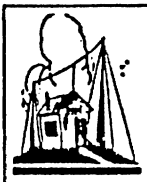
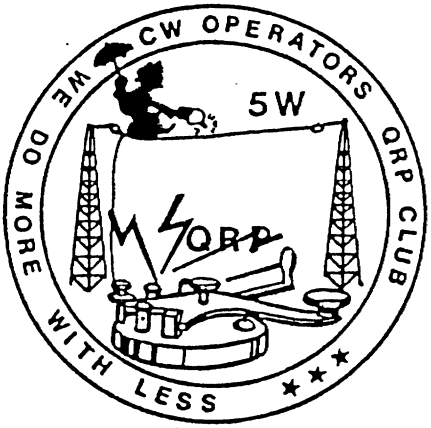


LO·KEY

SCRAMBLE 3.5MHZ WED. REMEMBER

NEWS BULLETIN



PUBLISHED

QUARTERLY

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WE DO MORE WITH LESS !

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VK $A10 ZL $A12 DX $A14

IRC'S NOT ACCEPTABLE.

MONEY ORDERS/CHEQUES PAYABLE TO THE CW.OPS QRP CLUB

RADIOTORIAL

Hello again, sorry that this issue is a little late but better late than never.
Unfortunately this issue does not contain a great deal of technical information, but rest assured that the issues to follow certainly will. I ask you to read the letter to the Editor from Rod VK6KRG (28) who is now the CLUB PROJECTS OFFICER and give him all your support. Len VK5ZF (I) is just about wholly committed to the production of the 'QRPing Down Under' book and to the 'Travelling Circuit Book No2 soon to be circulated in the near future.

This is very good news for members, but it does leave a vacuum in Len's previous input to the LO-KEY magazine, this of course means that your Editor will be looking towards a lot more input from members.

Now all you budding Boffins can relieve yourselves of the burden of keeping those ideas and flashes of inspiration to yourselves and sharing them with your fellow members.

Max VK5OS (2) has been doing a stirling job in running the 3.5mhz information net, it is good to hear the regulars checking in each week, I know that the Qrm and Qrn is sometimes very bad and copy must be rather bad at times but do try and check in,. The purpose of the net is to keep members informed of Club activities in between issues of LO-KEY and of course to assist members in getting to know each other.

So new and old members are cordially invited to say hello to Max each Friday evening, look for the Club callsign VK5BCW around 3.620mhz at IO.30z. Use SSB and as much power as you wish, legally that is. At 9.30z members congregate around 3.530mhz for cw qrp qso's with other members

73 Rai
Editor.

from Rod VK6KRG (28) Projects Officer.

Most of you will be familiar with my past articles, and thanks mainly to YOUR feedback I have found that generally, there has not been sufficient information in our bulletin for a beginner to build a rig. Also, the easier to build Xtal controlled rigs have very limited appeal. Well, that is all about to change!! My aim is to have MANY club members, even beginners, building simple yet sophisticated, fully tuneable transmitters and receivers, and other equipment. To do this, high quality articles are needed. I hope to be able to provide these from now on, with easy to read diagrams! I want our club to be the BEST in the world! We can be. I am trying to turn the lack of parts availability to our advantage! For example, we all know we can't easily get variable capacitors these days. I have found that, by using a fixed capacitor, a V.F.O. can be tuned by using a threaded brass rod. That has had some surprising results, extreme stability and, by its nature, a vernier action for slow motion tuning. And the cost? Only 2 cents - not bad, eh? This discovery is opening up a Pandora's Box of new exciting possibilities. Just imagine, if fifty of us built a high quality rig, we may even have a reputation overseas! I hope we may enlist the support of parts suppliers for discounts on parts. There is only one way to do this: I NEED YOUR SUPPORT. Let the club know via me if you are interested in a kit. I can then write away for parts at the best rates. Please don't worry if you feel you can't build a rig. The club will help. That's what we are for.

Well, I'm no salesman, but I have sent the club a sample of a new 5-watt 80 metre fully tuneable transmitter. It can look really good, and could easily be sold if and when you wanted to do so. Now it takes a lot of work to go from a working transmitter to putting it on paper and making up a kit. More even than the time taken for research and development and building a prototype. Well, I can enjoy my own QRP rigs immensely, so how about joining me? All you need to do is to WANT to. I hope to fulfill my role in the club to the best of my ability and to serve you well. Please feel free to write to me with ideas you have for any QRP gear you would like to see developed in the future.

Best regards.

Rod Green (28).

MEMBERS PROFILE

No. 95: Paul E. J. Ireland, VK2DMV.

My interest in radio started in 1943 when a school friend brought in a small valve receiver. I started collecting "radio junk", unwinding a transformer to get wire for an aerial and for a coil and a catswhisker. Yes, it was a crystal set and I used to hear the ABC stations and the stronger commercials. I was then living in the Sydney Metropolitan area.

Eventually, I made a 240v. A.C. power supply using a 5Y3 valve, and a regenerative receiver using a triode-pentode 6J8G valve. I made these up whilst an inpatient in hospital for three months at 18 years of age. I plugged the soldering iron into the bed-light socket (no earth), but operated the set from a power point. I bought an old Mullard mantel radio for ten shillings (about a dollar) at an auction and found it had short wave. I would listen to two amateurs, one in Nismore NSW and the other in Sydney, broadcasting on AM not SSB. However, before this, I had to make a decision whether to go ahead and get an amateur licence and talk to people in distant places, or to use my funds to buy a motor-cycle and see those places for myself.

I chose the latter and it was thus many years later that I came to live in Coff's Harbour about 380 miles to the north. Here I decided to get my licence sitting for the N.A.O.C.P. on 15th May 1979 and obtaining station licence VK2VQI on 22nd. June 1979. Continuing my studies, I obtained my A.O.C.P. on 19th February 1980 and callsign VK2DMV on 10th. June 1980.

In between this, in my motor-cycling days about 1950, I constructed a vibrator power supply to operate from my 6v. motor cycle battery. This was used to drive another trusty 6J8G receiver with headphones, giving entertainment to my friend and myself on our annual holiday trip into Queensland.

As an amateur, I purchased an FT101E and began a saga of aerial construction and demolition which continues to this day. However, just before obtaining my A.O.C.P., I purchased a Realistic DX 160 general coverage receiver which I used for CW practice on receiving. Its failure some years later, associated with Q9 on the BFO circuit (a 2SK37H -a FET) led to a replacement with, I think, an MPF102. This was only partly successful and the reception of SSB signals is still somewhat intermittent! So if any of my avid readers are able to help, if given a better description of what it does now and a circuit diagram, please let me know. Tandy cannot supply a replacement (enquired 1986). I would also be interested in curing its tendency (since year one) to frequency drift, and in improving routine reception of SSB signals other than by using the BFO pitch control, which always proved a nuisance!

Incidentally, my teeth were cut in transmitting using a C.B. as a receiver and - as a transmitter - a C.B. crystal in a one transistor oscillator circuit tuned with padder capacitors.

It had an aluminium collapsible antenna salvaged from an ex-WW2 rubber dinghy and extended judiciously until best signal strength resulted. The whole was run from a small 9v. battery, with a telephone carbon microphone from an old handset. AM, of course, and across the room. All mounted on a wooden breadboard!
This was followed by a circuit from 1969 ARRL Handbook - a transistor 5-watter for 80 and 40 using plug-in coils and a crystal oscillator and amplifier. Tuning of each circuit was by variable capacitors and two pilot lamps, using a tune/operate switch. One lamp was in the amplifier output circuit and one in the antenna coupling loop. An interesting circuit and one which got some interest at club amateur radio stands at local shows. The next was also a crystal oscillator, the Sardine Sender (ARRL 1979) which sent a small but good signal.
Following this, I made up a VFO for 28 MHz and marvelled at how quicklythe sea breeze blowing through the shack varied the frequency automatically as it were! It never got past the D/Load.
Back on my feet again, I built an 80 metre VFO (ARRL 1979, 6-8) which worked fine, with a TV coil former for output and an old B/C set former for the VFO. As an "afterburner" I made up a driver and a pair of transistors in a push-pull P.A. stage using RSGB Handbook 5th Edition 6-52 transmitter for 1.8 MHz as a model, but with different transistors and only two watts output.
On the receive side, I made up a an E.A. Nov 1980 design "Superhet Shortwave Receiver", a multiband job covering the broadcast band and 2 MHz to 30 MHz. It has an I.F. of 1.8 MHz and uses positive feedback to the secondary of the I.F. transformer. This gives regenerative oscillation and thus reception of CW and SSB signals.
I still have all these H.B. efforts, and have had a lot of enjoyment in both making and using them.
My other hobbies include photography in which I have had some success with black and white prints many years ago in the Sydney International Exhibition of Photography. More recently I sold a poster size colour print to the local airport authority for $100. It is still on display in the reception lounge. I have built a number of canoes from purchased plans and from my own designs, as well as several sailing dinghies which I also learned to sail. Model aeroplanes have also interested me and I have constructed and designed rubberpowered and glow motor types over the years. Currently, I am into drawing, sketching and painting and find a lot of pleasure in painting landscapes, seascapes and portraits.
By profession I am a qualified accountant and hospital and health Services Administrator, now retired due to ill-health.
My community work includes the duties of Honorary Treasurer and Honorary Secretary of the Coffs Harbour and District Meals on Wheels Service, which delivers 70-80 meals a day in the town. I have carried out these duties since I started the organisation in 1972. I am also a founder member of the Coffs Harbour Amateur Radio Club
We have five children, two married and one doing HSC in 1987.

REDUCING NOISE ON 3.5 MHZ

By Ian GM4HBG and Gus G8PG

If a licenced amateur causes interference to his neighbours he must, quite rightly, either cure the cause or stay off the air. Unfortunately when neighbours cause interference to the licenced amateur there is no reciprocity, and he has to suffer from endless noise from TV timebases, electric drills, leaky power lines etc with little hope of redress. Many 80M QRP operators face the situation, and are often left wondering whose side the DTI and RSGB are on. Sadly at the present time G QRP C are unlikely to be able to mount an effective campaign for cleaning up our befouled electronic environment, but what we can do is to suggest ways of reducing the local noise pollution in the reciever, thus allowing one to enjoy QRP/QRP contacts which would otherwise be impossible. Basically the name of the game when trying to copy signals in a noisy environment is readability (539 is much more use than 279)so what we must aim for is a system in which we trade off a very large reduction in unwanted noise for a much smaller reduction in the strength of the wanted signal. A simple and effective way to achieve this result is to use some form of loop antenna for receiving, and to switch over to the normal station antenna for transmitting. Both the loops to be described in this article have the following important properties (a) they mainly respond to the magnetic component of an incoming signal and (b) their polar diagrams have a very sharp nul. As they are both small enough to rotate easily this means that the nul can be placed so as to greatly reduce the strength of an incoming noise signal. The lack of response to this signal is often further increased by the non-response to its electrostatic component, as many noise sources are vertically polarised. As an example, tuning on to a S9 TV time base harmonic with the ferrite rod antenna to be described, then swinging the antenna to its nul position reduces the signal on the S-meter to zero; the wideband hash between harmonics is similarly reduced. Figure 1 shows the polar diagrams of the two loops to be described. Note that, because of its smaller size, the signal pickup on the ferrite rod loop is considerably less than that on the larger loop; so it incorporates its own rf stage to provide additional gain. A further important point is that readily available ferrite rods are only efficient up to around 4.5MHz, so the ferrite antenna is a 1.8/3.5MHz system only. The air core loop, on the other hand, could be adapted for use at higher frequencies.

The GM4HBG Screened Loop

The version described is for 3.5MHz. Constructional details are as follows. Obtain a 350cm length of RG8U co-axial cable. Very carefully remove 30cm of the outer insulating sheath at the centre of the length, then remove the exposed copper braiding. Do not damage the inner insulation. Next fit a BNC connector to each end of the cable (Fig 2). In a small metal box mount a good quality 400p varible capacitor (a twin gang 470p with the two sections in parallel is suitable) and 3 BNC sockets. Wire these together as shown in Fig. 3. Make up a suitable mounting frame, screw the metal box to it, and tape the co-axial cable to it as shown in Fig. 4. Make up and fit a suitable length of RG8U to connect the loop to the RX or changeover switch. Ensure that all three connectors are inserted and screwed up. To resonate the loop use either a GDO or a signal source such as a crystal calibrator. For DX work resonate to 3520KHz, and for QRP to 3560KHz. To null out a noise source, tune it in, then rotate the loop for minimun signal. If you only have one troublesome noise source the loop can be mounted in (say) the loft, oriented for minimum noise pickup, then left. If there is enough room to mount the shack, on the other hand, operation will be much more flexible. It can then be used to nul out either local noise or, at periods when there is no noise, QRM from other stations. As described it has been successfully used when making QRP contacts with VK, VE, and W on 3.5MHz, the power at the GM end being 3 watts.

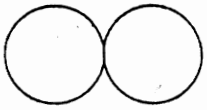


FIG.1.

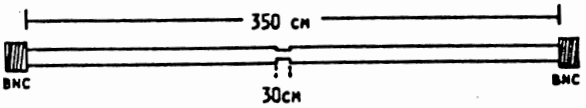


FIG.2.

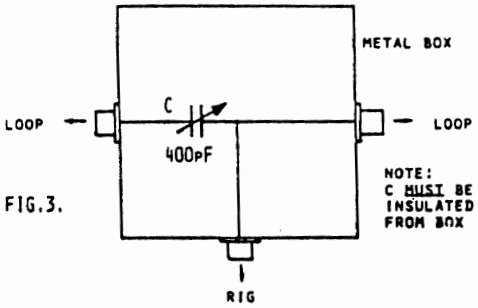
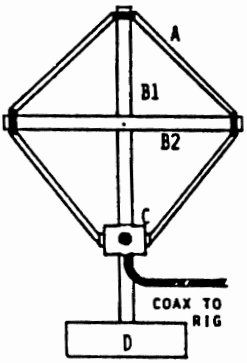


FIG.3.



A. LOOP TAPED TO FRAME

B1/B2 WOODEN FRAME

C. CAPACITOR BOX SCREWED TO FRAME

D. HEAVY WOODEN BASE

FIG.4.

The G8PG Screened Ferrite Rod Loop

Space is at a premium at G8PG, operator and equipment having to fit into a space 1m x 1.5m, so there was no way in which the excellent GM4HBG loop could be accommodated. Instead, it was decided to experiment with a screened ferrite rod loop. As the longest rods obtainable locally were on approximately 4 1/3 inch long, three of them were butted together and secured with Selotape to make a rod approximately 13 inches (32 cm) in length. A winding of 18 turns of 26 SWG wire was then wound on this rod at the centre. To make a suitable electrostatice screen a slot was cut for the full length of a 14 inch long, 1 inch diameter cardboard mailing tube, using a hacksaw blade while wearing a working glove. This slot allows the leads from the coil to be brought out from the centre of the tube. The tube was then covered with metal foil, leaving an air gap along the full length of the slot. The foil was secured by Selotape, and a suitable pigtail was attached to it to allow the foil to be earthed. This set-up allowed strong signals to be received on 3.5MHz, but it was obvious that more gain was required, so an amplifier was built in heavy, diecast box of 6 x 4 x 2 inch dimensions. This box is heavy enough to provide a base for the loop assembly as shown in Fig 5. The whole assembly is small and easy to lift, and it can be put at the back of the bench when not is

use. The electrical circuit of the loop and amplifier are shown in Figure 6. A simple changeover switch allows the co-axial input to the Century 22 main rig to be switched either to the station ATU or to the loop unit. With the loop switched in, S9 local tv timebase noise can be reduced to zero on the S-meter by turning the loop to its nul position, and local noise is generally greatly reduced. Sensitivity is adequate for two-way QRP working, and the loop has allowed many contacts of this type to be made which would have otherwise been impossible because of the local tv timebase interference. At night stations such as JTO, A9, U18 etc have been heard. On occasion, when the local tvs have not been in full cry, the null has been used to greatly reduce interference from QRO stations.

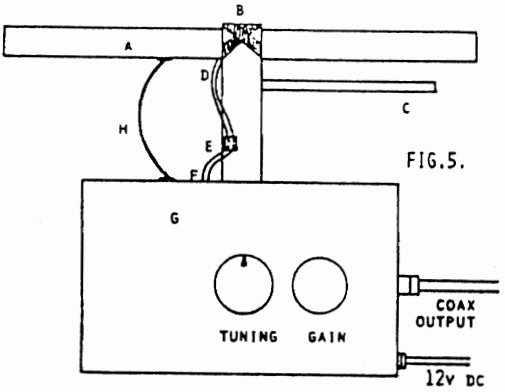


FIG.5.

A SCREENED LOOP

B 4 INCH x 1 INCH DOWEL ROD SECURED VIA HOLE IN CENTRE OF METAL BOX WITH WOOD SCREW AND WASHER

C THIN DOWEL ROD TURNING HANDLE

D LEADS FROM LOOP COIL

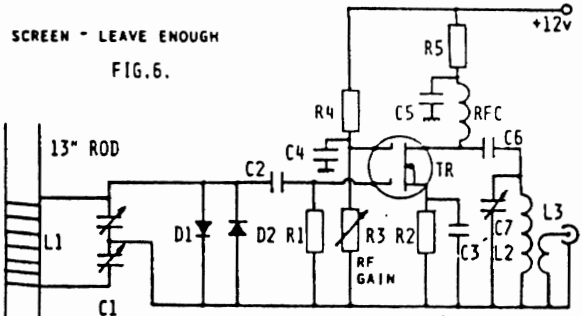
E JUNCTION CONNECTOR

F LEADS TO TUNING CAPACITOR - USE STRANDED INSULATED WIRE AND LEAVE ENOUGH LENGTH FOR LOOP ROTATION

G METAL BOX

H PIGTAIL WHICH EARTHS LOOP SCREEN - LEAVE ENOUGH LENGTH FOR ROTATION

FIG.6.

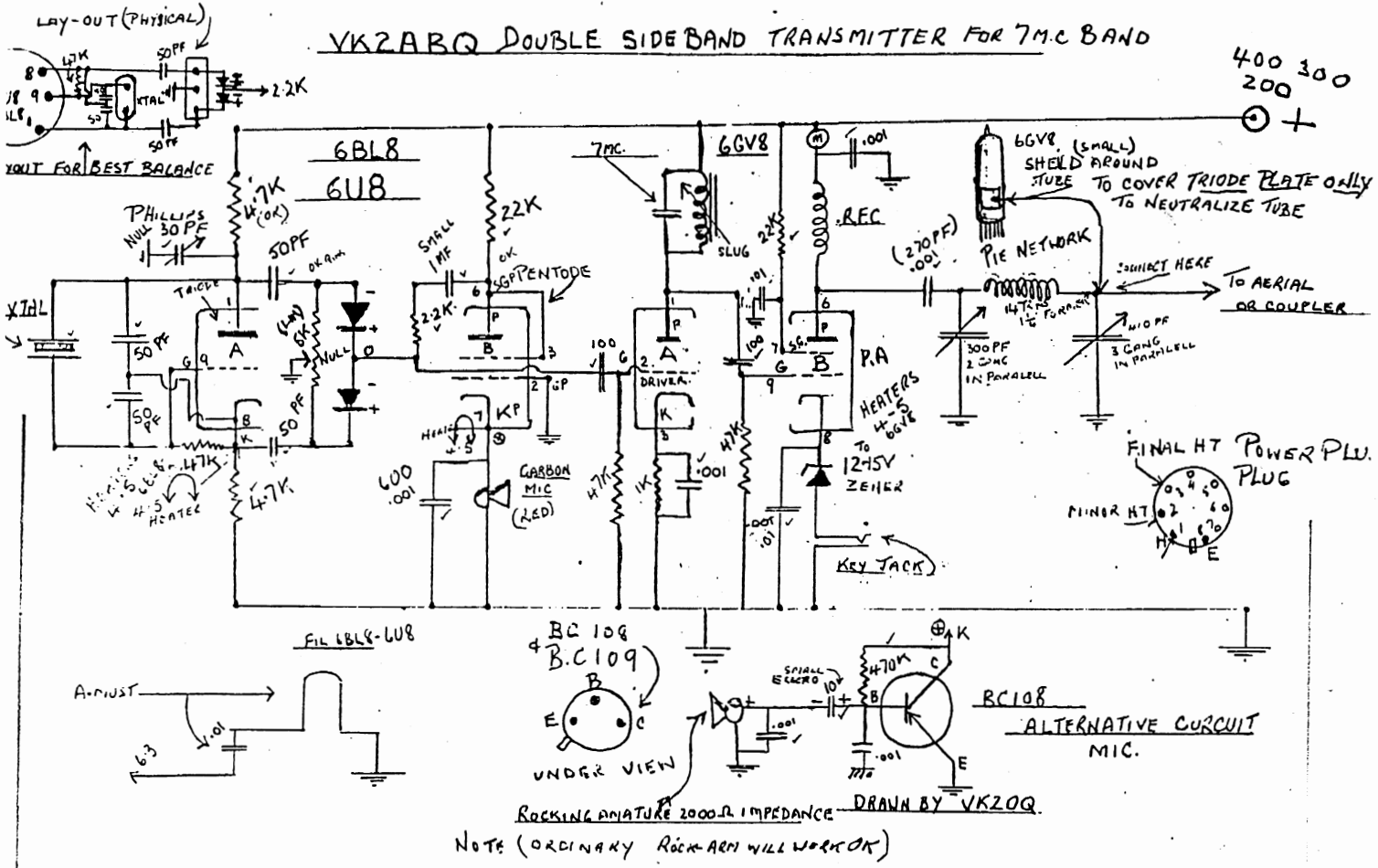


C1 - 150+150pF
C2 - 100pF
C3 - 0.1
C4 - 0.1
C5 - 0.1
C6 - 22pF
C7 - 50pF

R1 - 100K
R2 - 100
R3 - 33K VAR
R4 - 100K
R5 - 100

RFC - ANY AVAILABLE
L1 - 18T, 26 SWG
L2 - 50T, 28 SWG
L3 - 20T, 28 SWG
L2/3 WOUND ON T50-2 CORE

VK2ABQ DOUBLE SIDEBAND TRANSMITTER FOR 7M.C BAND



DSB TX FOR 7MHZ

This D.S.B. rig was designed by Fred VK2ABQ, yes thats right, the same gent that designed the 2ABQ ant. Although I have not built this rig myself it does work very wellby all reports. I have reproduced the circuit as sent to me. The information is rather scant, but I am sure some of you old timers will find little problem in the construction. The method of D.S.B. generation is unique and I would like to hear from anyone who builds the rig, or attempts the same design concept using all transistors.

THIS SPACE AND PAGES 21 - 22 - 23 AND 24 ARE RESERVED EXLUSIVELY FOR MEMBERS PARTICIPATION. SEND YOUR ARTICLES TO THE EDITOR BY JUNE 18TH 1987

..... CW OPERATORS QRP CLUB .....

DX SCOREBOARD RULES

By Award/Contest Manager Len O'Donnell (1) VK5ZF/QRP

To encourage Members to expand their CW QRP activities in the DX field the Club has instituted a NEW DX Scoreboard. The rules and regulations governing a Members entry upon the Scoreboard, are as shown below.

1. (a) ... CW mode only shall be used.
   (b) ... Peak output power into the antenna will NOT exceed 5 watts.
   (c) ... Power levels will be determined by methods or calculations by each station, that give an accurate assessment of output. The historical "Honour System" will be sufficient.
2. (a) ... Submission of score logs must be separated into individual bands, and the scoreboard will be tabled as such.
   (b) ... QSL cards are NOT required as proof of valid contacts, log extracts are acceptable with a declaration of authenticity.
   (c) ... Only DX contacts after zero hours Z 1st Oct. 1986, shall be valid for point scoring.
3. (a) ... The number of points for EACH INDIVIDUAL CONTACT shall be calculated by ADDING the points gained per Rules 4.(a), (b) and (c), and then multiplied by the power output factor as per Rule 5. (a).
   (b) ... If the DX Station is also QRP, then the result of the above calculation SHALL BE DOUBLED.
   (c) ... All authorised amateur bands are permitted to be used. Cross-mode or cross-band contacts are NOT admissible. Mobile or portable operation is valid. Contest QSOs will be accepted for point scoring purposes.
4. (a) ... DX STATIONS WORKED: Each DX station worked will count as ONE POINT only. The same DX station may be claimed for scoring repeatedly per band, provided NOT LESS THAN 24 HOURS have expired since the previous QSO with that same station on that band.
   (b) ... DX COUNTRIES WORKED: Each DX country worked will count as ONE POINT only. The same DX country may be claimed for DX scoring, ONCE ONLY per band.
   (c) ... DX PREFIXES WORKED: Each different DX prefix worked will count as ONE POINT only. The same DX prefix may be claimed for DX scoring once only per band.
5. (a) ... POWER OUTPUT FACTOR MULTIPLIER for each individual QSO:
   Indicated Power Output
   0 - 1 watt...X 6 : over 1 watt - 2 watts...X 5 : over 2 watts - 3 watts...X 4 : over 3 watts - 4 watts...X 3 : over 4 watts - 5 watts...X 2 :
   (b) ... TOTAL PROGRESSIVE SCORE ON EACH BAND: Each members tally of total Stations, Countries and Prefixes worked on each band will be recorded and indicated on the Scoreboard.
   (c) ... GRAND TOTAL SCORE: This shall be the TOTAL POINTS SCORE to-date for each member, and accrued from points gained on all bands.
   (d) ... DATES The 1986 - 87 Scoreboard will conclude on 30th. Sept. 1987 at 2400Z. Results will be printed in the Dec. '87 Lo - Key. Please ensure that progressive score logs reach the Awards/Contests Manager Len VK5ZF/QRP, 33 Lucas St., Richmond, S.A. 5033, Australia., in time to be included in each issue of Lo - Key. Please use the Club Log Sheets if possible.
   (e)... CERTIFICATES Will be awarded to the 1st., 2nd., 3rd., Overall, and each individual Band Winner.

DX CLUB SCOREBOARD

From 1st. Oct. '86 To 30th Sept. '87

QUARTER PROGRESS SCORES

From... Award and Contest Manager Len VK5ZF

Callsign	1.8 Mhz	3.5 Mhz	7 Mhz	10.1 Mhz	14 Mhz	18 Mhz	21 Mhz	24 Mhz	28 Mhz	Total Points
VK7VV		40	55		680					775
VK7IJ					498					498
KV7X		60			338		66			464
VK5ZF							I08			I08

VK CLUB SCOREBOARD

From 1st. Oct. '86 To 31st. Aug. '87

QUARTER PROGRESS SCORES

From... Award and Contest Manager Len VK5ZF

Callsign	1.8 Mhz	3.5 Mhz	7 Mhz	10.1 Mhz	14 Mhz	18 Mhz	21 Mhz	24 Mhz	28 Mhz	Total Points
VK7VV		292	I0		45					347
VK5ZF		82					I			83
VK3DXH		32			5					37

YOU BEAT. I00% increase in particapation from last quarter from 2 to 4. Come on let's have a few more logs in. You can't blaim the band conditions anymore can you?.

DX SCOREBOARD

3.5mhz	KV7X	60points
7mhz	VK7VV	40points
I4mhz	VK7VV	680points
2Imhz	VK5ZF	I08poirts

VK SCOREBOARD

3.5mhz	VK7VV	292points
7mhz	VK7VV	I0points
I4mhz	VK7VV	45points
2Imhz	VK5ZF	Ipcint

..... CW OPERATORS QRP CLUB .....

VK SCOREBOARD RULES

By Award/Contest Manager Len O'Donnell (1) VK5ZF/QRP

1. (a) ... Only the CW Mode shall be used in this Contest.
   (b) ... Peak output power into the antenna (key down condition), will NOT exceed 5 (Five) watts.
   (c) ... Power levels will be determined by methods or calculations, by each individual station, that give an accurate assessment of power output. The "Honour System" will be sufficient.
2. (a) ... Point scoring will be based on the following table...
   UNDER 500 KM.....1 point for all power levels.
   OVER 500 KM.....2 points for 5 watt power level.
   3 points for 4 watt power level.
   4 points for 3 watt power level.
   5 points for 2 watt power level.
   6 points for 1 watt power level.
   10 points for 500 Mw power level.
   15 points for 250 Mw power level.
   20 points for 100 Mw/less power level.
   (b) ... 2 X QRP contacts count double points for each contact, disregarding the power level used.
   (c) ... The Australia Map No. 150 as printed and published by Gregory's Guides and Maps Pty. Ltd., 142 Clarence St., Sydney, N.S.W. 2000, will be considered the standard reference for the measurement of distance in the scoring table. These maps are available from most stationery stores throughout Australia.
   A circle should be drawn on the map at the 500 KM distance, using your QTH as the centre point for the circle.
   (d) ... All authorised bands in the Amateur Service are permitted for scoring purposes.
   2 X VHF and 2 X UHF contacts count double points for each contact, disregarding the power level used.
   The same station can be worked once on each band, and then worked again on each band after each completed 24 hour period after the initial contact.
   (e) ... Only contacts with VK Stations (VK1 to VK8) are valid for scoring. Stations worked may be non-members of the club, QRO or QRP.
3. (a) ... Exchange will consist of RST (min. 3 / 1 / 9). Cross band and cross mode contacts are not valid. Contest QSOs are valid, also portable and mobile contacts are permitted for scoring purposes.
4. (a) ... The VK Scoreboard will commence on 1st Oct. '86 and conclude on 31st. Aug. '87. Progress log sheets to be sent in to the Award/Contest Manager, by the 10th. Dec. '86, 10th. March '87, 10th. June '87, and 10th Sept. '87.
   All entries to be on Club log sheets obtainable from the Awards/Contest Manager, and please use one sheet for each band.
5. (a) ... Certificates will be awarded to the 1st. 2nd. and 3rd. overall top scorers, and top scorer in each individual band. Additional certificates can be issued at the discression of the Award/Contest Manager, if thought necessary.

IT IS A FUN CONTEST...DESIGNED FOR YOUR PARTICIPATION...BE IN IT.

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CONTEST RESULTS

I986 OCEANIA QRP CW CONTEST.

SINGLE OPERATOR/MULTIBAND/24HOUR PERIOD

VK7VV	I505 points	Ist place
AE6ER	I276 ..	2nd place
VK4SF	735 ..	3rd place
KK7C	I96 ..	
VK2CWH	80 ..	

SINGLE OPERATOR/SINGLE BAND I4mhz/24HOUR PERIOD

G8PG	II52 points	Ist place

SINGLE OPERATOR/SINGLE BAND 2Imhz/48HOUR PERIOD

VK5ZF	II6 points	Ist place

RESULTS OF SCRAMBLE NUMBER 2 HELD 4 FEB I987

VK3BGH	53 points	Ist place
VK7VV	47 ..	2nd place
VK5AIL	40 ..	3rd place

SCRAMBLE NUMBER 3 will be held at 0930z on Wed.8th of APRIL I987 on 3.5mhz. Rules to be the same with the exception that VK5BCW will be operating, and participants can obtain IO points for contacting the CLUB station. There will be no mystery station.

TRAVELLING CIRCUIT BOOK NUMBER I

Repaired and up-graded the book should be on its round by the time that this issue of LO-KEY reaches you. Here is the list and the order of travel.

I	(44)	VK4BSD	8	(58)	VK3VBR
2	(27)	VK4NFE	9	(69)	VK7ZO
3	(I5)	VK4RE	IO	(9I)	VK7IJ
4	(95)	VK2DMV	II	(3)	VK7VV
5	(24)	VK2PLV	I2	(66)	VK6NNN
6	(35)	VK2EXD	I3	(6I)	VK6SA
7	(93)	VK3KRL			

COPIER FUND UPDATE

Previously acknowledged $I05

(43) Kevin VK5AKZ $2	(I8)Bill WA2YMW $35.72	(4i) Leo VK2QB $2
(3) RAI VK7VV $40.60	(5) Jim VK2AKE $IO	(9) Mike W3TS $7.74
(95) Paul VK2DMV $IO	(82) GRAHAM VK3BGH $IO	(8) Peter VK6KHZ $20
(76) Rod VK3CBO $IO	(35) Col VK2EXD $IO	(?) A.NONY MOUSE $5
(78) Jay KV7X $I5.48	(II) Ted VK4BML $IO	(78) Jay KV7X $8.82
(I4) Jack VK4SF $IO	(6) Fred K6NDJ $?	(I) Len VK5ZF $20
(47) Lindsay VK3DXH $IO	(93) Simon VK3KRL $5	

The fund has now passed the $350 mark and I sincerely thank all the members who have donated. I have made a number of enquiries about second handmachines and it would seem that we will need around $700. This would be the approximate cost of a good second hand machine ready to roll.

From VK4NFE No27 BOB.

NO SWEAT,

The 4 watt CW Transmitter for 80M published in A.R April designed by Drew Diamond VK3XU.

I purchased a Kit from Ian Truscotts Electronic World. The parcel arrived, a heap of capacitors, resistors toroids, lengths of wire, bolts, terminals etc. The first job was using the colour code and identifying all the bits and pieces.

I thought winding the toroids would worry me, but the article in A.R. explained all and they assembled first time. Wired the circuit board by following the positive line, then negative, the crystal section and then the key section. Applied power and keyed it, and made its first contact with VK4RSD 5.6.9.

This is my first attempt at assembling anything electronic.

BOB VK4NFE.

Pleased to hear that your first project was a success Bob keep up the good work, and do not forget to send in your entry in the Club scoreboard. ED.

HANDY HINT

To solder a wire without a soldering iron. Clean joint wrap with resin cored solder, wrap with Alfoil then heat with a match.

Bob VK4NFE.

BITS AND PIECES LOOK

VK2CWH no.89 Ted tells me he is having a ball with a Tassie Devil he has made up for 7 MHz. He has logged several state-side stations plus RAØ and YU2 with not much time spent on air. Ted's Tassie Devil has had the output boosted to 4 watts with the P.A. stage changed to an IRF511.
Ted's locality is mountainous, with lots of trees. Unfortunately, the trees are not in the right places for sky hooks, so he is using four long wires in different directions. He can notice significant changes in signal strengths when switching between the four long wires.

VK2MMW no 92, Ivan, has senton some information to assist members looking for parts. Ivan suggests that an S.A.E. to Mr. Mike Newnham, 4, Woodlands Avenue, Inverell, N.S.W.2360 will be worth while. Mike is involved in wrecking main frame computers and "Cat Scanners" and is able to supply very good quality used components such as power supplies, resistors, capacitors, transistors, etc, at a fraction of new prices. Many other components are also available too numerous to mention. If you are interested please contact Mike direct, and do not forget the S.A.E.

Congratulations to Stuart(48) now the proud owner of his new call sign VK7NXA, I know how hard you worked to get it. Stuart should also be recommended for 'Treading where angels fear to tread' by taking on the office of secretary of the W.I.A. Tasmanian southern branch, talk about that jump into the deep end. HI.

VK7RO No 98 Richard has had the unfortunate experience of crashing his glider, apparently he ran out of air and had to attempt an emergency landing, he hit some telephone wires and consequentialy nose dived into the ground, Richard broke both legs and head injuries, sorry to hear about that Richard, no doubt a few hours a day on the key will help to pass the time whilst you are recovering

COPIER FUND

This is the second up-grade of the Copier Fund. It is correct up to the end of February.

Kevin Zietz		30.28
David Werner		I.47
Rai Taylor		40.68
Rod Adams		I0.00
Jay Sturdivant		24.39
Bill Breare		35.72
Jim Edwards		I0.00
Graeme Harris		I0.00
Col McDougal		I0.00
Ted Leca		I0.00
Leo Pinkevitch		2.00
Mike Michael		7.74
P.Scales		20.00
Anonamous		5.00
Len O'Donnell	3rd	20.00
Lindsay Lapouple		I0.00
Simon Anderson	2nd	5.00
Jack Ford		I0.00
Fred Turpin		I6.33
Reg Bedford		I.TO
Roy Hildred		I0.00
Jerry Smutny		I5.00

Thanks a lot members, a very good effort up to date almost $400.00 from just a third of our members. hope the other two thirds re-read Len's letter to the editor in the December issue of LO-KEY and realise the benefit this project will bring to all members.
Your Treasurer Kevin waits with baited breath.

Thanks again Rai. VK7VV.

TREASURES REPORT

STATEMENT OF RECEIPTS AND EXPENDITURE FOR YEAR ENDING FEB 86.

	RECEIPTS	EXPENDITURE	BALANCE	
VK5BCW		$ 74.00	$- 74.00	
BANK CHARGES		$ 12.24	$- 12.24	
LO KEY		$ 275.15	$-275.15	
STATIONERY ETC		$ 220.82	$-220.82	
POSTAGE GENERAL		$ 103.40	$-103.40	
LOGO STICKERS	$ 26.69	$ 40.60	$- 13.91*	stock on hand
"G" HANDBOOK	$ 104.70	$ 83.50	$ 21.20*	expect $95.00
QSL CARDS ex(85)	$ 20.00			
QSL CARDS	$ 181.00	$ 169.00	$ 32.00	
BANK INTEREST	$ 57.54		$ 57.54	
SUBSCRIPTIONS	$1245.05		$1245.05	
DONATIONS	$ 74.76		$ 74.76	
SUNDRIES	$ 15.00		$ 15.00	
SUB TOTALS	$1724.74	$ 978.71	$ 746.03	
LEN'S LOAN REPAID		$ 406.41	$-406.41	
	$1724.73	$1385.12	$ 339.62	

SURPLUS 1986	$ 339.62	
B/F BALANCE (85)	$ 559.93	
CURRENT BALANCE	$ 899.55	
LESS EST LOKEY (87)	$ 450.00	(see Note 1)
LESS EST STATIONERY +POST	$ 250.00	
LESS EST BANK+VK5BCW	$ 37.00	
BUDGET SURPLUS	$ 162.55	(no estimate made for extra activities).
PHOTO COPIER FUND	$399.40.	

NOTES:

1/ dispite a stirling effort from Rai to keep lo-key costs down we must feel the effect of the real world. Our printers have had no choice but to raise the charges for lo-key considerably compared with last year. this increase is reflected in my budget.

2/ The above accounts have not been audited. I have sent Rai (secretary) and Len (president) a copy of my break-down and photostats of the Bank Statments. The accounts made up to end Feb to show Subs paid for 1987.

3/ As you can see the budgeted surplus for 1987 is not very much considering the size and expenditure of the club. Moves have already been made to attempt further reductions in the administration and banking costs. No estimates for donations or other fund raisers have been included - I don't think donations should be taken for granted.

4/ A BIG THANKYOU for all those DONATIONS (Some quite substantial). The paper and printing of the "G" QRP Handbook has been kindly donated to the club. It was because of these that we came out of 1986 with a surplus greater than that budgeted for.

K. R. Zietz.
TREASURER 1986.

ATTENTION !!

THE FOLLOWING MEMBERS ACCORDING TO MY RECORDS HAVE NOT RENEWED THEIR SUBSCRIPTIONS AND UNLESS THEY DO SO OR CONTACT THE TREASURER WITH OUT DELAY WILL BE REMOVED FROM THE LOKEY MAILING LIST. We regret this action but the hard facts are that the club can not afford to send lokey to unfinancial members.

42,55,62,63,74,81,85

The FOLLOWING MEMBERS WILL BECOME UNFINANCIAL DURING 1987

4,20,23,24,70,94

THIS IS BECAUSE THE TREASURER HAS NOT RECEIVED ANY RESPONSE TO THE ACCOUNT SENT WITH THEIR DECEMBER (85) LO KEY. WHICH WOULD HAVE BEEN FOR PRORATA FEES TO 31/12/87.

PLEASE CHECK THE DUE DATE PRINTED ON THE ADDRESS LABEL OF YOUR LOKEY. PLEASE ADVISE ANY CORRECTIONS AND ANY CHANGE OF ADDRESS PROMPTLY DIRECT TO YOUR TREASURER.

MR. Kevin ZIETZ
41 Tobruk Ave.,
ST MARYS 5042
SOUTH AUSTRALIA.

PLEASE NOTE YOUR RECEIPT FOR YOUR SUBSCRIPTIONS AND OTHER PAYMENTS SHOULD BE INSERTED WITH YOUR LOKEY (thanks Rai). this should be up to date as at the end of FEBRUARY 1987.

PLEASE DO NOT SEND CASH IN THE MAIL - We have had at least one case of missing cash sent by mail. Even though this is a very small percentage The Club can not afford to absorb the costs or any bad feelings. Usually considerable time elapses before the event is recognized and this hampers the necessary follow up.

NEW MEMBER'S WELCOME

Please welcome the following new members and QRPers to our ranks.....

(64) VK4BRZ Ron Bainbridge 9 Ross ST Toowoomba Queensland 4350
(65) VK5LG Leith Cotton 64 Weroona RD Palkholme South Australia 5043
(66) Vk6NNK Peter Parker P.O. Witcholiffe Western Australia 6286
(72) VE6AAO Bob Rollheiser Box 2609 Peace River Alhta Toh2xo Canada
(73) VK2MAK Phil Thompson 29 Polwood ST Kempsey New South Wales 2440
VK5PH Eric (ex No66) Has resigned his membership. All the best Eric it was good to have you with us.