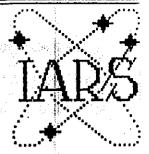


THE PROPAGATOR



ILLAWARRA AMATEUR RADIO SOCIETY

MONTHLY NEWSLETTER OF THE ILLAWARRA AMATEUR RADIO SOCIETY.
VOLUME - 87, NUMBER : 4.
REGISTERED BY AUSTRALIA POST PUBLICATION NUMBER : NBH - 1491.

MEETINGS ARE HELD ON THE SECOND TUESDAY OF EACH MONTH, (EXCEPT JANUARY) AT 7.30.PM. AT THE STATE EMERGENCY SERVICES, BUILDING, IN MONTAGUE STREET, NORTH WOLLONGONG. VISITORS ARE MOST WELCOME TO ATTEND THE MEETING'S.

A LOOK AT KATMANOU

The April meeting
An attendance of abt 40
members were present for the
April meeting.

Business at the meeting included a report on the conference of clubs by Jim VK2EJH.

The I.A.R.S. has not been represented for several conferences and it would appear we should have a representative when items such as repeater frequencey allocation and PAGER INTERFERENCE are being dehated.

Members present were signed up as applying for membership of the new Club I.A.R.S.INC.

Treasurer Dave VKZVAV reported that fund raising LOTTO 2 sequence finished on the week of the April meeting. The first draw of the NEXT LOTTO NO:3 Series will be the first Monday in July. Members can pay for the next series at the May or June meetings.

Dave reported on continuing progress with the new Club structure and that we have 114 Members.

The speaker for the meeting was also Dave VK2VAV with slides of his recent trip to NEPAL. While there is little visible Ham Radio activity in Nepal, the slides were very interesting showing City scenes in Katmandu and rural scenes as Dave progressed towards the High Country.

Highlights to emerge were that as a tourist you don't drink the water, your Aussie dollar has very good purchasing power. There isn't much transport beyond the main cities - the power supply is unreliable;

The people are unsophisticated and friendly and there is always an impressive back-drop of mountains.

Dave plans another visit this year via Siberia, the trans-Siberian railway to Mongolia thence Tibet and across the Himalayas to Nepal which should prove an interesting trip for the intrepid Dave.

Our second feature was a video of vintage Hancock, in which Tony portrays an amateur operator in his own inimitable way providing a good laugh for all present.

The meeting concluded with a cuppa and bickies.

SUBSCRIPTIONS

SUBSCRIPTIONS:

Subscriptions are now due and should be paid promptly to enable a smooth change over to the NEW CLUB STRUCTURE. Members not financial at 30/6/1987 will need to pay an EXTRA FEE of \$1 to join the NEW CLUB.INC.

FEES ARE NOW DUE

Dont make expensive mistakes by buying blind What should you expect as a minimum when purchasing an IBM compatible?

- * Dual speed 4.77MHz & 8MHz
- * 8088-2 Processor
- * Fully socketed Mother Board
- * Socket provided for 8087 arithmetic chip
- * Eight Expansion slots (2 should only be occupied)
- * Extra sockets for ROM's
- * Minimum 640K on Mother Board
- * 135 w Power Continue output
- * Built in cooling fan
- * Centronic parallel printer port
- * 2 RS-232 serial Communication port (you will probably end up with a Modem & Mouse or A/D card etc)
- * Joystick Port
- * Dual floppy Controller
- * Battery backed clock/calendar
- * Legal Bios eg. ERSO
- * 2 Quality Floppy Japanese Disk Drives as used in Sperry, IBM, Olivetti etc.
- * An on site Warranty & Insurance must be available from Computer Shield or Hills Industry (Nationally protected). If these companies dont offer maintenance on the machine you are purchasing then forget it, Companies only offer maintenance contracts on machines they believe are reliable.

PHONE J.C.C. SOLUTION SCLLEUS.

We have been selling Computers since 1979 as a family run business where Personal Service is a — PRIORITY — Mon - Fri 7.30-9.30.pm. Phone: <042>61-5451.

OPEN FOR BUSINESS ALL WEEK END

Due If your Propagator label has '\$' after the postcode. then you are unfinancial. Fees for this year remain \$5 for pensioners and students. and \$10 for normal All financial members of the Society at the 30th of June will automatically of Incorporated association you've signed application form!). If you don't pay your fees by June, then you will have to reapply for membership, pay the extra \$1 joining fee.

At the June meeting, a Special Resolution will be put to the members: "That the Illawarra Amateur Radio Society be wound up at midnight on the 30th June 1987, and that all property, monies and liabilities of the Society be taken over by the Illawarra Amateur Radio Society Incorporated".

Thus the June meeting be the last meeting of the Society. When we next meet, in July, it will be as the Illawarra Amateur Society Inc., and signed who have membership applications which have been on display at the meetings, will have become the first members this new Association, elect the Committee of management for the 1987-88 financial year.

REPEATER-REPORT-GRAEME-VK2GAG-

The monthly repeater report is normally typed out on my computer, a Ferguson Big Board, using Wordstar to correctly form the paragraphs and justify the right hand column of the text. However, this month I am manually putting in the line feeds because Wordstar apparently inserts control characters which are transmitted along with the text of this report, and some stations receiving it on packet radio who are using different operating systems have reported some unusual effects on the format caused by the bogus control characters. This report is simply left on the disk with the filename RPTR/RPT.MAY, and can be accessed along with the other files by anyone who connects to me on packet. A report from packet stations would be appreciated on this months format.

On the repeater scene, I must admit that I have been too busy to do anything or even have the radio gear on, so there is little to report.

Thanks to those who have submitted logs and written reports of the paging interference to 7275 repeater. I will take any further reports at the next meeting and forward them on to the department along with a covering letter as soon as possible after the meeting.

There has also been some response to our appeal for material for 6850 rebuild project. It looks like we are OK now for the rack and panels and hardware bits and pieces, but there have been no offers of radio equipment yet.

During my regular checks I noticed a fault developing in 8725 UHF repeater at Sublime Point. The transmitter takes a few seconds to come up to full output when it is first triggered, but acts normally after that. No-one has reported anything about it, and I have never heard anyone using this repeater on the occasions that I have been listening. I have no idea of its useage, as I usually listen on 8225 and don't have a scanner on my 70cm rig. I would be interested to hear from anyone who uses this repeater. Does it fulfill a need? Is it necessary? It was intended to provide a service back in the boom days of RTTY, but RTTY never seems to have got off the ground on 70cm.

I get a continuing stream of reports on packet about VK2BFI-1 at High Range occasionally going off the air then coming back on. There are two quite logical reasons for this. First, this repeater is a temporary one, installed on a trial basis to determine whether it would provide a better service at High Range rather than Mt. Murray where it was originally supposed to go. As such, the eprom in its TNC was purposely left without a callsign programmed into it, and the callsign VK2BFI-1 is programmed into the device by remote control. There is a watchdog timer fitted to the processor section (in addition to another timer in the TX PTT line), which serves to reset the processor if it goes into a loop or 'crashes' for any reason. Thats much better than someone having to drive all the way to the site just to press a button to reset it. Most all microprocessor controlled devices will 'crash' for some obscure and unexplainable reason at some time or other. With VK2BFI-1 when this happens, it simply loses its callsign and apparently ceases to exist. It remains like this until either myself of someone approved by the repeater committee re-programs it. Some operators have been seen connecting to the repeater (quite unnecessary, and a no-no with a packet repeater), and attempting to send commands to it. This usually results in a forced reset condition. This will change as soon as the new eprom programmed with its callsign is installed.

REPEATER REPORT CONTINUED PAGE 8.

Common sense says it won't work and a lot of theory says it can't work, but if you try it for yourself you'll be surprised. It does work!

The "U" Antenna

A High-Performance DX Receive Antenna For 80 and 160 Meters

BY BOB FARKALY*, K9RHY

These days, when you can count the sunspots on the fingers of one hand, the low bands are the only DX game in town. Listening to 20 meters on a winter evening during the sunspot minimum is likelistening to a dummy load.

Because I was looking for something a bit more exciting, I decided to try 80 meter DXing.

The first antenna erected was an inverted vee with the apex at 70 feet (21.5 meters). Next, Because everyone says you need a vertical to work DX on 80, a Butternut HF2V followed. The Butternut is top-loaded and has 4000 feet (1225 meters) of radials in the ground system, making it a competitive transmit antenna.

This choice of antennas worked pretty well. My 80 meter DXCC total went from zero to 77 in a couple of months. All continents were worked, and nice ones such as AZI, P29, J5, 5V7, and VR6 added flavor. What frustrated me from day one, however, was noise. There is no shortage of this commodity on 80 meters.

The Vee was noisy, and the vertical was worse. My noise level hovered around the S9 mark most of the time, rising occasionally when a storm showed up anywhere within a 500 mile (800 km) radius. Trying to extract a signal only a few dB above the noise was giving me headaches.

I 'kept hearing about the Beverage antenna is for serious 80 DX work. I read and meter heard about the Big Guns who routinely check different propagation paths selecting appropriate Beverage. When you research classic antenna, however, reality and limited real estate get in the way. Nice as a Beverage might be, there simply was no space for one.

Just as I was about to throw in the towel on 80 meter DXCC and WAZ, KS9U. a fellow member of the Northern Illinois DX Association, came to the rescue. He described his low-band receive antenna which seemed to combine many of the attractive performance

features of the Beverage but with the benefit of being able to be installed on a surburban lot. Because this antenna was first described to me by KS7U, and because it is shaped like a big letter "U," I call this my U Antenna for 80 meters. Incidentally, it plays well on 160, too.

NEWTEK-

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THE "U" ANTENNA CONTINUED

THEORY OF OPERATION

A little background information on the Beverage antenna is appropriate at this point. The Beverage is a high-performaance low-band DX antenna for four reasons:

- 1. It discriminates in favor of DX signals arriving at low incoming angles (less than 45 degrees).
- 2. It is insensitive to atmospheric noise, and rain and snow static.
- It is very sharp directionally.
- 4. It discriminates against signals arriving at high incoming angles. Signals from within a radius of about 1000 miles (1600 km) are typically 25 to 30 dB down on the Beverage.

The U Antenna has all of these characteristics with the exception of the directional bias. Although I can't confirm it, I would

guess the theory of operation of the U Antenna is similar to the Beverage. Why does it work ? I don't know. How does it work ? Great.

CONSTRUCTION & INSTALLATION

The U Antenna installed at K9RHY uses about 1000 (306 meters) of insulated wire. The length of the antenna does not appear to be critical, but longer is probably better than shorter. One end of the wire leads directly into the shack and is attached to the receiver via an antenna tuner. The rest of the wire runs into the three of the perimeter of the lot. forming a large, rough U

The wire averages about 7 feet (2.1 meters) above the ground. No insulators or supports were used. The entire antenna is held above the ground by tree branches, bushes, and a few staples.

PERFORMANCE

The performance of the U Antenna has been great. During a recent DX contest 80 meters was wall to wall noise at S9+ on both the Vee and vertical. No DX signals could be copied.

Switching in the Understand transformed the noise into wall-to-wall DX signals. Unbelievable.

The signal strength of the DX stations drops, but the noise disappears. Signals that were totally undetectable on the Vee or the vertical were absolutely Q5 copy. As an added benefit, QRM from local USA stations dropped down 25 to 30 dB in strenght, making adjacent channel copy easy.

To use the U Antenna on 160 meters, a 16:1 toroid autotransformer makes an appropriate matching device.

Direct connection provides the best match on 80

The second user of the U Antenna, WD9AHJ, worked DXCC on 160 meters in two seasons. Another club member KV9S, put up a U antenna last year. He has used it to come out on top of the 9th call area in 80 meter contest work.

The U Antenna supports
the well-known adage: "You are
can't work 'em if you can't
hear 'em."

taken from "CQ" ..



Illawarra Amateur Radio Society Incorporated

Report to the Committee on Association

Suggested Committee Structure:

Office Bearers:

President Vice-president Secretary Treasurer

General Committee:

Three ordinary members

Sub-committee chairpersons:

Repeater QSL Propagator Broadcast

At the first committee meeting of the Illawarra Amateur Radio Society Incorporated, which is currently planned for the night of the July general meeting (the Annual General meeting), the following motions will be proposed:

- 1. That the once-only joining fee for the Illawarra Amateur Radio Society Inc. be set at one dollar.
- 2. That fees for membership of the Illawarra Amateur Radio Society Inc. be set at ten dollars per annum, and that members who require their copies of the Propagator to be posted overseas should pay an extra ten dollars annually to defray the cost of airmail postage, this extra ten dollars to be paid with the members fees.
- 3. That members who are pensioners or full-time students need only pay half of the annual membership fee.
- 4. That upon a decision of the committee, a member may be given the title 'Life-member' and that that person will have all membership fees for the Association waived.
- 5. That the committee bestow the title of 'Life-member' on the following association members:

Lyle Patison VK2ALU Keith Curle VK2OB Graeme Dowse VK2CAG

- 6. That joining fees and annual membership fees for the 1987-88 financial year be waived for all applicants for membership who were members of the Illawarra Amateur Radio Society on the 30th June 1987.
- 7. That sub-committees be established to act on behalf of the committee in the following areas:
- 7.1. Repeater sub-committee: responsible for all matters related to the licenced repeaters of the Association.

CONTINUED NEXT PAGE

I.A.R.S. INCORPORATED CONTINUED

- 7.2. Propagator sub-committee: responsible for all matters related to the compiling, printing and destribution of the Association's newsletter, the Propagator.
- 7.3. Broadcast sub-committee: responsible for all matters related to the production and transmission of broadcasts made under the callsign of the Association.
- 7.4.QSL sub-committee: responsible for all matters related to the collection and destribution of the QSL cards of Association members.
- 8. Each sub-committee created under motion 7 (above) will have a chairperson who will be appointed by the committee. The structure, membership and meeting times of each sub-committee will be at the discretion of the members of the sub-committee. Where the chairperson of a sub-committee is not a member of the Committee of management, that person will have one vote on the Committee, except that each person may only have one vote, regardless of how many sub-committees that person chairs.

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146 PRINCES HIGHWAY. CORRIMAL

PHONE: 84 5650

There was a young girl who was continuously sucking her thumb. Her Mother told her that if she continued she would get fat.

When travelling on the train one day, she saw a pregnant woman sitting across from them on the train.

The little girl kept looking at the pregnant Lady intently. The Lady feeling uneasy started a conversation

with the child asking if she knew her . The child replied, "I haven't seen you before , but I know what you've been doing".

REPEATER REPORT CONTINUED

The other reason for the repeater apparently ignoring you is simply explained. Sometimes there are several stations on at the same time, being out of simplex range of each other, but all producing good signal strengths at the repeater's receiver. Even though the repeater will repeat only packets that contain the appropriate header address information, most of the packets that the repeater hears are not addressed to go through it, but their signals could well be strong enough to prevent appropriately addressed packets from being heard. On the day that the repeater was installed, the QRM on the site had to be heard to be believed. Packets from Sydney, Newcastle and Canberra were all trying at the same time, and because they could not hear each other on the direct path they were all under the impression that the channel was clear, and therefore each station continued to attempt a connection. The result was that very few signals actually got through because of the QRM. A packet repeater may hear many signals, but will repeat only those which contain its callsign in the header. This is quite a different concept to a voice repeater which blindly retransmits ALL the signals it hears. So a packet user cannot get the full story about channel useage and QRM. Think about it!!!!!!

Next trip to High Range (we hope its soon!) we plan to (1) change the eprom, (2) change the aerial from Isopole junior to extended ringo, and (3) change the 20 watt radio with another identical one with better performance, 30 watts.

<<Graeme>> VK2CAG.



If this Propagator has a loose sheet of paper included, it meens that you have not yet PAID your DUES. To retain your membership of the club you should sign the form and return it with a cheque for the appropriate: amount to the club

Subscriptions are \$10 for ordinary members and \$5 for pensioners and full-time students. To the Sec of the I.A.R.S. P.O.80x 1838. Wollongong. Code 2500.

COMMITTEE - REPORT

COAST-WIDE
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MARINE RADIOS
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VK2KWN WAYNE NEWPORT

COMMITTEE MEETING 21/4/87.

Dave VK2VAV/YKQ submitted a financial report showing a healthy credit balance and reported on the results of the FUND RAISING LOTTO SERIES

Dave also presented a report on suggested committee sructure and club procedure.

These suggestions are included in full elsewhere in the Propagator and generally reinstate the conditions existing in the present club operations.

Other discussions concerned PAGER QRM and the submission of LOGS to Graeme VK2CAG

The need for ITEMS and ARTICLES for the Propagator.

The need for representation at the conferences of Clubs.

Satellite Notes - May 1987 (prepared 28/4/87)

Pie in the Sky - or What?

The Amsat Australia monthly Newsletters are providing more and more up to date information on current and likely future developments in amateur satellite technology. Anyone reading up on Phase 3 and Phase 4 satellite capability must wonder how he might be enjoying his hobby in, say 5 or 6 years time.

In the "days of yore" an amateur could take advantage of new horizons by building up some new gear and/or absorbing some relatively easy-to-understand technical information from QST or whatever.

These days it seems that most of us rarely achieve the construction of more than the peripheral devices, in order to hang them on to our communication "black boxes".

Now we are starting to find that the cost of the same black boxes is rapidly escalating beyond our means, and if we are to be more than impulse buyers, then we must look very carefully at the capabilities of the receiver/transmitter units to see if they are likely to be compatible with the requirements of the most satisfying modes of communication which we may be wishing to employ not only in one or two years time, but for much longer periods over which they may have to last for us (how many of you are contemplating renewal of your car every two years or so these days? If you are then you can stop reading this right here!) The same goes for investment in commercial high gain antenna systems, antenna tuners and suchlike. In fact how many of us can even afford to subscribe to QST anyway?

Does anyone of us think of the consequences to ourselves as individual amateurs of "free for all" use of the HF spectrum, deregulation of licensing requirements in some populous overseas countries or inability of the regulatory authority in such countries to police what regulations remain? Sounds far fetched? Then you havent been keeping your ear to the ground recently!

Maybe us "old guys" can see out the remainder of our amateur operating days with what we have now - but you younger fellas might find it worthwhile, for your pockets at least, to have second thoughts before you lay out your hard earned cash on that next black box.-----which takes us right back to the beginning of this article----The Amsat Australia monthly Newsletters are providing more and more up to date information on current and likely future developments in amateur satellite technology.

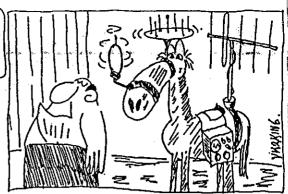
Of no interest to you. ----Well you had better think again!!!!!!!

Lyle VK2ALU.



HE'LL NEVER FIND A FOX WITH ALL THAT CLOBBER ON THE HORSE!





ON THE NET

ON THE NET: 5th April 1987.

VK2EMV - Morry Co-ordinator, VK2MT - Rob, VK2AXI-Brian, VK2IU- Ralph, VK2FDU-Paul, VK2BIT-Peter, VK2PHD-Ray, VK2JNC-Neil, VK2PGL-Phil.

12th April 1987.

VK2EMV-Norry Co-ordinator,
VK2ENX-Tony, VK2NT-Rob,
VK2EBI-Kevin, VK21U-Ralph,

VK2F0U-Paul, VK2NNJ-John.

VK2JTB-Tom,

19th April 1987.

VK2IU-Ralph Co-ordinator, VK2BIT-Peter, VK2ENX-Tony,

26th April 1987.

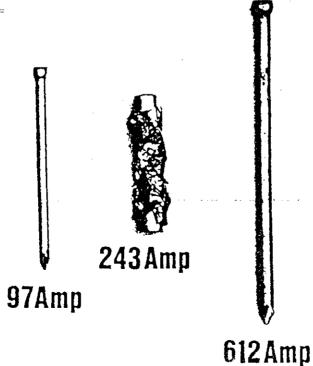
VK2MT-Rob Co-ordinator, VK2PHD-Ray, VK2IU-Ralph, VK2ENX-Tony, ZL3KR-Allen, VK2EMV-Morry, VK2JNC-Neil, VK2ERH-Ralph, ZL3TJE-John.

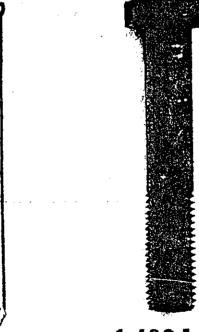
F.R.L.2.WINNERS

F.R.L.2. WINNERS

Week No : 24 M. McConnell Week No : 25 B. Knobel Week No : 26 N. Roosachi Next LOTTO F.R.L.3. Will start again on the first Monday in July 1987.

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TO ALL OUR CLUB
MEMBERS

RULES FOR TEACHERS IN 87

The following rules were discovered by Bruce Roberts at Pioneer Village Inverell:

- 1. Teachers each day will fill lamps, clean chimneys, before beginning work.
- Each teacher will bring a bucket of water and scuttle of coal for the day's session.
- Make your pens carefully. You may whittle nibs to the individual taste of the pupils.
- 4. Men teachers may take one evening each week for courting purposes, or two evenings a week if they go to church regularly.
- 5. After ten hours in school, the teachers may spend the remaining time reading the Bible or other good books
- Women teachers who marry or engage in unseemly conduct will be dismissed.
- 7. Every teacher should lay: aside from each pay goodly sum of earnings for his benefit during his declining years so that he will not become a burden on society.
- 8. Any teachers who smokes, uses liquor in any seform,

frequents pool or public halls, or gets shaved in a barber shop, will

give good reason to suspect his worth, integrity and honesty.

* THE ILLAWARRA AMATEUR RADIO SOCIETY * POBOX 1838. WOLLONGONG.Z500. NS.W.

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Are held every 2nd Tuesday of the Month except January, at 7.30.pm.in
MEETINGS:
            the S.E.S. Headquarters, Montague street, North
                                                      VHF
                                                           Mt Murry.
               VK2RAW - 146.850. - (VOICE)
REPEATERS:
               VK2RIL - 147.275. - (VOICE & R.T.T.Y) VHF
                                                           Sublime Point.
                                                      UHF Hill 60 Port Kembla.
               VK2RUW - 438.225. - (VOICE)
               VK2RIL - 438.725. - (VOICE & R.T.T.Y) UHF Sublime Point.
BROADCAST: On Sunday evening prior to the club meeting, at 7.00.pm., R.T.T.Y.
Mode, and at 7.15.pm. on voice. Transmitted on 147.275.VHF, and relay on
                                                     the voice broadcast.
                                    taken after
                         will be
3.562.Mhz.
             Callbacks
                  On 146.850. at 11.00.am. and at 7.30.pm. each Sunday.
        RELAY:
CLUB - NETS: On 3.562.Mhz. SSB on Sunday at 8.00.pm. and a slow morse net on
                                      evenings
                                                      at
                                                            8.00.pm.
28.440.Mhz.
                  on Thursday
             "THE PROPAGATOR" , published monthly to reach FINANCIAL-MEMBERS in
NEWSLETTER:
the week preceeding the club meeting. All articles, adds etc , to the editor
must be in, or try , by the 3rd Tuesday each month.
MEMBERSHIP: The Secretary, I.A.R.S. , P.O.Box.1838. Wollongong. 2500. Full
membership is $10 per annum; students & pensioners concessional members $5 per
          The award of the Illawarra Amateur Radio Society is the LAWRENCE-
AWARDS:
HARGRAVE-AWARD. VK stations require 10 contacts with I.A.R.S. members. Overseas
stations require 5 contacts with I.A.R.S. members. A contact with VK2AMW is sufficient for the award.Band-details, date, frequency, station worked and $2 or
4 I.R.C.'s . to THE AWARD-MANAGER, I.A.R.S., P.O. Box. 1838. WOLLONGONG. 2500. No
QSL-CARD
                required.
          The club store operates at each club meeting. by COMMITEE-MEMBERS.
STORE
COMMITTEE:
                             VK20B - KEITH CURLE. 24 . Beach
              PRESIDENT.
                                                                Drv,
                             VK2DYU- BILL CHADBURN, 45. Beltana Ave.
         VICE-PRESIDENT
                             VK2EJH- JIM HAYES. 1 Kathleen Cres
              SECRETARY
                             VK2VAV-YKQ-DAVE HENDERSON.8.Gladstone st.Bellambi.
              TREASURER
                             VK27HU- GEOFF CUTHBERT. 1 Nioka Ave, Kieraville.
                AUDITOR
GENERAL-COMMITTEE: VK2EXN-IAN CALLCOTT, VK2ENX-TONY MOWBRAY, VK2MT- ROB McKNIGHT.
                                           ROUTLEDGE.
                            VK2DWR-DAVE
                                                       VK2BIT-PETER
VK2ALK-LES
             KIRCHMAJER.
                            VK2BMH-MARTIN HUTCHINGS.
VK20E-WOJCIECH TOMCZYK.
REPEATER - CHAIRMAN: VK2CAG - GRAEME DOWSE.
                                               VKZEMV - MORRY.v.d. VORSTENBOSCH.
REPEATER -COMMITTEE: VK2EXN - IAN CALLCOTT.
VK2DFK-MIKE KEECH. VK2MT-ROB McKNIGHT. VK281T-PETER WOODS. Colors
                              - IAN CALLCOTT.
                  : VK2EXN
QSL~CARD'S OUT
                  : VK2DWR
                                - DAVE ROUTLEDGE.
QSL-CARD'S IN
                             - LYLE PATISON.
E.M.E. CO-ORDINATOR: VK2ALU
PUBLICITY - OFFICER: VK2VAV/YKQ - DAVE HENDERSON
BROADCAST - OFFICER: VK2ENX - TONY MOWBRAY.
                                - BRIAN WADE.
CARTOONIST : VK2AXI
                                - DAVE CAPON.
                                                 VK2EMV-MORRY.v.d.VORSTENBOSCH.
PROPAGATOR-EDITORS:
                    VKZPZY
                            - MIKE KEECH.
                                               AND POSTED BY VK2EJH-JIM HAYES.
                  : VK2DFK
PRINTERS
                  : VK2CAG-GRAEME DOWSE. VK2OB-KEITH CURLE.VK2ALU-LYLE PATISON
LIFE - MEMBERS
SUNDAY - EVENING - CLUB-NET - ROSTER:
                         SUNDAY OF THE MONTH : VK2MT - ROB McKNIGHT.
                  FIRST
                         SUNDAY OF THE MONTH : VK2ENX- TONY MOWBRAY...
                  2 \text{ nd}
                         SUNDAY OF THE MONTH : VK2PZY- DAVE CAPON.
                  3 \text{ rd}
                         SUNDAY OF THE MONTH : VK2DWR- DAVE ROUTLEDGE.
                  4 th
                         SUNDAY OF THE MONTH :
                                                 VK2EBI- KEVIN MURPHY.
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