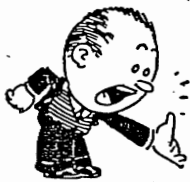


THE QUARTERLY NEWS BULLETIN OF THE CW OPERATORS QRP CLUB

33 LUCAS STREET, RICHMOND, S. A., 5033. AUSTRALIA

ISSUE NO. 1
MARCH 1984



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"WE DO MORE WITH LESS"

QRP





Information centre

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VK3 Len O'Donnell VK5ZF As Above

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VK6 Len O'Donnell VK5ZF As Above

VK7 Rai Taylor VK7VV 25 12th Ave., West Moonah 7009,
Tasmania.

VK8 Len O'Donnell VK5ZF As Above

DX Len O'Donnell VK5ZF As Above

MEMBERSHIP Is open to all Amateurs and Short Wave Listeners in all
Countries.

ANNUAL MEMBERSHIP FEE \$4 for VK, and \$10 for DX.

CLUB CALLING FREQUENCIES 3530, 7025, 14050, 21130, 28125. khz

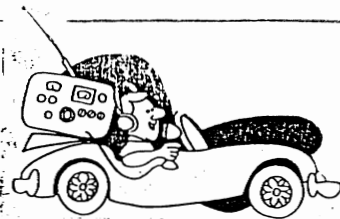
INTERNATIONAL CALLING FREQUENCIES 3560, 7030, 14060, 21060, 28060 khz

CLUB CW QRP ACTIVITY Friday nights 0930Z 3530 khz

CLUB INFORMATION NET Friday nights 1030Z 3575 khz. Sat. 0500Z 21180

QUARTERLY NEWS BULLETIN Issued March, June, Sept., Dec.

STATE AND DX NEWS from your roving reporter



VK1 AUSTRALIAN CAPITOL TERRITORY

It is great to have Glen VK1FB join our ranks, which now gives us members in 7 States. Glen is active with a "Home Brewed" QRP rig, having recently sold his Icom QRO gear. He is also very busy in teaching many of the locals, in preparation for their NAACP exams. Please look out for Glen on the Club QRP frequencies. With VK1FB spreading the word about the Club in the ACT, it should not be too long before we have a few more VK1s among our numbers.

VK2 NEW SOUTH WALES

Membership in VK2 is building up, and we now have 8 members in this area. Brian VK2BVH is the State Co-Ordinator, and has been heard on the Friday night net, and also mobile with good signals. Jim VK2AKE is a keen QRPer, who has been heard on the CW QRP 3.530mhz frequency, in QSO with other members of the Club. He is also to be heard regularly on the Friday night 3575khz Club information net. Thanks for your support Jim. Another very active member is Col VK2VVA, who is our Awards and Contest Manager. I believe Col has been getting his share of the DX lately.

VK3 VICTORIA

There has also been a steady growth of members in this State, there being 9 VK3s at present. VK3PGE Neil from Montrose has been putting this area on the QRP map. My spies tell me he has already QSOed ZL1, VK2 and VK5. That's terrific Neil. If only the "Vics" knew how to play football, never mind they can't have everything. I have the details of Neil's "Sardine Tin Special" QRP rig, and hope to feature it in a future issue of the News Bulletin. Eric VK3BXA has been on holidays, I hope that you enjoyed them OM. Who is going to volunteer to be VK3 State Co-Ordinator? Give it some thought.

VK4 QUEENSLAND

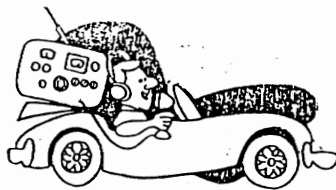
Up North in the Sunshine State, we have 4 members. One of these members Paul VK4APN, has taken the job as State Co-Ordinator. Good work Paul, and I know your crew will support you. Nice to hear Jack VK4SF checking into the net on 80 meters. I believe congratulations are in order for Ted VK4BML, as he now has a brand new Full Ticket on the wall of his shack. Really great Ted.

VK5 SOUTH AUSTRALIA

VK5 has the largest State membership, but not a great deal of activity to report. The Festival State has 11 members. Clarry VK5NAI is the only VK5 to check into the net as yet. That 4 watts QRP CW was making the trip to VK3 very well recently. Also those 21mhz CW sigs sounded real good to me OM. Thanks are due to Marshall, who is quietly giving our Club a plug where it counts. The regular feature "Pounding Brass" by Marshall Emm VK5FN in Amateur Radio Magazine is widely read. Congratulations to Kevin VK5AKZ, he is another of our members with a nice new AOCP. Nice work Kevin.

STATE AND DX

NEWS from your roving reporter



VK6 WESTERN AUSTRALIA

Our friends in the West are getting in to this QRP business, as we have 3 members in the area. It was great to hear Peter VK6YW and VK6KRG, both from Donnybrook, checking into the 80 meter net. Keep it up fellas. Peter's little QRP rig is featured in this Bulletin.

VK7 TASMANIA

QRPing in VK7 has really taken off, membership being 8. Under the leadership of the State Co-Ordinator Rai VK7VV, the boys in Tassie are a very keen bunch. Heard them talking about getting together, to help one another with projects, also they are making plans for some portable QRP operation in the near future. It was great to hear your enthusiasm.

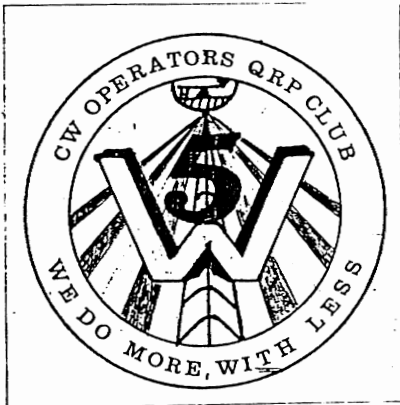
VK8 NORTHERN TERRITORY

We do not have any members in VK8, but moves are being made to interest Amateurs in this area. Hoping to have some good news in the next issue of the Bulletin.

DX MEMBERS

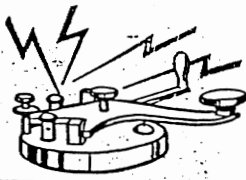
There are 4 DX members in the Club, and they certainly add an international flavour to proceedings. Matt ZL1ATW, ZL1BRK, W5QJM, and KX6GO will be eagerly sought by our members. Would it be possible for our DX friends to drop me a line, and indicate their operating habits. I could then circulate possible times and frequencies amongst our members, with a view of possible contacts being made.

NO. 1



NO. 2





The Communications Department CLUB BUSINESS



ELECTION OF COMMITTEE

Thanks to Rai VK7VV who has taken the Public Relations manager, and State Co-Ordinator for VK7 positions on the Committee. Rai is also Net Controller for the Club.

Thanks to Col VK2VVA who has taken the Awards/Contest manager position on the Committee.

Thanks to Kevin VK5AKZ who has taken the Assistant News Bulletin Editor on the Committee.

Thanks to Leith VK5IG who has taken the Scoreboard Manager position on the Committee.

Thanks to Brian VK2BVH who has taken the State Co-Ordinator for VK2 position on the Committee.

Thanks to Paul VK4APN who has taken the State Co-Ordinator for VK4 position on the Committee.

Len VK5ZF has taken the Organiser, and the State Co-Ordinator for VK5 positions on the Committee.

VACANCIES ON COMMITTEE

The following Committee positions have not been filled.

1. Treasurer/Secretary. 2. News Bulletin Editor. 3. Technical Editor
4. WQF Delegate. 5. State Co-Ordinator for VK1. 6. State Co-Ordinator for VK3. 7. State Co-Ordinator for VK6. 8. State Co-Ordinator for VK8
9. State Co-Ordinator for DX. These positions are all being filled by Len VK5ZF, until other willing Committee Members can be found. If ANY Members would like to really help the Club in any of the above positions, please contact the Organiser Len VK5ZF.

CLUB NETS

I believe that all Members would agree, that Rai VK7VV is doing an excellent job, in controlling the Club net on Friday nights. He needs more support from the Membership, so how about making 1030Z each Friday evening a must for checking into the net. This net is run primarily, for the purpose of giving out information to the members, by the Committee. Can we count on YOUR support.

WORLD QRP FEDERATION

The Secretary WQF has written me with details of membership, and in due course our Club will seek entrance to this Federation. I notice from the correspondence supplied, that the South African ZS6TJ QRP Club has now been admitted to membership.

CLUB QSL CARDS

There has been quite a good deal of interest among Members, with regard to a Club QSL card. As you will have noticed, there are a couple of designs from Members, for a Club Logo suitable to be incorporated in a Club QSL design. I would be very happy to receive some feedback from Members as to their opinions on the submitted designs.

MEMBERSHIP

The Membership of our Club now stands at 48, and I think that you will agree with me that it is terrific. Please give our DX members a warm welcome, when you QSO them. Please join with me in making our Club, a Club that we can all be proud of.



NEW MEMBERS

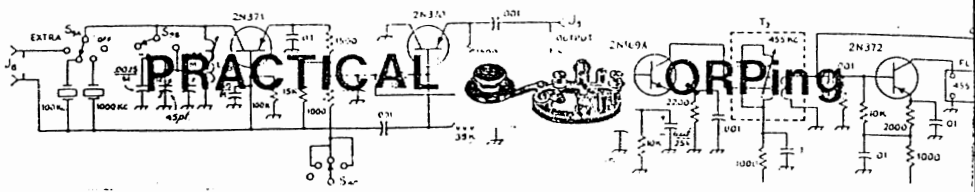


A VERY BIG WELCOME TO THE FOLLOWING

NEW MEMBERS

- 24 VK5VD HUGHES Rob 6 Park St., HYDE PARK S.A. 5061
 25 VK6AHM MOORE Harold C/O P.O. LAVERTON W.A. 6440
 26 VK3KII WILSON Gray 16 Newsom St., ASCOT VALE VIC. 3032
 27 VK4APN NEWMAN Paul 22 Hamersley Circuit, ALEXANDRA HILLS QLD.
 4161
 28 VK6KRG GREEN R. 72 Yelverton St. South, DONNYBROOK W.A. 6239
 29 VK3VQX GIBBINGS-JOHNS Glyn R.S.D. Forrest Rd., BARWON DOWNS
 VIC. 3243
 30 VK3CCE SOUTHWOOD R. 159 Wattletree Rd., MALVERN VIC. 3144
 31 W5QJM BONAVITA Fred P.O. Box 12072, Capitol Station AUSTIN
 TEXAS U.S.A. 78711
 32 VK1FB TORR Glen P.O. Box E93, Queen Victoria Tce., A.C.T.
 2600
 33 VK5PAJ JONES Murray Pelican Point C/O P.O. CARPENTER ROCKS
 S.A. 5291
 34 ZL1ATW MEENAGH Matt 23 Herbert St., KIHIKIHI TE AWAMUTA N.Z.
 35 VK7NWK KELLY Wayne RSD 2322 Mountain River Rd., MOUNTAIN
 RIVER TAS. 7102
 36 VK7JE SMUNTY Jerry Huon Rd., NEIKA TAS. 7102
 37 VK7NRE EDWARDS Bob 205 Davey St., HOBART TAS 7000
 38 VK7NAJ BLACKWELL Arthur "KELLIE" ELDERSIDE TAS 7400
 39 VK7UP FRY Geoff 29 Latana Rd., RISDONVALE TAS 7016
 40 VK7JK ROGERS J. 1 Darville Crt., BLACKMANS BAY TAS. 7152
 41 VK2QB PINKEVITCH Leo 20 Cathrine St., KOTARA SOUTH N.S.W.
 2288
 42 VK7BZ LOVETT Phil 61 Lipscombe Ave., SANDY BAY TAS 7005
 43 VK5AKZ ZIETZ Kevin 41 Tobruk Ave., ST MARYS S.A. 5042
 44 ZL1BRK STEWART A. 11 Kerry Dell HOWICK AUCKLAND N.Z.
 45 VK3BMJ REID Col 16 Fyfe Ave., RINGWOOD VIC. 3134
 46 KX660 MILLS Walt P.O. Box B387 A.P.O. SANFRANCISCO U.S.A.
 96555
 (Station Located :- ROI NAMUR MARSHALL ISLANDS)
 47 VK3PLP LaPOUPLE Linsay 5/10 Gurner St., ST KILDA VIC. 3182
 48 VK5ANL LEE Norm 25 Ralston St., NORTH ADELAIDE. S.A. 5006





YOUR FIRST QRP RIG

GET INTO "HOME BREWING" WITH THE
"DONNYBROOK SPECIAL"

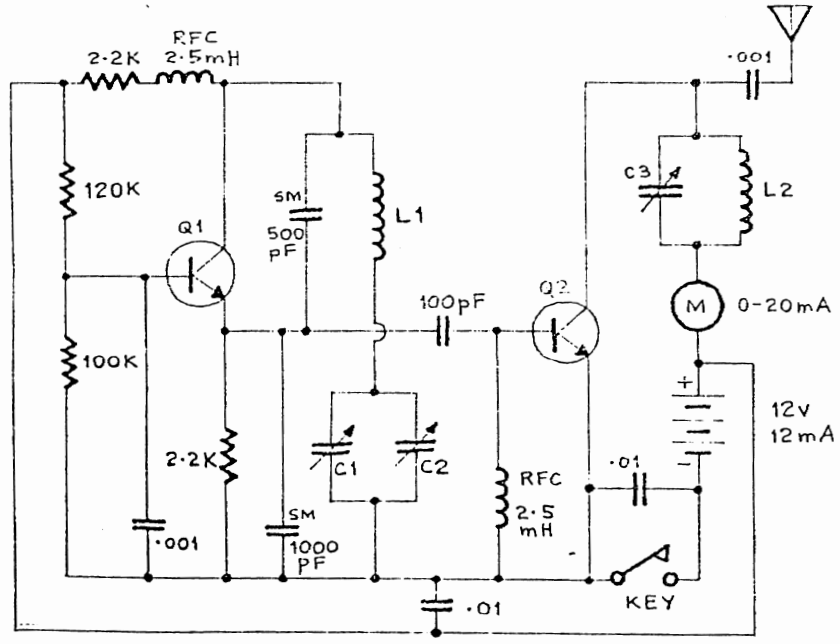


VK6YW



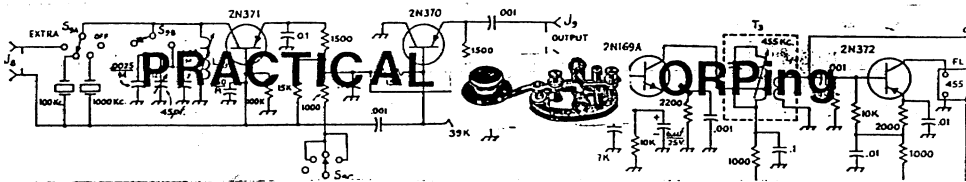
2 TRANSISTOR QRP RIG

100 MW — 3.5 MHz — VFO



QRPP CW VFO Tx FOR 80M

- C1 15pF BANDSPREAD (small trimmer)
- C2 5-55pF BANDSET (transistor radio variable)
- C3 6-80pF FINAL TUNING (old B.C. variable)
- L1 57 TURNS 1" DIA. MINI-DUCTOR
- L2 35 TURNS 1" DIA @ 32T/INCH (P.V.C. pipe former)
- Q1/Q2 BC108 OR 2N2711



THE DONNYBROOK SPECIAL VK6YW 2 Transistor QRP Rig

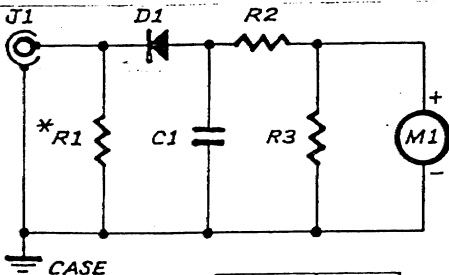
From Peter VK6YW ... I am happy to let you know that I have managed to put together a small QRP rig, that uses 2 BC108 transistors. It appears to be a very stable little Tx, so I am enclosing the circuit. Most of the parts were found in an old TV set, and the cost was less than \$5.

This appears to be quite a fun rig, and I am hoping that many of our members will have a go at building it. If all the members who do build it, keep me posted on their results, we will see who gets out the greatest distance, by the time the next Bulletin is printed.

Here is something to check out the little QRP rig, when you finish it. From the Bulletin of the VK CW QRP CLUB ...

QRP OPERATORS POWER METER AND DUMMY LOAD by Drew VK3XU

Here are details of a handy little weekend project, which has sufficient accuracy for QRP purposes, checked against a professional meter. SPECIFICATIONS 0-5watts FSD. Freq. 500khz-50mhz. SWR Less than 1:1. Impedance nominally 52 ohms. Accuracy Approx. Plus or Minus 5%.



*R1 consists of nine 470Ω 1W 5% Philips cracked carbon resistors. Two loops of 20B&S tinned wire used to support ends of the resistors. Seven strands of the same wire twisted together, one end soldered to centre pin of J1, other end flared out and soldered to the other loop. Case side of R1 loop soldered to four lugs under the nuts securing J1.

M1 RDG.	PWR.
500μA	5 W
430	4 W
360	3 W
300	2 W
210	1 W
140	.5W
100	.25W

C1: .022mfd 63v disc ceramic.
(leads less than 7mm)

D1: 1N914, 1N4148.
(leads less than 5mm)

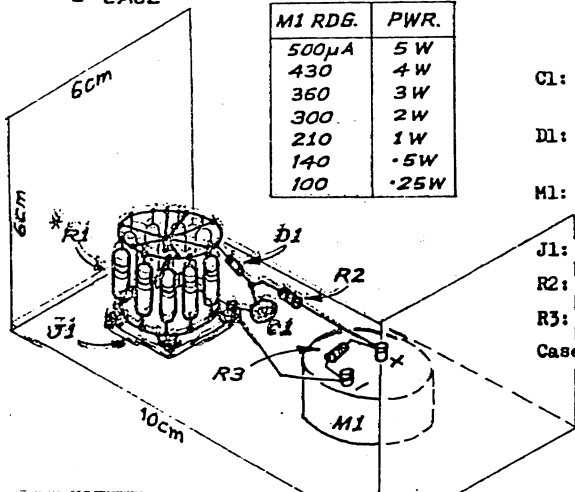
M1: 500μA 180Ω coil.
(most available are 180Ω)

J1: UHF female coax connector.

R2: 27k 1/2W 2%

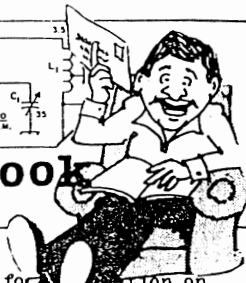
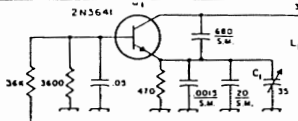
R3: 270Ω 1/2W 2%

Case: available with cover from many outlets.





a



page from lenny's note book

With an increasing number of requests being received for information on modifications to the popular Yaesu FT7 to permit QRPp output, I thought a permanent record through the media of the Bulletin would be better than dashing off individual letters!

Mark: VK3NOY: originally sent me the info. a couple of months ago and, in fact, also to Norm: VK6NDE and Tony: VK6NGZ: who have carried out the mods. to their FT7's successfully.

To give credit where it is due and to conform to copyright laws we must state that the article below appeared in the RSGB journal Radio Communication for March 1980 by I.H.Crowther: G3KLF.

"RF POWER CONTROL FOR THE FT7, WITHOUT REMOVING THE COVERS"

The circuit ... was developed to allow output power reduction from a maximum of 25W to zero for QRP operation ... The FT7 utilizes a directional wattmeter circuit to sample rf output, which is then rectified by forward and reverse power diodes D1502, 1503 and 1504. The anodes of the diodes form an OR gate from which a negative voltage is derived, and fed back as alc to Q304 in the transmitter i.f. chain to control its gain and hence rf output. The diode OR gate lends itself to the addition of another diode, and this is what is done.

An attraction of this modification is that the alc line is connected to pin 3 of the dc power socket on the rear apron of the FT7, and therefore it can be incorporated without removing the covers.

Before commencing, connect a 50 ohm rf wattmeter to the FT7 antenna socket and transmit on 3.5MHz; the output will probably be 15W. Adjust alc potentiometer RV1501 through the rear apron to just secure maximum rf output; this should be 25W for a meter current of 3.8 to 4A at 13.5V. This is within the output transistor's rating, but should not be sustained for more than 20sec.

Switch to receive and prepare the circuit shown in Fig.1. The negative supply may be derived from a mains unit, but a 1.5 to 15V dry battery will work just as well, as current drain is only about 1mA. As the battery voltage begins to fall, the only effect will be that zero rf output will be unobtainable without readjusting RV2. Use an Avometer on the 10V scale to adjust RV2 to obtain Neg.1V across RV1. Connect D1 to the FT7 pin 3 and the positive battery line to the chassis.

Switch on the FT7 and transmit into the dummy load. RV1 should vary power output from maximum to zero watts. If zero is not achieved, adjust RV2 until cut-off is reached. RV2 can be a small preset, as it is seldom readjusted once set.

Note that rf efficiency drops with reduced power output, e.g. for a 2A meter current 5W are produced: for 3A, 12-15W, and for 4A, 25W - corresponding to efficiencies of 20, 45 and 50 per cent respectively."

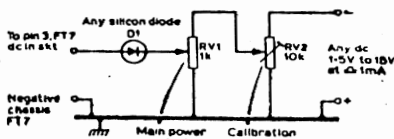


Fig 1. Circuit diagram



1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28



CONTEST CALENDAR



FOR 1984-85

RULES

1. Contest will be held on a yearly basis from the 1st April to 31st March, each 12 month period.
2. There shall be two sections of the Contest
 - a. Novice ticket
 - b. Full ticket
3. The Contest is open to all members of the CW Ops QRP Club.
4. All bands open to Amateur operation in both sections may be used.
5. The mode used will be CW, and our QRP 5 watts output power limit will apply to all contacts for this contest.
6. Station worked does not need to be operating QRP, but must be using the CW mode.
7. Scoring
 - a. Inside own call area 1 point
 - b. Outside own call area, but still in own country.. 2 points
 - c. Outside own country 3 points
 - d. QRPP (1watt or less) count double points.

N.B. 24 hours must elapse before contacting a station you have previously contacted.

Entrants in the contest are asked to send their progress log, each 3 months to the Scoreboard Manager Leith VK5IG QTHR. Quarterly progress scores will then be shown in "LO-KEY" in June, Sept., Dec. Logs in each section will show, Date, Time, Freq., RST Sent, RST received, Points Claimed, for each contact. Total points for the period of the log must also be shown.
8. In the March issue of "LO-KEY" (1985), the winners will be declared for the 1984-5 year.
9. Certificates will be given for 1st, 2nd, and 3rd place in each section.
10. All entrants are expected to operate under the terms of their licenses, and the honor system.

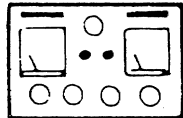
VK VERSUS THE REST OF THE WORLD

CONTEST 1984

Will be held in Nov. Dates, times, rules, etc., are now being worked out, and full details of the contest will be given in the June issue of "LO-KEY". This should give the DX QRP Clubs plenty of notice. Members of the CW Ops QRP Club are asked to start on getting their rigs and aerials etc. ready. Let's show the rest of the World how it is done.



marketplace



FOR SALE

CLIPSAI P.M.G. TYPE MORSE CODE KEY MODEL 610. SOLID BRASS COMPONENTS. BRAND NEW \$30 POSTED. (AS ADVERTISED IN "A.R." AND A.R.A.")

WANTED

TEN-TEC MODEL 247 ANTENNA TUNER IN GOOD ORDER AND CONDITION

JIM VK2AKE QTHR. (O48) 712113 Member No. 5

WANTED

NEW OR SECONDHAND VALVES TYPE 6U8 6EJ7 6BA6 12BY7 6JS6 7036 NEEDED TO PUT MY FT200 BACK ON THE AIR. WILLING TO PAY ANY REASONABLE PRICE.

LEN VK5ZF QTHR Member No. 1

Marketplace is available to all members of the Club. Please send your copy to the Editor, by June 14th to be included in the next issue of "Lo-key", which is issue No. 2 19th. June.



DX DX DX DX DX

From Col VK2VVA QRP CW worked YU-DL-KA6/8/O-KH6-JA-SM. Have put up three nrw dipoles and re-aligned the 4 el. Quad.

From Rai VK7VV Over the last couple of months I have worked the following QRP-QRP CW QS0s, on 14 mhz. 0710Z-F6FZL, 0510Z-W6RCP, 0725Z-ON5AG, 0830-SM5CCT/MM Azores, 1430Z-4S7VK, Others include AH9AB, VP2MEL, XU1SS, A4XA, CU2QN, BY4AA, KH6JOI. and many G stations.



BITS 'N PIECES



The following is an extract from a letter, received recently..... I have had a lot of mail from Hams in the USA regarding computer activities, and I have compiled a great heap of Ham Computer Programs sent to me. If anyone in the Club has a TRS-80C colour computer, I will gladly share what I have in the way of programs and info on RTTY, CW etc I require only cost of tapes, post and photocopy. I have lots of interface circuits etc too.

I have written an extensive bearing and distance program with a print-out like the one advertised in ARA. It is available to Club members for \$5.50 posted, with \$1.50 to go to Club funds for awards, from each listing sold. DX members cost is \$6 or equivalent IRCs. The listing shows in alphabetical order, current DXCC countries, call signs, zones, bearing out, return bearing, and distance both in miles and kilometers. The list shows all Russian and Mainland USA call areas, and most non mainland ones too. In all there are some 360 entries on eight pages with headers and page numbers. Pages are loose leaf and of first grade bleached white rag paper, and are very durable. Printing is bold block upper case letters from a dot matrix printer for easy reading. Requirements are-. The co-ordinates of the station requiring the listing. Accurate to the nearest minute is OK, but if the seconds can be determined then the list will be more accurate. I warrant the listing to be as good or BETTER than any advertised and possibly more accurate too. A large VK (300+ entries) listing is planned for the near future.

As an adjunct to Club activities I will be able to offer a computer check and printout for verification for the 1000 mile per watt award should anyone be requiring it. I think about \$1.00 should cover the cost for post etc..... Col Stevenson. P.O.Box 109, Mt. Druitt, N.S.W. 2770. (Thanks Col, sounds very good to me. Ed.)

AWARDS

A suitable program of Club Awards, is being discussed by the Committee at present. Details of the first of these will be given in the next issue of "Lo-key". It will be an award for contacting members of the CW Operators QRP Club, and will be available to members and non members.

NEW WIA CALL BOOK

The Executive of the WIA have been in touch with me, in regard to a page on QRP being included in the next Call Book. Rai VK7VV our PR Manager is handling this chance to give QRP a BIG BOOST in VK.

STOP PRESS

A VK QRP HANDBOOK is something that some of us QRPers have dreamed about for more years than I care to remember. I am now able to tell you that the dream is about to become a reality. Drew VK3XU has sent me a Draft copy of the QRP Handbook he is producing, and I can tell you that you are going to like this one. Drew as you will know, is a very experienced and dedicated QRPer and CW Operator, as well as a very capable Experimenter. Most of us have read his articles in AR, but now you will be able to have all of Drew's best circuits, along with many other very useful QRP ideas in one Handbook. This is a must for every QRP operator in VK. I will keep you posted with price and release details as soon as details are known.