Meetings are held on the second Tuesday each month (except January) at 7:30pm in the State Emergency Services building Montague Street North Wollongong

VISITORS ARE MOST WELCOME

Editorial

And yet another month bytes the dust, and for that matter the year hasn't got much left in it either.

I would like to ask all of the members to consider if they could see their way to contribute something to the running of the club. There is a balance that is required to be struck with respect to participation. If a few members do all the work then what happens is they burn out and there is nobody left to do any thing. If a large number of people pitch in and do a little bit then there is no problem, of course I don't expect everybody to be involved (I am a realist), but that's not giving you the excuse to do nothing. There is the side benefit that I have found from experience and that is if you don't contribute any thing to a cause then you will get little back from it. (The motto of my high school was "no reward without effort", and how true this is.) So what I'm saying in a nut shell is its your/our club, if you want something out of it then don't be backwards in coming forwards. Please consider the positions vacant column.

On a more positive note the John Moyle field day was a success after all. I was a little disappointed at the lack of contacts perhaps we picked the wrong day. The conditions were definitely up on 6m but very few contacts were made. We perhaps had a "little" help from Lyle VK2ALU with his 10GHz contacts to Sydney. But not withstanding the lack of contacts we had an enjoyable time keeping the water out of the tent at the start, setting up etc and the general camaraderie with those that attended. I've inserted a copy of the certificate that the club received on page 3.

Until next month 73's Ken VK2KWG

Coming Events

October
Roger VK2AIV will be giving a talk and practical demonstration on winding helical whips for HF use.

November
Bring your money and preloved goodies with you it's Auction time "come on down" and grab a bargain.

December
End of year get together

March /April
Field day

July
Packet Seminar

Leather Tongue

Brian VK2UBF has the coveted leather tongue at the moment, and rumour has it that he is on the look out for the next recipient. (Don't upset him, you might end up with it!)

Classifieds

For Sale

ONE ONLY YAESU FT-690 + DSE 100Watt amp $550 o.n.o.,

ONE ONLY YAESU FT-290 bare foot $450 o.n.o.,

and last but not least

ONE ONLY IBM AT 286 computer. 1.6meg of RAM 20meg hard drive 1.2meg floppy and CGA colour monitor. Good paKet or NOS toy. $275 ono

See Phil VK2TPH at the next club meeting

Wanted

Your ad to put in this space

Positions Vacant

CANTEEN OPERATOR. (re advertised)

As the current canteen operator is overloaded could somebody PLEASE take over the position of canteen operator. You will need the following.

1   able to boil water without burning it.

2   Able to buy milk and biscuits (cost reimbursed).

3   Able to wash up cups and clean up the mess left by the members.

The pay is award plus we offer all the food left over at a reduced cost and any milk left is yours until next meeting.

Apply in the FIRST instance to the club president or get up and have a go at the next meeting just don't sit there and hope that somebody else will do it.

PAKET SEMINAR CHAIR PERSON.

We are looking for a highly motivated executive type to head a team of willing workers, and steer the organisation of the paket seminar.

The remuneration package is the same as above but without the milk fringe benefit

Apply to the club president.

The Wireless Institute of Australia

JOHN MOYLE MEMORIAL

NATIONAL FIELD DAY

CONTEST

This is to certify that

VK2AMW

has been

awarded this certificate for outstanding performance with portable

radio equipment in gaining   1ST   place in the   MULTIOPERATOR PORTABLE

VHF/UHF PHONE

Section of the   1994   Contest, and in scoring   80   points.

Issued   13/9/94   No. 94007

Federal President

Way Back Then

Episode 34.....1984.

(i)   UHF Kilometer Kontest.

(ii)   VK2RAW repeater on wind power recharge only -remote shutdown facility installed.

(iii)   VK2RIL repeater modified to provide RTTY as well as voice operation.

(iv)   Increase in Membership fee.

(v)   Emergency communication assistance to SES on RTTY during Dapto flooding.

(vi)   Change of meeting place to SES building, Montague St, North Wollongong.

UHF Kilometer Kontest.

It was decided that the club should run a contest on 70cm FM over the first half of the year - in order to popularise the Dick Smith UHF transceiver kits. It was to be called the UHF Kilometer Kontest. Scores were to be based on the number of contacts made and the path distance of individual contacts.

The eventual winner was Reg, VK2EMI, of Vincentia.

VK2RAW repeater.

Problems were experienced over the year with failures of the wind powered generator, normally used to keep the batteries charged. It eventually had to be returned to the manufacturer for strengthening of blades etc.

When the underground cable which carried 32 VAC through very rocky ground from the adjacent farmhouse to the repeater site failed at about the beginning of the year, it was decided that it could not be economically replaced - so the repeater tone ident. was modified to change its tone to indicate when battery voltage was low. Then the repeater control system was modified to allow for remote shutdown if the battery volts fell too far.

The first of the repeater feed systems' duplexers was made up and installed on this repeater at year's end - allowing for both receive and transmit functions to be performed by the one antenna. The result was a noticeable increase in coverage from the repeater.

Several more duplexers "were in the pipeline", for installation at our other repeaters, following much effort in their manufacture etc. by a number of club members.

VK2RIL repeater.

This repeater was "off air" for approx. a week in February, as the result of a lightning strike which severely damaged the AC supply system and battery charger.

Changes were made to VK2RIL to allow it to operate as a RTTY repeater as well as on voice. This proved a popular move, as it was then used by a number of stations for regular RTTY contacts.

A monthly broadcast of club news was then made on RTTY. This was completely computer generated for the first time, in February, by Mike VK2DFK.

Membership Fees.

As from March, the Annual Fee for Full Members was increased from $7 to $10 - due to increased running costs for the club.

Assistance to SES during flooding at north Dapto.

A request was received from SES on the evening of 18th February - for three local Amateur RTTY stations to provide communication assistance during a period of serious flooding in the north Dapto area. An hour later they were on the air and remained available overnight, until the emergency had passed. Club members VK2's EXN, EMV, XCC and KIH were involved and did an excellent job.

Election of Officers.

Those elected to Office at the AGM in March included - Pres. Dave, VK2DFL, VP. Keith, VK2OB, Sec. Murray, VK2MY, Treas's Geoff VK2ZHU and Andrew McEwan. Committee VK2's DFK, EXN, XCC, EMV, EJH, KO, JIM and Gerard Meuller.

In all, 20 members of the club filled various positions! (present members might like to take note!!!)

Change of Meeting Place.

In June the Illawarra Amateur Radio Society changed its place of Monthly Meetings from the Congregational Hall, corner of Coombe and Market Sts, Wollongong to the SES building, Montague St, North Wollongong. Thus we have now been some 10 years at the present location.

Visits, Picnics etc.

A group of club members enjoyed a visit to the Warilla Police Communication Centre on 17th November.

A picnic was held at Sublime Point Lookout picnic area on 18th March and the usual Christmas picnic was held at Cordeaux Dam on 9th December, with something like 50 in attendance.

Talks, etc.

Talks etc, given at monthly meetings during the year included -

Feb. - Display of Icom and Kenwood gear - by Barry, VK2FE, of Macelec.

Mar - Demo. of computerised RTTY - by Dave, VK2DFL and Mike, VK2DFK.

Apr - Talk on Dick Smith VHF (2 metre) Transceiver kits - by Gil, VK2ZGE.

June- Films on SES Organisation activities during times of flood, followed by a talk on SES by Dennis, VK2DMR, followed by a guided tour around the SES building.

July- Talk on VHF/UHF Antenna Design - by Gil McPherson.

Aug - Talk on Amateur Fast Scan Television - by Dave, VK2NH and John, VK2XY, of Sydney.

Sept- Video of visit to Gladesville ARC ATV Station, VK2BUN, - by Mike, VK2DFK.

Oct - Talk "Will Amateur Radio Exist Beyond the Year 2000" - by Roger Harrison, VK2ZTB.

Nov - Trade Display - by Dick Smith Electronics. Dec - Talk on the new Wollongong Community Broadcasting Station, 2ICB FM - by DR Hugh Spencer.

Lastly.

The July Propagator included an article in which it was stated that Packet Radio was just starting to appear on the Amateur bands in Australia! (for better, or for worse??)

Lyle VK2ALU.

The Lighter Side Pt 1

Hiya Ken, here's an item you may like for the Propagator. You may have seen this before, but I hadn't so here it is anyway. It is a Theoretical test put out by NASA to see how you would attempt to survive if left on the Moon with only the following items. Mark off in order from 1 to 15 what YOU think are the most important through' to the least important items necessary for survival. NASA's answers in the next message. (Now don't cheat & look ahead !)

LOST ON THE MOON *

[ ]   Box of matches.
[ ]   Food concentrate.
[ ]   Fifty feet of nylon rope.
[ ]   Parachute silk.
[ ]   Solar-powered heating unit.
[ ]   Two .45 calibre pistols.
[ ]   Two 100 pound tanks of oxygen.
[ ]   Stellar map (of the moon's constellations).
[ ]   Self-inflating life raft.
[ ]   Magnetic compass.
[ ]   Five gallons of water.
[ ]   Signal flares.
[ ]   First-aid kit (containing injection needles).
[ ]   Solar-powered FM receiver / transmitter.
[ ]   One case of dehydrated milk.

Take your time & think about them...

Rob VK2MT

Swineherd

"Swill from the PIG Sty"

David Henderson, VK2YKQ
AMPrnet: david@sparky.vk2ykq.ampr.org
Internet: wehend@itwol.bhp.com.au

This month, following a few questions I've received, I'll spend just a little more time on domain names. Firstly; no, you don't need to use host names instead of IP-addresses - ever! If you like, you can use IP-addresses exclusively, and never have to worry about Domain Name Service (DNS). However, I believe DNS makes life easier, especially if you don't know a station's IP-address - in that case, if you do a ping of *callsign*.ampr.org, where *callsign* is the call of the station that you're interested in, it is probable that the DNS trail will deliver back to you that station's IP-address - admittedly, this assumes that:

• the guy named his station that, and;
• he has managed to get his machine registered OK on ucsd.edu.

Just a point about this - your station's NOS will probably have a command in it's start-up script like:

  domain suffix ampr.org

this allows you to use only the first part of a hostname, and your NOS will add the '.ampr.org' - well this probably won't work if the host concerned can't be resolved by your domain table. For example, if you:

  ping g6crv

and that machine isn't in your domain table (and it probably won't be) then your NOS will ask the PIG for the address of g6crv - not g6crv.ampr.org. PIGs being extremely stupid, won't add the '.ampr.org' before passing your request on to the international authoritative domain name server for the amateur service at ucsd.edu, in California. What you would have seen if you had trace on, was your machine send out a UDP DNS Quest packet, and the PIG reply with a UDP DNS Reply packet, telling your machine that the IP-address of g6crv is 0.0.0.0 (i.e. it couldn't find it!); your machine would then have told you "Unknown host g6crv". If on the other hand, you typed:

  ping g6crv.ampr.org

then the PIG will have found that machine and have replied to your machine that it's IP-address was 44.131.1.61. Your machine would then send out the Echo request packet for the ping and voila, the other machine, which is in Heysham in England would reply with an Echo reply packet.
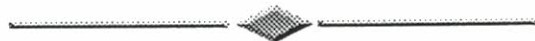
The moral of this story is to always use the full hostname for everyone who is not in your local area. One more thing - if you had tried to ping g6crv, then most NOS s would have added the result of the unsuccessful DNS query (i.e. the fact that the IP address was 0.0.0.0) to the cached domain table in your machine's memory. This means that any further attempts to reach g6crv would result in "Unknown host g6crv" messages, without going to the PIG for name resolution. You can type the command:

  domain cache list

to see this table on most NOSs. This memory cache is cleaned out occasionally, and some NOSs have a command you could enter to clean the cache immediately (the command is probably called something like *domain cache garbage*). Also, if the result of a DNS query is successful, your NOS will probably update your copy of the domain.txt file on disk - that's right, NOS will change your file by adding the new entry onto the end of your file.

The hostnames used in DNS are collected by each area co-ordinator when IP-numbers are allocated and fed up to the national co-ordinator (John Tanner, VK2ZXQ is the VK co-ordinator), who in turn passes them on to the international co-ordinator - this makes the process rather (!) slow. It is also very difficult to change the name of your station once it has been allocated. Here in Wollongong, we are well connected (in the networking sense!) - both Richard (VK2ZVX) and I (the two local swineherds) have direct Internet access and so changes to the 44.136.24.0 sub-net on ucsd.edu (the international authoritative domain name server .ampr.org) are done directly - usually within a day or so. However, I can't vouch for other areas!

Well - that's another month of swill out of the way. Next month, I'll talk a little about the use and abuse of PIGs.

. Repeater Report

5/9 - 1/10/94

VK2RAW (6850)

Well since our working-bee at Mt Murray on the 3/9, the benefits of our effort have been made most evident. Lots of good distance stations getting into the Rptr quite well. Some that have been heard are Port Stevens, Goulburn, Canberra, Lithgow & Bulli (UBF is getting in quite well now). No desense to the Rptr can be detected either, so one would have to say our day at the site was well worthwhile.

The Solar Panel Shunt Regulator has now also been fixed since it's valiant effort to shunt off over 200A on the same day. Two MJ2955's, three BC548 types & a CMOS IC all bit the dust. Will be reinstalled at the next opportunity. (Thanks Graeme).

VK2RIL (7275)

Not much to report Rptr-wise. There has been a fair bit of activity in the hunt for a possible better site. On Thursday morning (8/9/94), John (ZLJ), his son & myself spent quite a few hours investigating/checking-out sites around Maddens Plains. At this point in time it may not be prudent to go into detail as to sites we visited. While up there, we came across a group of technicians from three different organisations commissioning some radio eqpmt. John & I wasted no time extolling the virtues of Amateur Radio, in an effort to get some contact names/numbers to gain access to one of these sites. We went our separate ways about 11.30am & that afternoon spent close on an hour on the telephone to these contacts. One was promising, one not much to hope for. Both suggested writing a letter to officially request access to their towers & this was duly done in the next few days. No response has been received as yet. Also, Ken (TKE) is investigating another tower possibility, so who knows, we may be lucky...

VK2RUW (8225)

A few things have happened on this one in the last month. Twice in the last month, the 70cm band in general & 8225 in particular have been affected by radar-type interference possibly emanating from a ship out to sea or maybe in Jervis Bay (the interference is VERY strong down that way). The "radar" is very broad in nature & varies in pitch & intensity. Sounds like a varying humming sound. Apparently it's "broadness" extends up to the 800-900MHz area, causing a bit of grief to those duplex comms systems up there that none of us ever listen to. I've been told that the interference has been reported to SMA.

Another type of "interference" is the two blokes that appear to be using the Rptr input (433.225MHz) for their business chatting. They don't sound like they are licensed Amateurs by their frequent use of rather colourful language. They seem to appear more in the afternoons, but not every day. If anyone hears them, try & work-out from their references, who or where they are.

And yet another interference is the static / crackling that sometimes occurs. This could be rectification of some metal on the tower. Will investigate next visit.

For a while now, we've talked about changing the Rptr's antenna system to a directional type. Well it's happening. Two folded-dipole type yagis are presently being manufactured for us as well as a coaxial coupler device to join these two antennas to the LDF 5-50 heliax feedline. Before I had a chance to request the money from the IARS, South Coast WICEN has offered to pay the costs for the directional system. This is a VERY generous offer as the cost will be toward $300. A BIG thank-you for their support.

The two yagis will be faced north & south. The south facing one is easy, it will be pointed straight at Nowra, which in turn then continues on along the Princes Hwy. through' Milton/Ulladulla & on to Batemans Bay. The north facing Yagi will either be faced straight through' Wollongong or a little to the West of Mt Keira (from Knights Hill). If it's pointed straight through W'gong, the signal will then continue out to sea & by the time it hits Sydney, it will be 30klms out to sea. On the other hand, facing a little west of W'gong will then put a good signal along the F6 through to Sydney & beyond. As Knights Hill can "see" all of W'gong, the signal strength

may not be all that different. When the yagis are installed however, we will get a few home stations to guide us as to the best northerly direction.

Have also just obtained some very nice, high capacity gel-cell type batteries. They are Exide Powersafe Standby cells. They're 200x200x300mm in size & are different to other types of cells I've seen because they have 4 terminals on top, one in each corner. (2 positive & 2 negative.) As it turns out, each battery has two 2 volt cells inside, with a capacity of 140A. So, you can connect 3 of these batteries in series & get 12V at 140A OR 6 of them in parallel & series to get 280A. Pretty nifty I reckon. Anyway, we've been wanting to put the Knights Hill Rptr system batteries in the cubicle with the eqpmt, but

because the present batteries are wet-cell types, they generate corrosive gases when being charged which wouldn't be to good for eqpmt. Now we have sealed lead acid batteries, of a rather high capacity, we will install them inside the cubicle for convenience. (By the way these batteries are apparently worth about $200 each, but we "procured" 7 of them for $35.)

Finally, the linking of our 8225 & Goulburn's 8325 to Mt Ginini 8525. This has been going on for ages now. To try & find out what's happening in VK1 about the linking, I phoned Len (VK1NLJ) who is the Secretary of the WIA VK1 Division. We spoke at length & he has going to phone back in the next week to give me some info'. Also in the past 2 weeks I have been building the interface unit for Mt Gray to connect all the mutes, PTT's, audio ins & out for the 4 systems. (Link from VK2RUW & VK1RGI, the VK2RGN Rptr plus Ian (AIJ) has built & is testing a 6m Rptr for connection into the system as well.) As well, this unit has on-site monitoring & microphone, line audio metering as well as full DTMF remote control for many functions. (In total there are 14 LEDs on the front panel for status monitoring alone.) Many late nights were spent on it, but it will be worth the time when we have the linking set up. If convenient, it will be brought along to the next meeting before being shipped down to Goulburn. (By the way fake some interest will ya's, as I'm rather proud of it... OK?)

VK2RIL (8725)

As briefly mentioned last Report, we are considering connecting 8725 to another Rptr. Since then, we have decided to link to 6700 Milton/Ulladulla. The basis was on the idea to give W'gong WICEN members access to the South

Coast WICEN Net on 6700 on Tuesday (?) evenings. If successful & found to be worthwhile, the link will be left open at other times. This connection can be controlled remotely via DTMF. At all times, the IARS Rptr Committee will be answerable to the Mid South Coast A.R.C. (as well as the IARS of course), about the continuation of the linking. Crystals will be ordered shortly & installation will take place after that.

This linking will hopefully have very positive aspects, as was the case when we linked to Goulburn, for Amateurs both here & Milton/Ulladulla to exchange ideas & experiences.

VK2RUW (Packet)

As also mentioned last Report, South Coast WICEN are sponsoring the upgrade of the Knights Hill ROSE digipeater. Some very good eqpmt has been obtained & will soon be interfaced together. In the meantime, to try & improve the reliability & usefulness of the existing digi, Michael (XCE) has replaced the UHF port transceiver. This has proven to be successful & as far as I know, it hasn't failed since. On the other hand, the VHF port has intermittent problems. The current one is the loss of TX audio. Will be checked shortly.

As you can see, quite a few projects are being planned & hopefully they will improve our Society's Rptr systems.

Till next time - Rob (VK2MT)

Pig Report

>From: David B. Henderson
<vk2ykq@sparky.vk2ykq.ampr.org>

Just a quick status report on the Wollongong Packet Internet Gateway:
* this message is proof of the success of the JNOS-PBBS link to VK2XGJ's BBS for local bulletins - thanks John.
* the PIG machine has been replaced with a 386 with more memory.
* the JNOS1.10g has been recompiled to use EMM
* NNTP is being trialed - works OK so far - the aim is to take Internet News feed from aus.radio and aus.radio.packet and feed it on to anyone who runs a NNTP client on their home machine (like me :O))
* the Baycom modems have arrived and will be tested at VK2YKQ before installation on the PIG.
* the new antenna has not yet been installed.
* the FM828's have not yet been installed.

More news next week - 73

David Henderson ------------------------------

(part of message on john XGJ's BBS ..Ed)

The Lighter side Pt 2

OK, here are NASA's answers (& reasons) to "Lost on the Moon". I bet no one gets them all right, I sure didn't...

LOST ON THE MOON *

ANSWERS & REASONS

[15]   Box of matches.

          (No oxygen on Moon to sustain flame, virtually useless)

[4]   Food Concentrate.

          (Efficient means of supplying energy requirements)

[6]   Fifty feet of nylon rope.

          (Useful in scaling cliffs, tying injured together)

[8]   Parachute silk.

          (Protection from sun's rays)

[13]   Solar-powered portable heating unit.

          (Not needed unless on dark side, but then won't work - remember it's Solar powered)

[11]   Two .45 calibre pistols.

          (Possible means of self-propulsion)

[1]   Two 100 pound tanks of oxygen.

          (Most pressing survival need)

[3]   Stellar map of the moons constellations.

          (Primary means of navigation)

[9]   Self-inflating life raft.

          (CO2 bottle in military raft may be used for propulsion)

[14]   Magnetic compass.

          (Magnetic field on Moon is not polarised - useless)

[2]   Five gallons of water.

          (Replacement for tremendous liquid loss on lighted side)

[10]   Signal Flares.

          (Distress signal when rescue ship arrives)

[7]   First-aid kit containing injection needles.

          (Needles for vitamins, medicines, etc. will fit the special aperture in NASA space suits)

[5]   Solar-powered FM receiver/transmitter.

          (For communications with rescue ship, but FM requires line of sight transmission & short ranges)

[12]   One case of dehydrated milk.

          (Bulkier duplication of food concentrate)

So how'd you go? Honestly now...

(I'd have to take issue with the "line of sight FM transmissions" though.)

Rob VK2MT

POST BOX - "THE ILLAWARRA AMATEUR RADIO SOCIETY Inc."
PO Box 1838, Wollongong, 2500.

REPEATERS	VK2RIL	147.275	Voice/RTTY	Sublime Point
	VK2RIL	438.725	Voice/RTTY	Sublime Point
	VK2RAW	146.850	Voice	Mt. Murray
	VK2RUW	438.225	Voice	Knights Hill
	VK2RUW	029.020	Gateway	Knights Hill
	VK2RUW	144.775	Packet(ROSE)	Knights Hill
	VK2AMW-1	144.625	Packet	Wollongong Uni

(Packet Internet Gateway)

BROADCASTS - The Wireless Institute of Australia, N.S.W. Division broadcast is relayed to 146.850 and 438.225, and 29.020 at 10.45am and 7.15pm each Sunday. Call-backs after the broadcast.

NEWS LETTER - The "PROPAGATOR" is published each month to reach all financial members in the week preceding the club meeting. Articles and letters are always welcome. Commercial advertising $60 per ad per year, members classifieds free for one issue. See Ken VK2KWG for details.

MEMBERSHIP - $20.00 P.A., concessions $15 P.A., expiring immediately after the Annual General Meting in July.

LAWRENCE HARGRAVE AWARD - VK stations require 10 contacts with IARS members. Overseas stations require 5 contacts. One contact with the Club station VK2AMW is suitable. Details of contacts are to be sent to the Club secretary.

*******************************COMMITTEE*************************************

PRESIDENT	VK2KWG	Ken Grimm		
VICE PRESIDENT	VK2UBF	Brian Farrar		
SECRETARY	VK2UR	Ron Hanks	(042) 84 2691	
ASSIST SEC	TBA			
TREASURER	VK2UBF	Brian Farrar		
ASSIST TREAS	VK2ZWG	Jim Beaver		
COMMITTEE	VK2ZWG	Jim Beaver	VK2GCE	Brian Clarke
	VK2KVH	Vic Hee		
REPEATER	VK2MT	Rob McKnight	VK2TKE	Ken Goodhew
	VK2CAG	Graeme Dowse	VK2BIT	Peter Woods
	VK2XCE	Michael Sediakin	VK2UBF	Brian Farrar
PUBLICITY	VK2KWG	Ken Grimm		
BROADCAST	VK2XGJ	John Simon	VK2MT	Rob McKnight
	VK2UBF	Brian Farrar		
EDITOR	VK2KWG	Ken Grimm	(042) 28 8218	
CANTEEN	VK2UBF	Brian Farrar		
WIA LIAISON	TBA			
LIFE MEMBERS	VK2ALU	Lyle Patison	VK2CAG	Graeme Dowse
	VK2OB	Keith Curle		