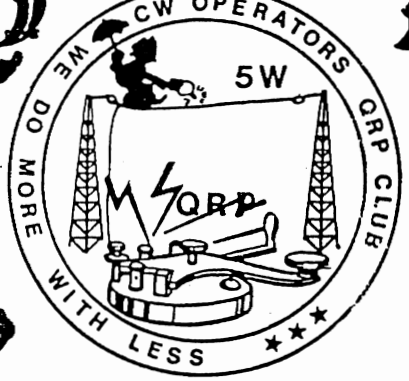
Merry Christmas

LO·KEY

NEWS BULLETIN



PUBLISHED QUARTERLY

CONTENTS

"WE DO MORE WITH LESS!

25 12th AVENUE W. MOONAH, HOBART, TASMANIA AUSTRALIA

Happy New Year

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****

MEMBERSHIP

The CW OPERATORS QRP CLUB is an International Club, open to Amateurs and Short Wave Listeners from any country. The Club was formed with the aim of promoting QRP using the CW mode, on ALL frequencies allocated to the Amateur Service.

****

ANNUAL MEMBERSHIP FEES

VK....$8 : ZL.... Lo-Key by surface mail....$A9 : ZL....Lo-Key by airmail....$A10 : DX....Lo-Key by surface mail.... $A9 : DX.... Lo-Key by airmail....$A12. Please make all Money Orders and Cheques payable to the CW OPERATORS QRP CLUB. IRC's not acceptable.

****

CORRESPONDENCE

Please address all correspondence for the Secretary, CW Operators QRP Club, 25 12th Avenue, West Moonah, Tasmania. 7009. Australia All membership fees to be sent to the Treasurer, CW Operators QRP Club, 41 Tobruk Avenue, St. Marys, S.A. 5042 Australia.

****

CLUB CALLING FREQUENCIES

1815:3530:7025:14050:21130: 28125

***

INTERNATIONAL CALLING FREQS

3560:7030:14060:21060:28060:

****

LO-KEY

Published in March : June : September : December.

VK5 STATE NEWS BY JEFF, VK5BJF

Well, as you aware the HF bands have been quite busy of late. Nice to be able to get into Europe again with 5 watts on 15 m. Have you noticed the number of intruders on our bands? Many c.w. stations on 20 m, using such calls as ZQQJ, ZOLG, NEMX, TWXX, E6IL, W4ZD, IV4N, etc. Please support the Intruder Watch!

As I mentioned last time, I have been trying for contacts on 18.070 Mhz. on Sat. about 0300z but I have not had many takers, however I will keep trying. A few European stations can sometimes be heard in the evenings on this band lately. With summer weather we should be able to get some good openings on the 12 m band so don't forget to listen there occasionally, especially if the 10 m beacons can be heard.

Well Len, VK5ZF tells me he made a few points in the contest of Nov. 16/17 but had to work hard at it. He is thinking of planning some activities for the John Moyle field day in Feb.. So if any VK5's have any thoughts on the matter then please contact him. It would be a great opportunity for us to meet each other. We tried to discuss it on 80 m one night recently, but Len's little 120v couldn't beat the static so we went to 15 m and had better luck over the 130 Km path on that band.

May I take the opportunity to wish all our members a happy Christmas and the very best of Dx and good fortune in the New Year.

Happy QRP-ing.

Jeff.

TECHNICAL TOPICS

BY ROD GREEN VK6KRG NEWSLETTER No 28

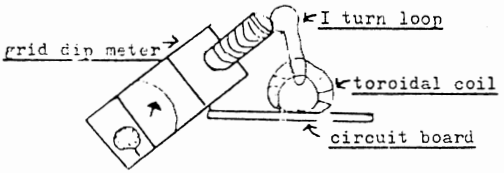
You can make chokes of any value for HF and heres how. Firstly select your core material. eg ferite toroid, resistor of high value, plastic water pipe, or even r wind an old transister IF amplifier coil. (my favourite) we will assume for instance that you want to make an RFC of 60 microhenry.

Firstly to basics. A very useful formula to hams is $F = \frac{1}{2\pi\sqrt{LC}}$ where F= frequency in hertz, L= inductance in henries, c is capacitance in farads. These values can be awkward to manipulate, but with a calculator with scientific notation it is no problem. Remember you can buy your calculator, QRP rig and measuring instruments, for about 10% the cost of a QRO rig and learn, and have more fun. Now if you have a known capacitor of say 22 PF.

We want L to be 60 UHY or 60×10^{-6} Henry.
We know c to be 22PF or 22×10^{-12} farad.
This combination will resonate at $\frac{1}{2\pi\sqrt{60 \times 10^{-6} \times 22 \times 10^{-12}}} = 4.4$mhz.

So then if you had a grid dip meter you could wind your coil, and check the coil capacitor combination and if its resonant frequency is too low your inductance is too much, just take turns off. If frequency is too high you must rewind the coil, so it is best to start with too much. If you need more accuracy for some reason. The actual frequency is 4.3806 mhz, tune your receiver to that frequency, prune your choke so that the trough of your dip coincides with the GDO being heard on your receiver. This accuracy is very seldom needed (probally never).

When building your "high isolation buffer, you will for best results need to tune each stage, although they are very broad. To do this you can dip the collector chokes whilst in circuit, with power off, before the attenuators are fitted. If the dip frequency is too low remove some turns and vice versa for frequency too high. For best results the dip should be mid band. I didn't do this to an experimental unit, and it worked ok, but its peak response was at 3mhz, the response extending to 7mhz, then dropping off. I should have set my peak at around 6-8mhz.



grid dipping your toroidal coils in circuit

ERRATA LO-KEY No 7 PAGE 19. ✓
For 80M L1 and L2 in Fig 1 should be 60MHenries.
stray capacitance was 30pf.

I have an 80 meter QRP transmitter, that I would like to describe in coming issues but first, I will describe its VFO as it is on 40 meters. It is quite stable, and rarely needs returning. This VFO should be useful on the 40 meter band. It could be followed by a source follower, thence the high isolation buffer of the last Lokey. Remember to wind your chokes LI and L2 to suit 40 meters. (60UH is ok for IOPF stray C) the circuit fig I

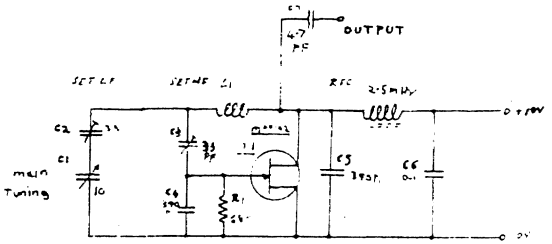


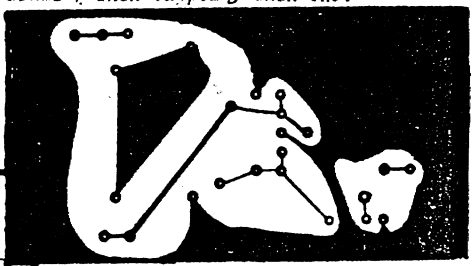
fig I VFO schematic 7.0-7.2mhz

The circuit is a Vakkar type, which has the reputation of high stability. see fig I.
Figures 2 and 3 are the printed circuit board layout. The entire unit including the tuning capacitor is mounted on the P.C. board. The tuning capacitor is mounted on the compent side, the shaft poking through the bottom. The board was then mounted on the front panel with standoffs. The tuning capacitor used on the prototype was 12PF but use what you have up to say IOOPF.

COMPONENT LIST

LI close wind 22 turns gauge 26SB enameled wire close wound on plastic water pipe about 11.5mm OD, this was the old ½ inch inside diam pipe. The length of the pipe should be about 37mm to leave room for standoffs see fig3. Wind coil centrally between standoffs.
Standoffs 16mm long for coil. 2 off. Brass ¼ inch tapped 6 each end.
I fet MPFI02.LI
2 trim caps 3-30PF C2 ,C3.
2 390PF poly capacitors C4,C5
I O.IUF capacitor C6.
I RFC 2.5mhy.
I 4.7PF NPO ceramic capacitor C7.
I PC board shown full size fig 2.

Fig 2



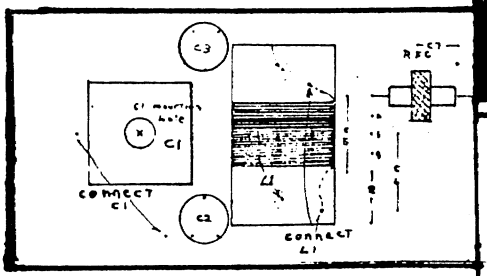


FIG 3

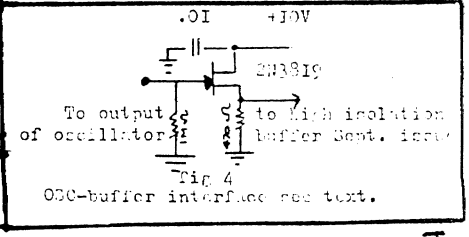


Fig 4
OSC-buffer interface see text.

BITS AND PIECES

Well the mail has been a bit on the light side over the last few months, and I don't have a great amount of bits and pieces to scatter. I am very pleased to report that Ian Smith (91) VK7 KKN was successfull in passing his full call examination last month. So you DXers out there can expect a bit of action on 20 - 40 meters eminating from Tasmania in the near future.

OLD TIMER TELLS ALL

Gus G3PG (50) relates an occasion when he recently found himself seated in the BELL INN Oswestry Wales with G2NA, G4LU, and GW2DSG, nothing particularly special about that you may say, but considering that these four fine gentlemen had a combined total of 200 years of ham radio experience behind them, and they were present at that meeting to give a series of talks to newly licenced G4s and G0s about simple HF antennas and HF propagation. I think it is most commendable that Gus can find the time and energy to impart some of that knowledge to others. Good on you Gus, lets hope that you are spared many more years to keep up the good work.

HELP FOR HAND BOOK

Len O'Donnell (I) writes to report that he has been in hospital recently. Well Len we hope you are fully recovered and well and fit again. Len also personnally recommends Fred Bonavita W5QJM (31) handbook of modifications, improvements, and recipes for the heath HW8 CW transceiver, called "The Hotwater Handbook". Len says this is a well produced book, with articles and information taken from a wide range of sources, all under one cover. Some mods are good for the HW7 and HW9. It sells virtually at cost price, U.S. $4 surface mail and U.S. $5 for airmail, and can be obtained from.

Fred Bonavita W5 QJM P.O. Box I2072, Capital Station, Austin Texas USA 787II.

Thanks for the information Len, I am sure it will be a usefull addition to the QRPers library.

OUT WITH THE OLD IN WITH THE NEW

It looks like Len has finally overcome his problems with the old FT 200 by getting rid of it, or hiding it in a corner. Now working with his home brew QRP TX and a Kenwood TS I20V for QRP work. For those occasional QRO SSB contacts he has a Uniden 20 - 20, so looking forward to some regular contacts Len.

CHELMSFORD REVISITED

Matt ELIATW (34) has sent in an article from the ZL BREAK-IN MAGAZINE. called "Chelmsford QRP Transceiver Revisited" it would appear that a large number of them are in use on 80 and 40 meters. I will consider reprinting the circuit and assembly instructions on the Chelmsford transceiver together with the "revisited" article if sufficient members indicate their interest.

CLUB NETS

Neil Emeny VK3CGE (I9) reports very little interest is being shown on the club nets, pity, but I suppose with band conditions being so poor on 80 meters, it is not suprising. Work and family commitments have kept Neil away from the radio lately however he has found the time to build an 80 meter DSB/CW transceiver using part of Drew Diamonds design, and some of the S.C.D. design, plus some mods. Reports indicate the final rig is a success with good results alround. It would appear that like many other members, Neil missed out on the VK versus the world QRP contest, it is a pity, because conditions generally were not to bad.

TAS DEVIL TRANSCEIVER KIT

Due to Ian's success with this QRP rig, featured in this issue. The Tasmanian Southern Branch of the Wireless Institute of Australia have decided to produce kits of this project primarily designed to encourage novices and other interested people in the art of home brewing. I am sure that when completed, many of the owners will become just as amazed and thrilled to discover the pleasure of communication in the CW mode with QRP power as did many of us, particulary when they can proudly say "I made it myself OM". The kits come complete with a top quality PCB and all the necessary componants. There by removing the frustration of digging through yours and other peoples junk boxes. Total cost is $35.00 Australian plus postage.
All proceeds go to the Southern Branch Activity Centre to assist in financing other projects. Place your order with me as soon as possible, if you are interested.

W.A.F. NEWS

Len VK5MF (I) applied for membership to the W.A.F. about I8 months ago, but for some unknown reason we have not recieved any reply. I similarily followed up the request with the same result, so I am unable to report if the CW OPs QRP has been accepted or not, it is a pity, because I believe that the W.A.F. is an important bridge between QRP clubs around the world. So don't blame Ted Leca VK4BML (II) who is our W.A.F. delegate he is as much in the dark as the rest of us.

SCRAPPED SCOREBOARD??

I think I should clear up any misconceptions about the recently introduced awards programme. It was never my intention of doing away with the score-board concept in fact if you take another look at the old and new rules little has changed, the main alteration is the use of the 40 zone plan. I realise that some members, do not like contests or chasing awards, fair enough, but some do. So in order to assist members who are chasing the club awards, the changes were introduced, so basically just do as you did before. Don't worry about the zones or countries just total up the points, but please take an interest, don't forget the programme finishes next March. It is still not to late to go through your log books and enter a couple of sheets, you never know you might suprise yourself with the score. The offer still holds, if you have any suggestions about improving this aspect of the Clubs activity, or any other activity. Please drop me a line.

THE "UPSIDE-DOWN" QRP 80m CW P.A.

If, like me, your've been searching for a well behaved, easy-to-build, output stage for your QRP CW transmitter project then this may be the answer.

Many circuit arrangments have been tried by the author with varying degrees of success. These have included push-pull class B, MOSFET CLASS C, conventional and upside-down class C bi polar.
The convention class C i.e. same polarity active devices, gave a good result and was considered to be attractive because of simplicity and low component count. (The high freqency power mosfet devices are expensive!).
However, some instability problems were encountered when constructed on strip board. It was also noted that the drive requirement was quite high.

Deciding to have a go the upside-down driver stage was tried. The main perceived advantage being that the coupling transformer primary and secondary could be "earthed".

The stage was biased to give an Iq of 15mA and was supplied through a fairly conventional keying circuit. L1 and L2 were designed very much by a wind-and-try method.

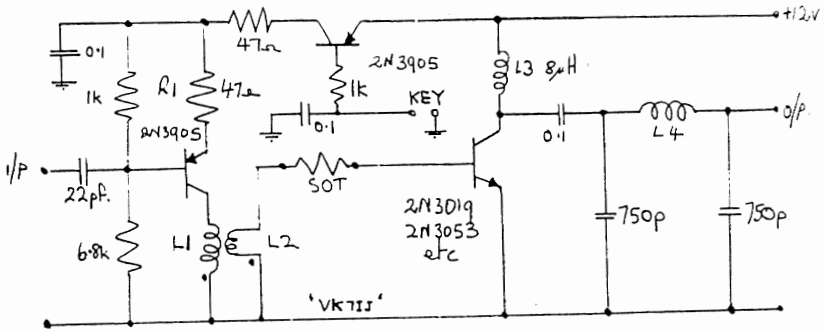
Coupling the driver to the standard SCD output stage and filter proved to be very successful. L1 and L2 were adjusted to optimise loading and drive requirement.

Drive can be adjusted by altering L2, SOT, R1 or the VFO output. The two pleasing aspects of this ciruit are the apparent stability and the very low drive requirements. Not having an r.f. voltmeter (r.f. diode probe only) I could not measure the input required but a comparison showed that this circuit needs only 10% of that needed for the conventional stages.
This represents a significant reduction in the loading on a VFO and hence less chance of frequency pulling.

Hopefully the circuit will prove of interest to others.

'73 de Ian VK7KAN

THE JITTER



L1 8t 28g } Balun Former 1050/1/FIt
L2 3t 22g }
L3 3t 22g Philips 6hole ferrite bead.
L4 21t 22g T-50-2

The "Upside Down" QRP 80m P.A.

THE "TAS-DEVIL" 80M CW QRP TRANSCEIVER

Having had the pleasure of working "QRP" for nearly 12 months using a Drew Diamond design DSB/CW Tx I decided to build the SCD CW transceiver . However , whilst SCD in concept, I did incorporate a standard Colpitts VFO and a home brew transmit section! The performance of the receiver was very impressive andgood reports gained from the transmitter. The VFO was made to tune over a frequency range of 3.50 to 3.60 MHz so I had the additional pleasure of listening to the DX window. RIT and the audio filter were considered to be a must on this rig.

Circuits were constructed entirely on "strip board". Three were made - VFO, TX and RX/filter/audio amplifier. Each part was "proved" and the lot put together.The VFO and battery holder were placed in one aluminium box 100X100X50 and the Rx/Tx in another, the idea being to go portable on camping holidays etc.

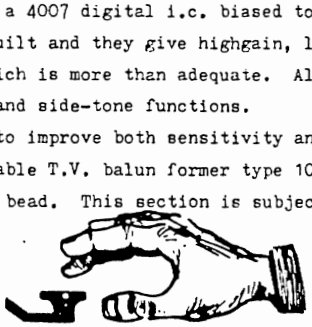
Good news travels fast, even with low power, and before I had time to oil the key, requests were being received for a single p.c.b. design suitable for easy home construction. Using the experience gained, it was decided to incorporate all the perceived desirable features. This, of course, is very much an individual thing! The circuits are fairly conventional and mainly borrowed. However, the p.c.b. was designed from scratch and is the end result of much midnight oil. I don't think I can look tram tracks in the face again! The layout is such that sections can be removed and joined up to make a separate receiver, transmitter, VFO etc.

The following is an attempt to highlight the few unique aspects of the circuits.

The VFO is supplied from a 5 volt voltage regulator as it is felt that the regulation is superior to a simple zener. The aim being to improve stability. A 1N4001 power diode is used as a varicap as it was found to give both a greater capacitance variation and better linearity than a BA102. R5 and R6 set the d.c. voltage across D1 and hence, the transmit frequency. Q3 switches on during key-down. Q4 switches on during receive and a variable voltage from VR3 gives receive-incremental-tuning. VR1 and VR2 set the (+) and (-) RIT limits.

Circuit design for the receiver is straight out of the SCD manual. However, the audio-amplifier is a little different. This incorporates a 4007 digital i.c. biased to linear working conditions. Many of these amps have been built and they give highgain, low noise amplification. The output power is about 150 mW which is more than adequate. Also, being in three stages, it was convenient to provide mute and side-tone functions.

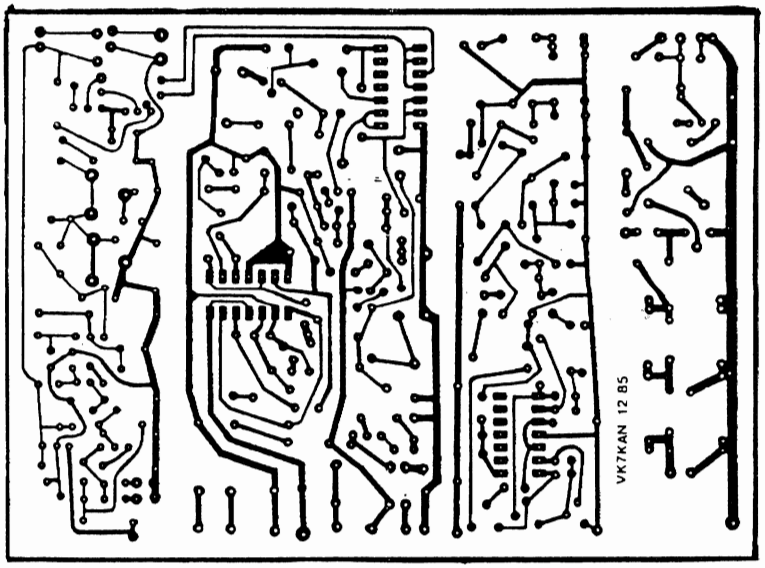
The transmitter uses a PNP driver and this appears to improve both sensitivity and stability. L2 and L3 are wound on a readily obtainable T.V. balun former type 1050/2/F14. RFC3 comprises 3 turns on a Phillips 6 hole ferrite bead. This section is subject of a separate article. (see the "upside-down" QRP P.A.)



THE TAPPER

Probably the most surprising circuit is the d.c. switching. Semi-breakin was considered the best compromise and in order not to reduce receiver sensitivity a relay, rather than diodes was used to switch the aerial from Rx to Tx. VR5 adjusts the release delay time of RLA to allow for different keying speeds. The idea being to prevent the relay releasing between characters. As ones speed increases, the delay can be reduced.
PB1 allows the VFO to be set to zero-beat without having to turn the RIT control to zero position.

I.Smith VK7KAN



NOT To SCALE.

THE NIBBLER

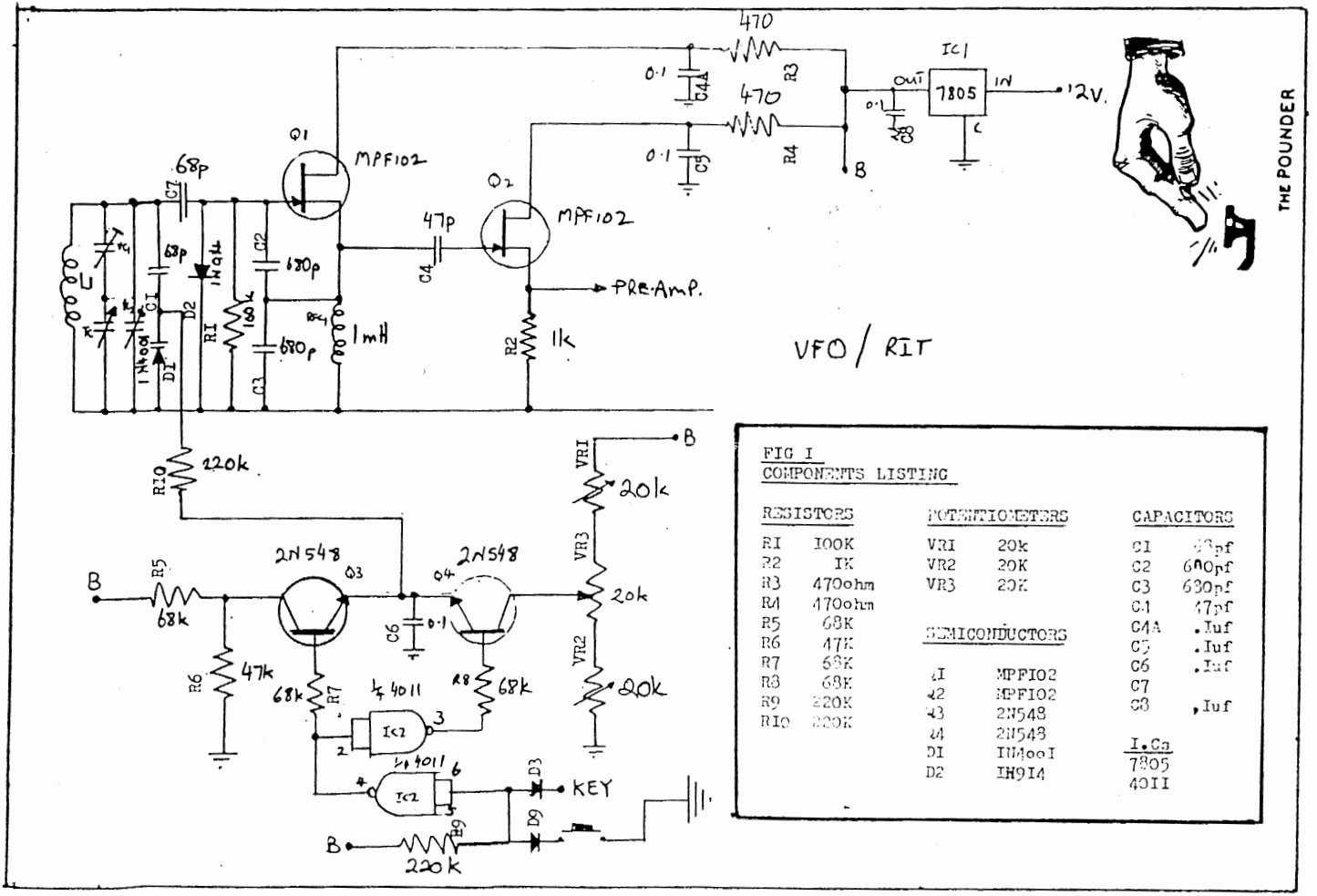


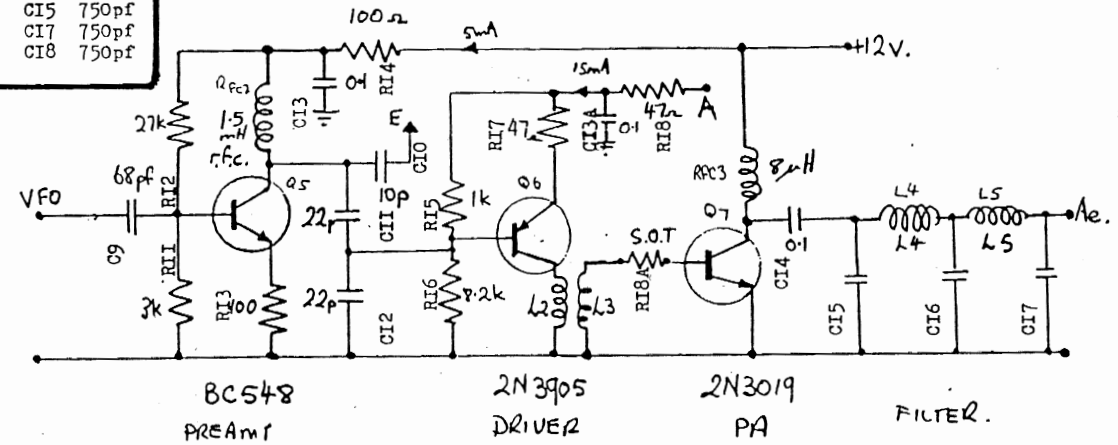
FIG I
COMPONENTS LISTING

RESISTORS		POTENTIOMETERS		CAPACITORS	
R1	100K	VR1	20k	C1	68pf
R2	1K	VR2	20K	C2	680pf
R3	470ohm	VR3	20K	C3	680pf
R4	470ohm			C4	47pf
R5	68K	SEMICONDUCTORS		C4A	.1uf
R6	47K			C5	.1uf
R7	68K			C6	.1uf
R8	68K	D1	MPF102	C7	
R9	220K	D2	MPF102	C8	.1uf
R10	220K	D3	2N548		
		D4	2N548	I.Cs	
		D1	IN4001	7805	
		D2	IN914	4011	

THE POUNDER

FIG 2
COMPONENTS LISTING

RESISTORS		CAPACITORS		SEMICONDUCTORS		INDUCTORS	
RI1	3K	C9	68pf	Q5	BC548	L2	8T 28G BALUN FORMER
RI2	27K	CI0	10pf	Q6	2N3905		I050/I/FI4
RI3	100ohm	CI1	22pf	Q7	2N3019	L3	3T 22G on above
RI4	100ohm	CI2	22pf			RFC3	3T 22G 6 hole F/B
RI5	1K	CI3	.1uf			L4	22T 22G T50-2
RI6	9.2K	CI3A	.1uf			L5	22 22G as above
RI7	47ohm	CI4	.1uf				
RI8	47ohm	CI5	750pf				
RI8A	SELECT	CI7	750pf				
		CI8	750pf				



THE TEA DRINKER

FIG 3
COMPONENTS LISTING

RESISTORS

RI9	IOK
R20	IOK
R2I	IK
R22	22K
R23	20K
R24	47K

POTENTIOMETERS

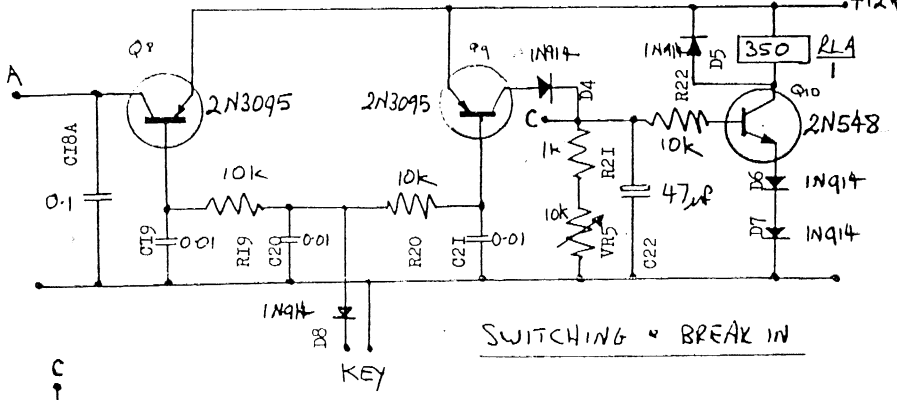
VR4	20K
VR5	IOK

CAPACITORS

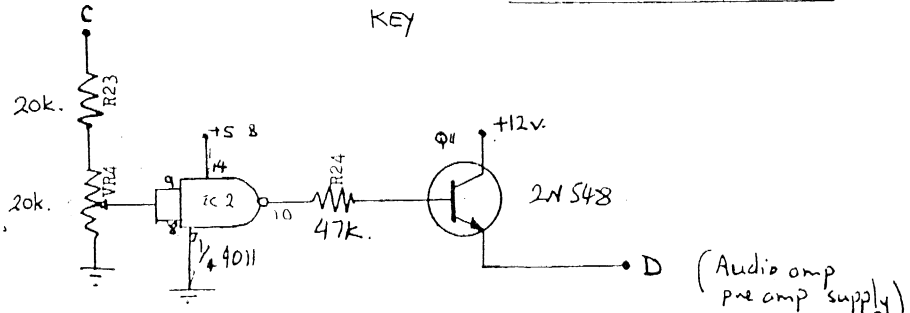
CI8A	.Iuf
CI9	.OIuf
C20	.OIuf
C2I	.OIuf
C22	47uf

SEMICONDUCTORS

Q9	2N3905
Q9	2N3905
QIO	2N548
QII	2N548
D4	IN914
D5	IN914
D6	IN914
D7	IN914
D8	IN914
IC2	4011



SWITCHING & BREAK IN



AUDIO MUTE.

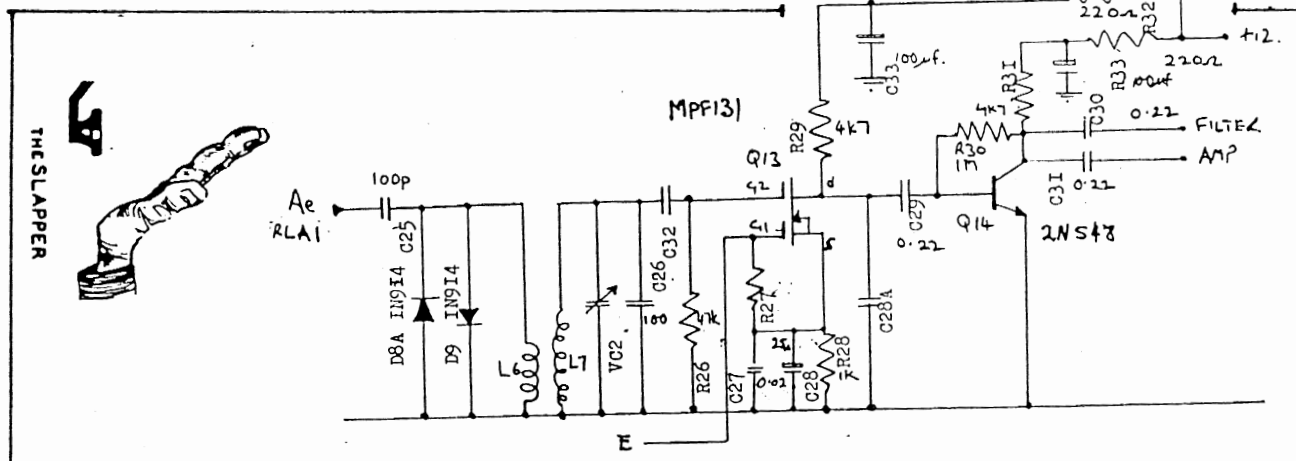


FIG 5 RECEIVER AND PREAMP

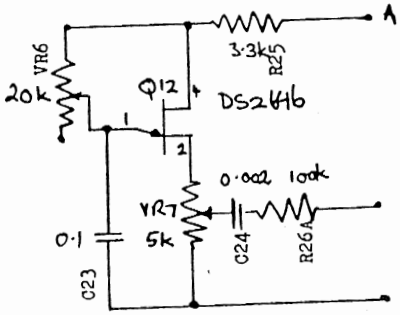


FIG 4 SIDE-TONE GEN.

FIG 4
COMPONENTS LISTING

RESISTORS		SEMICONDUCTORS	
R25	3.3K	QI2	IN2646
R26A	IOOK	POTENTIOMETERS	
		VR6	20K
CAPACITORS		VR7	5K
C23	.Iuf		
C24	.002uf		

FIG 5
COMPONENTS LISTING

RESISTORS		CAPACITORS		SEMICONDUCTORS	
R26	47K	C25	IOOpf	QI3	MPSI3I
R27	SELECT	C26	IOOpf	QI4	2N548
R28	IK	C27	.02uf	D8A	IN914
R29	4.7K	C28	25uf	D9	IN914
R30	IM	C28A	SELECT		
R3I	4.7K	C29	.22uf		
R32	220ohm	C30	.22uf		
R33	220ohm	C3I	.22uf		
		C33	IOOuf		

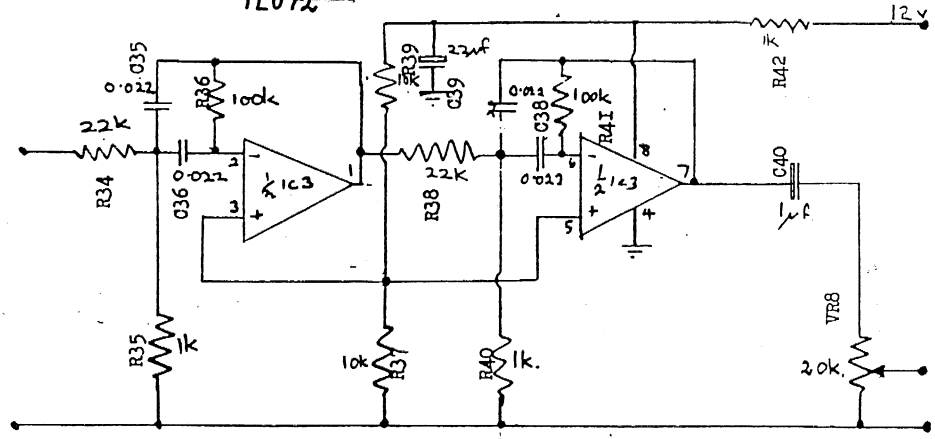


FIG 6 COMPONENTS LISTING			
RESISTORS		CAPACITORS	
R34	22K	C35	.022uf
R35	IK	C36	.022uf
R36	100K	C37	
R37	10K	C38	.022uf
R38	22K	C39	22uf
R39	10K	C40	1uf
R40	IK	POTENTIOMETER	
R41	100K	VR8	20K
R42	IK	IC3	TL072

600Hz Filter FIG 6

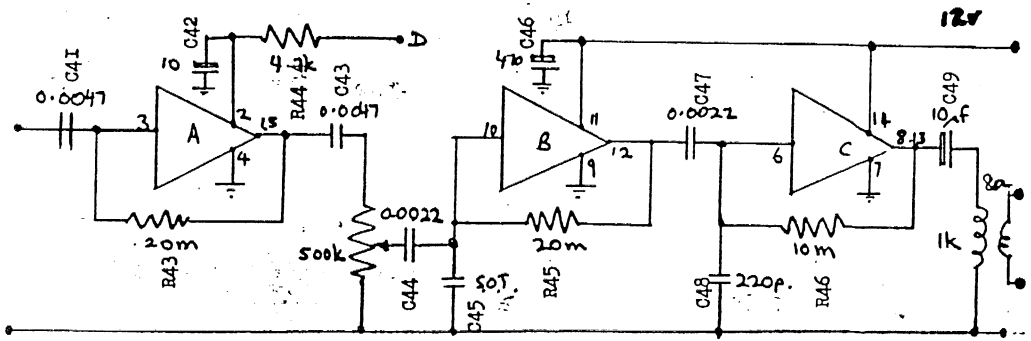
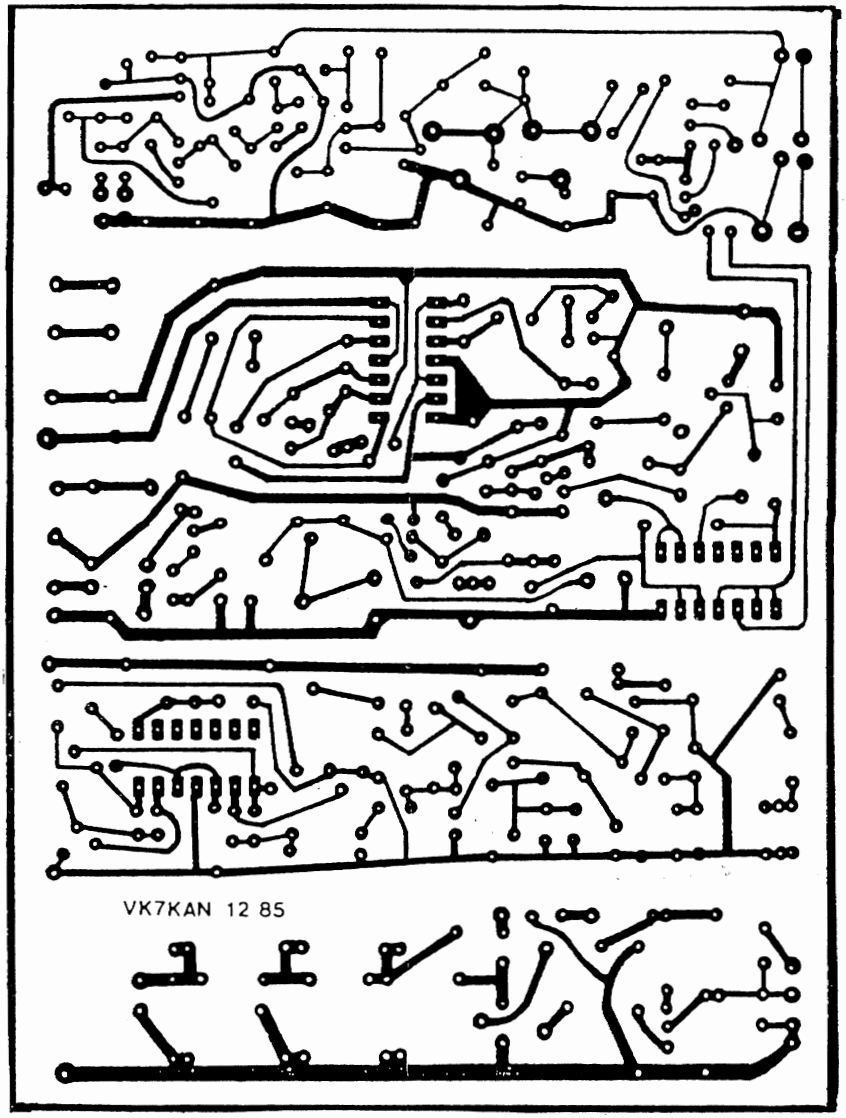


FIG 7 COMPONENTS LISTING			
RESISTORS		CAPACITORS	
R43	20M	C41	.0047uf
R44	4.7K	C42	10uf
R45	20M	C43	.0047uf
R46	10M	C44	.0022uf
IC4		C45	SELECT
4007		C46	470uf
		C47	.0022uf
		C48	220uf
		C49	10uf

IC4 4007 AUDIO AMP FIG 7



"TAS DEVIL"

FULL SCALE.

THE CLUTCHER

THE PATH TO SIMPLICITY.

Advancing technology has, over the past few years, created a market in the sphere of amateur radio for highly complex equipment. This makes it possible for those who obtain their licences to go "on the air" with high-powered gear almost at once. (It's very like the learner-driver in U.K. who can pass his test and immediately drive an XJ6 flat out down a motorway -even though he's not been allowed on a motorway before). The problem is compounded by the fact that the purchase of such equipment does nothing to help the amateur to know "what goes on inside" the box, and adjustments have to be made 'by the book". The book is rarely adequate in the amount of detail it provides, so if something doesn't work as the book says it will, the amateur is left with a very large question:"What do I do now??"

The temptation is always there - to buy a piece of gear that is covered with all the buttons, bells and whistles in creation, and then to operate it "blind". The theory of the exam or the learning of "pat" answers to the questions is no way to become an effective operator on air, and much bad practice stems from trying to go too fast too soon. At a meeting last week, we were discussing CW practice, and the point was made that you should send your CQ at the speed at which you feel competent to receive the reply. The same concept applies to the use of transceivers on phone - don't try to run before you can walk. However, the wonderful descriptions in the advertisements telling us how easy the TR.XYZ is to operate, how sensitive it is, how much "memory" it has, and so on - make it seem all worthwhile to buy the top of the range gear in the hope that you won't have to spend to uprate for a long time.

Several questions then arise: 1. How many amateurs actually use their lovely shiny gear to the utmost? I would suggest that, for many, only the basic functions are those regularly used.

2. How many amateurs can"get inside" and sort out problems that can - and, according to Murphy's Law, certainly will - arise? Once again, I would suggest that few, apart from those whose profession or career makes them qualified, would venture to take many steps down <u>that</u> road!

3. How many amateurs, overwhelmed by the complexity of it all, have withdrawn, instead of taking up one of the many interesting challenges which their hobby could provide? Only those who have faced this dilemma can help with the answer to <u>that</u> one!

The logical response to all these problems is to start with equipment you understand - and what better way to understand than to build it yourself? The logical answer to "What shall I build?" is that a basic "R.F. communicator" will provide real operating experience, enjoyment and a firm foundation for moving on to more advanced stages.

Therefore, a well-designed circuit for QRP work, using good quality components and thoughtfully-written instructions will most likely teach more than all the black boxes. It would also encourage newly-fledged amateurs to "stick with it" and delve deeper. As the Editor of another amateurs' bulletin, I have been boosting the idea

of home-brew test equipment, too, because things become clearer if we know what our checking instruments are really doing.

My final hope is that the sheer expense of the most recent block boxes will force amateurs into the home-brew field, so some good may come even out of <u>that</u> sad situation!

Merry Christmas and a DX-full New Year from

John, VK7JK.

CLUB AWARDS SCOREBOARD.

CALL	1.8	3.5	7	10	14	18	21	24	28		TOTAL
VK3BGH		796	166	2	24		33		1		1022
KV7X		50	83	4	486		16				619
VK7VV		69	22		354						475
VK5BJF	2	104	5	136	10	5	30				272
VK3CVF		106									106

AERIAL TOPICS

SOME HANDY EQUATIONS.

¼ wavelength free space	= 246/f MHZ
½ wavelength free space	= 492/f MHZ
½ Dipole	= 234/f MHZ
¼ Dipole	= 710/f MHZ
Reflector	= 492/f MHZ
Director	= 450/f MHZ
Triangle	= 984/f MHZ

Velocity factor average 0.66 co-axial cable.

¼ wavelength	= 162/f MHZ
½ wavelength	= 324/f MHZ

If you are cutting a dipole to the usual formula it is made a little easier if you remember that by reducing the length of each element by six inchs the resonant frequency will rise by aprox25KHZ on 80m, the same six inchs on 40M the frequency will rise by 100KHZ, on 20M a 100KHZ rise will occur with only 1½ of an inch removed. almost 200KHZ rise on 15M with the same 1½ inchs off.

On a nice sunny afternoon when you have nothing better to do try it yourself first cut the two dipole elements to the start of the band you are interested in as follows.

1.8MHZ	129ft 6ins	2.0MHZ	117ft 6ins	12feet to play with
3.5MHZ	66ft	4.0MHZ	58ft 6ins	8 feet 6ins to play with
7.0MHZ	33ft 6ins	7.3MHZ	32ft -	1foot 6ins to play with
14.0MHZ	16ft 9ins	14.350MHZ	16ft 3ins	6ins to play with

New WARK BANDS

10.0MHZ	23ft 4ins	10.15MHZ	23ft 1ins	3 inchs to play with
18.0MHZ	13ft	18.16MHZ	12ft 10ins	2 inchs to play with
24.9MHZ	9ft 5ins	24 98MHZ	9ft 4½ins	⅜ins to play with

I realise it is all very basic to a lot of you out there, but new commers should not believe all that they read in books, in fact a lot can be learnt about the effect that the height of the dipole has on the resonant freq., not to mention the feed point impedance, or the End-effect that makes the resonant length of a dipole physically shorter than the calculated half-wavelength in free space, so go to it, play around a little, have fun.

Rai VK7VV.

VK VERSUS THE WORLD CONTEST RESULTS.

Here are the results of the 1985 contest, sponsered by the CW OPERATORS QRP CLUB.

1ST PLACE WORLD, 1ST PLACE QRP 24HR, SINGLE OP, SINGLE BAND.
Congratulations to.....;
Rai VK7VV (3)

BAND	CONTACTS	ZONES	PWR MULTI	BONUS	TOTAL PTS
20M	33	9	5	1.5	2217

1ST PLACE WORLD, MULTI BAND, SINGLE OP, 2ND PLACE QRP 24HR.
Congratulations to.....;
Gus G8PG (50)

BAND	CONTACTS	ZONES	PWR MULTI	BONUS	TOTAL PTS
Multi	20	10	4	1.5	1200

2ND PLACE WORLD, QRP 24HR, 2ND PLACE SINGLE OP. SINGLE BAND.
Congratulations to.....;
Len (I) VK5ZF

BAND	CONTACTS	ZONES	PWR MULTI	BONUS	TOTAL PTS
15M	26	?	5	0	345

Comments
GUS G8PG = " Conditions seemed poor, but during the 7½ hours I was on met up with a lot of old W mates and had a small ball. All the best to the gang, also Merry Xmas and Happy New Year to you all.

Len VK5ZF = " Conditions lousy nothing about on 80M so worked on 15M only, It was hard work to get the score, but enjoyed it.

Rai VK7VV = " Took the campervan up the bush, and built a 20M version of the modified version of the VK2ABQ as described in Sept issue of LO-KEY, worked a treat, out of the 33 contacts made, 17 were different countries. The only other QRP stations worked, VK3BXN and VK2CWH (89) Ted.

I am most dissapointed with the interest shown by members in this, our major international contest. Gus sent me his log direct, it would appear that his last issue of LO-KEY went astray, and he was'nt sure of the Contest Manager. Len passed his score results to me over that other medium the telephone, I beleive Len did send his log to John VK3CVF our contest manager, but up to the date of compiling this, 20/12/85 I have not received anyother logs. If other members have sent logs in I do appoligise, maybe the recent Mail strikes are the problem, as I go to print in one hours time , I can't hold this back any longer.

Rai VK7VV.

A THUMBNAIL SKETCH

Well, apparently I was interested in "wire and things" since I was 2 years old. However I first became interested in radio in 1964 when I started high school. I got my limited ham licence in 1975, on my second attempt. I have mainly been concerned with big projects since and they take far to long to finish. However a few years ago I passed the slow morse exam and received a combined licence, then, I heard of QRP. I have only limited maths ability, and semiconductor specs. However, since joining the QRP club, or just shortly before, this problem was overcome, using a measurement technique. This has been described in our bulletin. Recently I have just added a new measuring instrument to the shack to aid in QRP mini amp design for any band, a QRP in line wattmeter/reflectometer.

Rod Green.

DX MEMBERS NEWS from Jay KV7X (78)

A few notes for the DX members page: NW6F operates out of a school bus. He may, sport a XE2 call after the first of the year.
W85KQ was the only station heard during CW OP test. Bob had just returned from a trip to KH6 land eye balling with note able QRPers KH6JOI, AH6EH KH6CP and QSOD my good friend Howie KH6IJS on Maui. He also made stops to BV2, JAXKL7 many QRPCI members are very interested in our awards programme - mainly the score board and the 5000 mile per watt award - all want info on our club and I am requesting a catch all info sheet that I and mostly likely others could duplicate and send with QSL's and other correspondence with the NA gang, DX too and the JA's as well what say???. I am getting married in Feb and moving 2 km away to 85 FT Cedar Trees. QRPCI is changing leaders and hopefull KK7C (Jim) will be publishing that quarterly (he may have joined us) Jim is a milliwatter and loves to contest at that level (mainly sprints) NM7M and myself and KK7C hopefully will team up at I watt during the next NA sprint.

OTHER RAMBLINGS

Wish CW OP club would piggy back a major contest rather than the current contest - it's lonely here HI.
Picked up CYØSAB and ZM8OY during CQWW 98 & 99. My comfirmed total is 90, so even in these time progress is being made. Hope you are well.

73'2 Jay KV7X

NEXT ISSUE THUMBNAIL SCETCH
DOT AND DASH AS BEEN AT IT
AGAIN, GUESS WHO'S NAME THEY
PULLED OUT OF THE HAT ?.
NO. (83) SO COME ON KEVIN
JUST A COUPLE OF PAGES WILL
DO. DON'T BE BASHFULL.

PAGE NO. 00001 02/12/85

CW OPERATORS QRP CLUB ADDRESS LIST

NO	CALL	NAME	SURNAME	ADDRESS
1	VK5ZF	Len	O'DONNELL	33 Lucas St., RICHMOND S.A. 5033
2	VK5OS	Max	BRUNGER	3 Durham Ave., LOCKLEYS S.A. 5032
3	VK7VV	Rai	TAYLOR	25 12th Ave., WEST MOONAH TAS 7009
4	VK2JAC	A.	CARTWRIGHT	10 Kent St., BELLAMBI N.S.W. 2518
5	VK2AKE	Jim	EDWARDS	P.O. Box 385 BOWRAL N.S.W. 2576
7	VK3BPG	R.	BEDFORD	45 Milne St., CRIBB POINT VIC. 3919
8	VK5BA	Malcolm	HASKARD	Bassnet Rd., ONE TREE HILL S.A. 5114
10	VK2KSA	Stan	BROOKS	2/10 Blight St., WOLLONGONG N.S.W. 2500
11	VK4BML	Ted	LECA	5 Clement St., WOORIM, BRIBIE IS. QLD. 4507
12	VK3CVF	John	ELLIOTT	8 Queen St., ROSEDALE VIC. 3847
13	VK3BXA	Eric	ERVINE	P.O. THOONA VIC 3726
14	VK4SF	Jack	FORD	222 Warwick Rd., CHURCHILL IPSWICH QLD. 4305
15	VK4RE	Roy	HILDRED	P.O. Box 387 TOOWOOMBA QLD. 4350
16	VK5FN	Marshall	EMM	G.P.O. Box 389 ADELAIDE S.A. 5001
19	VK3CGE	Neil	EMENY	1 Beaumont Crt., MONTROSE VIC. 3765
21	VK2ECB	Tony	BADGER	U1/28 Brooks St., NEWCASTLE N.S.W. 2300
22	VK2BVH	Brian	HALPIN	5 Carramer Cres., MIRANDA N.S.W. 2228
25	VK6AHM	Harold	MOORE	C/O P.O. LAVERTON W.A. 6440
28	VK6KRG	Rod	GREEN	72 Yelverton St. South, DONNYBROOK W.A. 6239
29	VK3DJV	Glyn	GIBBONS-JOHNS	R.S.D. Forrest Rd., BARWON DOWNS VIC. 3243
31	W5QJM	Fred	BONAVITA	P.O. Box 12072, Capitol Station AUSTIN TEXAS 78711 U.S.A.
32	VK1FB	Glen	TORR	P.O. Box E93, Queen Victoria Tce., A.C.T. 2600
33	VK5BVJ	Murray	JONES	Pelican Point C/O P.O. CARPENTER ROCKS S.A. 5291
34	ZL1ATW	Matt	MEENAGH	82 Kemp Road., KERIKERI BAY OF ISLANDS. NEW ZEALAND
36	VK7JE	Jerry	SMUNTY	Huon Rd., NEIKA TAS. 7102
37	VK7NRE	Bob	EDWARDS	205 Davey St., HOBART TAS 7000
38	VK7NAJ	Arthur	BLACKWELL	"KELLIE" ELDERSIDE TAS 7400
40	VK7JK	J.	ROGERS	1 Darville Crt., BLACKMANS BAY TAS. 7152
41	VK2QB	Leo	PINKEVITCH	20 Cathrine St., KOTARA SOUTH N.S.W. 2288
42	VK7BZ	Phil	LOVETT	61 Lipscombe Ave., SANDY BAY TAS 7005
43	VK5AKZ	Kevin	ZIETZ	41 Tobruk Ave., ST MARYS S.A. 5042
44	ZL1BRK	David	STEWART	11 Kerry Dell HOWICK AUCKLAND NEW ZEALAND
47	VK3DXH	Lindsay	LaPOUPLE	5/10 Gurner St., ST KILDA VIC. 3182
51	WIA-L20944	C.	POPE	17 Goode St., DUBBO N.S.W. 2830
52	VK3KGY	Fred	KOLB	6 Claronga Street, SOUTH OAKLEIGH VIC. 3167
50	G8PG/GW8PG	Gus	Taylor	37 Pickerville Rd. Greasby Merseyside L49 3ND ENGL.

CW OPERATORS QRP CLUB ADDRESS LIST

NO	CALL	NAME	SURNAME	ADDRESS
53	VK7SA	Maurie	POTTER	19 Blessington St., SOUTH ARM TAS. 7022
54	VK6ATM	T.	MAITLAND	P.O. Box 88 , WYALKATCHEM. W.A. 6485
55	VK4FAL	Jim	LYALL	8 Queen St., MARYBOROUGH. QLD. 4650
57	VK5BJF	Jeff	WALLACE	Box 344, CLARE. S.A. 5453
58	VK5AGP	G.	PHILLIS	413 The Terrace, PORT PIRIE. S.A. 5540
62	VE3JFH	Ed	SHIELDS	412 Talfourd St., SARNIA ONT. N7T IR6 CANADA
63	NM7M	Bob	BROWN	504 Channel View Drive, ANACORTES. W.A. 98221 U.S.A.
66	VK5PH	Eric	STEELE	13 Third St., MINLATON S.A. 5575
67	W6SKQ	Bob	SPIDELL	45020 N. Camolin Ave., LANCASTER CALIFORNIA 93534 U.S.A.
68	WB2OUQ	David	WERNER	68 Gordon Ave., LANCASTER. NEW YORK 14086 U.S.A.
69	VK7ZO	Graham	RANFT	3 Newlands Ave., LENAH VALLEY TAS. 7008
70	WA1JVY	Mark	PEREIRA	4633 Acushnet Ave., NEW BEDFORD MASSACHUSETTS 02745 U.S.A.
75	VK5AIL	Don	CALLOW	5 JOYCE St., GLENGOWRIE S.A. 5044
76	VK3CBO	Rod	ADAMS	6 Hague Rd., WODONGA VIC 3690
78	KV7X	Jay	STURDIVANT	P.O. BOX 3027 BELLINGHAM WASHINGTON 98227 U.S.A.
79	SWL/ZL	Mark	DONALDSON	P.O. Box 899 PAPAKURA NEW ZEALAND
80	VK6KHZ	P.	SCALES	B34 S.M.Q. PARABURDOO W.A. 6754
81	KA4LKH	Barry	STRICKLAND	RT1 BOX 216 SYLVANIA ALABAMA 35988 U.S.A.
82	VK3BGH	G.	HARRIS	C/O P.O. BOX 126 LILYDALE VIC 3140 Station EAST RINGWOOD
83	WB6MTR	Winfred	FRANKS	1001 Sylmar Space 107 CLOVIS, C.A. 93612 U.S.A.
84	VK3CIG	Dick	McINTOSH	BOX 159 WHOROULY EAST VIC. 3735
85	VK3KQD	Merv	QUINN	104 Lane Street, BALLARAT VIC. 3350
86	VK7RS	Barry	RISELY	14 Moirunnard Rd., LINDISFARNE. TAS. 7015
87	VK7BS	Brian	SAMPSON	31 Joynton Ave., LENAH VALE. TAS. 7008
88	VK7NBN	David	CROTTY	C/O Australian Maritime College P.O. Box 708 NEWNHAM. TAS. 7248
89	VK2CWH	Ted	DANIELS	Wombat Hole Bylong Rd., RYISTONE. N.S.W. 2849
90	K2JT	Joseph	MEAD	50 Harmon Dr., PARAMUS N.J. 07652 U.S.A.
91	VK7KAN	Ian	SMITH	

The above are Financial Members as at 01/11/85 payments after 02/12/85 have not been included.
Membership numbers and details have been retained on file for Unfinancial members who may wish to rejoin.