMH B. Matthies, Osterfeldweg 30, 2100 Hamburg 90, Fed. Rep. of Germany.
- 1477 G4NVH G. Boull, 10 Arcot Park, Sidmouth, Devon, EX10 9HW.
- 1478 G6BOO R. Machin, 236 Tamworth Rd., Kettlebrooke, Tamworth, Staffs. B77 1BY
- 1479 G4GXI P. Pearson, 3 Lorimers Cl., Peterlee, Co. Durham, SR82NH.
- 1480 G4NIL R. Henshall, St. Annes, Staplehay, Taunton, Somerset.
- 1481 G6FRZ C. Norfolk, 21 Buckingham Rd., Wilmslow, Cheshire, SK9 5JU.
- 1482 G4OWE F. Daw, 21 Chawkmare Coppice, Bognor Regis, W. Sussex, PO21 3SA.
- 1483 G4OJZ C. Spurrier, 70 South Street, Chichester, Sussex.
- 1484 G2FMO A. Milnthorpe, 31 Park Cres., Oadby, Leicester, LE2 5YJ.
- 1485 WB3JEZ B. Palmer, 33 Hontress Ave., Westbrook, ME04092, USA.
- 1486 PA2YZA A. Dort, Roerstraat 8 huis, 1078 LN Amsterdam, Holland.
- 1487 G6FPZ A. Hart, 54 Greenpark Rd., Exmouth, Devon, EX8 4JJ.
- 1488 G6KXL P. Norman, 90 Barn Meads Rd., Wellington, Somerset, TA21 9BD.
- 1489 G8DWE 7 Maycroft Cl., Ipswich, Suffolk.
- 1490 G8WZV J. Aizlewood, Anvil House, 36 King St., Winterton, Scunthorpe, S. Humberside.
- 1492 G2ZU F. Ellenger, 37 Harper Rd., Salisbury, Wilts.
- 1493 OH3CN S. Kurvi, Jovinkatu 2 B 34, 15170 Lahti 17, Finland.
- 1494 G4PJZ J. Towel, 63 Digby Ave., Mapperley, Nottingham NG3 6DS.
- 1495 KA4GVQ C. Tryor, 7809 10th Ave., South, Birmingham Ala. 35206, USA.
- 1496 G8JR N. Haskins, Fen House, Castle Street, Eye, Suffolk, IP23 7AW.
- 1497 G4OJR A. Stone, 122 Stradbroke Rd., Lowestoft, Suffolk, NR33 7HX.
- 1498 G3JLY S. Sparks, 55 Gainsborough Rd., Scotter, Gainsborough, Lincs.
- 1499 G6MCZ G. Gardner, 46 Dumber Lane, Sale, Cheshire, M33 5QX
- 1501 G4PEP C. North, 107 Holmgarth Dr., Hull, HU89DX.
- 1502 GW61CM M. Barfoot, 9 St. Albans Rd., Tynewydd, Treorchy, Mid. Glam, CF42 5DD.
- 1503 G3KJC R. Church, Three Birches, Sandy Cl., Long Lane, Harmitage, Newbury, Berks.
- 1504 G3GJQ R. Handley, Villa Hind Km5, 2 Route des Zaers, RABAT, Morocco.
- 1505 G6KDV D. Wickett, 10 Brockwell Grove, Jingstanding, Birmingham, B449PE.
- 1506 A. Korda, 5A Croft House, Frant Rd., Tunbridge Wells, TN2 5SE.
- 1507 G6MRB J. Ralph, 70 Regis Crescent, Milton Regis, Sittingbourne, Kent.

1508 GJ3IT R. Reid, 62 Elizabeth Ave., St. Brelade, Jersey, Channel Islands.
1509 G3MJW D. Edmunds, 15 Hope Street, Bozeat, Wellingborough, Northants, NN97LU
1510 G4LMQ I. Reid, 54 Gaynes Park Rd., Upminster, Essex.
1511 KA9KOW I. McNicholl, 1201 Spring Tree Court, La Habra, California, USA.
1512 C. Peaks, 5 Meadow Grove, Newton, Derbys, DE55 5TW.
1513 G4IYI N. Wright, 16 Casterton, Church Park, Euxton, Chorley, Lance, PR76HN
1514 G4OWD J. Kemp, 42 Hawksworth Ave., Cuisley, Leeds, LS20 8EJ.
1515 G3MAM Dr. D. Sugden, 7 Church Street, Alfreton, Derby, DE5 7AH.
1516 K4AHK W. Harding, 10923 Carters Oak Way, Burke, VA 22015, USA.
1517 G4KFG D. Twist, 2 Noverton Ave., Prestbury, Cheltenham, Glos. GL52 5DB.
1518 G6DIZ Mrs. D. Feeley, 79 Narrow Lane, North Anston, Sheffield, S317BJ.
1519 G4OPE J. Hodges, 51 Carnford Rd., Sheldon, Birmingham, B26 3AG.
1520 G4HJV D. Miller, 26 Little Elmbrudge, Longlevens, Gloucester.
1521 G4NCJ J. Short, Sunnyside, Knapp Road, Thornbury, Bristol, BS12 2HF.
1522 M. Dolan, 15 Ringwood Road, Headington, Oxford, OX3 8JB.
1523 G4EIA M. Wallis, 9 Valma Rocks, St. George, Bristol, BS5 8SY.
1524 B. Ellison, 931 Burnley Rd., Todmorden, Lancs.
1525 T. Bennett, 37 Skomer Cl., Frankley, Rubery, Rednal, Birmingham, B45 0NU.
1526 DF10Y F. Fabri, Mallinckrodtstr. 52, 4790 Paderborn, W. Germany.
1527 SM4KL K. Osterberg, Akerg 14, 66050 Valberg, Sweden.
1528 G6DQC D. Owen, Delamere, 12 Wolverley Ave., Wallaston, Stourbridge, D78 3PJ.
1529 YD3EBM R. Soetedjo, JL. Kapuas 19, Surabaya, Jawa Timur, Indonesia.
1530 ZS6PT P. Sykora, P.O.Box 1387, Vanderbijlpark 1900, Rep. of South Africa.
1531 J. Meadowcroft, 17 Chantry Rd., Thronbury, Bristol, BS121ER.
1533 G4NVC I. Hollingsbee, 8 West Lodge Drive, Coney Hill, Glos. GL47QH.
1534 G4PFK G. Gifford, 184 Chantry Crescent, Great Barr, Birmingham, B436PG.
1532 G8DOQ N. Milson, 65 Doncaster Rd., Gunness, Scunthorpe, S. Humberside, DN158TG.
1535 G4EBQ R. Robinson, Holy Cross Presbytery, Worcester Road, Birkenhead, Merseyside
1536 G8HJS J. Harris, 57 Evesham Rd., Stratford-upon-Avon, Warks.
1537 G4IQR N. Troop, 10 Mellowdew Rd., Wyken, Coventry, CV25GL.
1538 G3MXH T. Downing, Archways, 94 Shipston Rd., Stratford-upon-Avon, Warks.
1539 G8VQQ L. Locke, 16 School St., Honeybourne, Nr. Evesham, Worce. WR115PJ.
1540 G8YRO P. Yardley, 13 Blackthorn Road, Menilworth, Warks.
1541 KK9Z M. Tinker, 1612 Indiana Ave., Connersville, Indiana 47331, USA.
1542 Dr. J. Moyle, 62 Montagu Gdns, Wallington, Surrey, SM6 8ER.
1543 G4OTW D. Gregory, 9 Litley Dr., Cheadle, Stoke-on-Trent, Staffs. ST10 1NJ.
1554 M. Homes, 5 Iris Close, Weoley Hill, Birmingham, B29 5BS
1555 G4LZJ P. Garnett, Drewen Garth, Church Street, Aldbrough, Hull, 4RN.
1556 G4NSJ G. Heffer, 12 Downvew Rd., Ferring, Worthing, Sussex.
1557 WB2OUQ D. Werner, 68 Gordon Ave., Lancaster, New York, 14086 USA.
1558 G3WCE B. Edwards, 3 Farmlands Court, Farmlands Cl., Polegate, East Sussex.

- 1559 WB1GMH J. Fellows, Box 637, Pittsfield, Vermont, 05762, USA.
 1560 WB1GMG Miss J. Fellows, Box 637 Route 100, Pittsfield, Vermont 05762, USA.
 1561 J. Ivory, 178 Fern Hill, Arklow, Co. Wicklow, Eire.
 1562 G4BQV R. Mullard, 46 Green Lane, Clanfield, Portsmouth, PO8 0JX.
 1563 E. Streatfield, 2 Gardiners Cl., Churchdown, Gloucester, GL3 2DX.

Membership Changes:

CHANGES OF ADDRESS:

- 017 G3DOP, 25 Croft Parc, The Lizard, Nr. Helston, Cornwall.
 132 GM3KNX, 13 Neidpatch Ave. Coatbridge, ML5 4LQ
 182 G4BXN, 36 Appletrees, Bar Hill, Cambridge, CB3 8SJ
 247 VE7FFX, 7460 Garfield Dr. Delta, B.C. Canada V4C 6Y1
 430 G4GVV, 2RO R. Hookam, RFA Blue Rover, BFPO Ships, London.
 484 G3OEP, 33 Addison Rd. Gorleston, Great Yarmouth, Norfolk, NR31 OPA
 539 GW4GIU, 152 Ael-y-Bryn, Llaneldeyrn, Cardiff, CF3 7LH
 895 G4GQL, 38 Torquay Gdns, Redbridge, Ilford, Essex, IG4 5PT
 908 D. Wood, 37 St. Annes Rd. Willenhall, West Midlands
 927 GW4KJJ, 54 The Orchard, Newton, Swansea, SA3 4UQ
 994 G4HHT, 3 Shirley Rd. Walsgrave, Coventry, CV2 2EL
 1025 DJ8FU, Eichenstr. 4. D-4444, Bad Bentheim, West Germany.
 1093 G6BAI, 68 Keele House, Forth Dr. Chelmsley Wood, Birmingham, B37 8PN
 1219 G4MQR, 67 Crossdale Dr. Ketworth, Nottingham, NG12 5HP
 1239 G4MZC, Valeview, Green Lane, Churt, GU10 2PA
 1250 G4MWM, 99 Horace St. St. Helens, Merseyside, WA10 4NA
 1253 G4PWS, 30 Bath Rd. Chiswick, London, W4.
 1349 KA5NLY, 16 Fairmont Dr. Little Rock, AR 72204, USA.
 1455 R.F. Bleasdale, 12 Midway, South Crosland, Huddersfield, Yorks.

CALLSIGN CHANGES:

- 247 now VE7FFX (ex G4BJZ), 415 now G6GZD, 539 now GW4GIU (ex G4GIU),
 1025 now DJ8FU (ex ON8CP), 1200 now GM4PON, 1253 now G4PWS, 1264 now G6OCH,
 1366 now DL4YCD (ex DD7QP), 1384 now GM4PUQ (ex GM6KCS), 1512 now G6OMZ,
 1457 now G6LEJ,

WRONG ADDRESS:

- 1273 AJ1Q is Rollins not Rolling, 1330 N1BKX, State Maine not Main.

PLEASE QUOTE YOUR MEMBERSHIP NUMBER IN ALL CLUB MAIL.....

OH WE FORGOT...

- 1500 T1REF (Name and address withheld at owners request)

EUCW NEWS (Cont'd)

Application fees. UK applicants must include 50p in UK stamps with their application, and overseas applicants 3 ircs. Address; send applications to; A. D. Taylor, G8PG, 37 Pickerill Road, Greasby, Merseyside L49 3ND, England. As from 1st January 1982 the Club EUCW representative will be; George Burt, GM30XX, 1/5 Essendean Terrace, Clermiston, Edinburgh EH4 7HD, Scotland.

PERSONAL NOTE

At the end of my terms of office as WQF Secretary and EUCW Manager I would like to thank the many great QRP enthusiasts from all parts of the world who have helped to make the work such a wonderful experience. The offices now end, but the friendships remain. Thank you all ! Gus, G8PG/GW8PG, G QRP C 004, Grupo QRP Do Brasil 062, VK QRPp CW C 069.

DO YOU USE 18 and 24 MHz ? The Club is still considering suitable QRP Calling Frequencies for these bands, perhaps you might like to help us. Advice to G3RJV.