

The Propagator

The monthly newsletter of the Illawarra Amateur Radio Society Inc. (IARS)

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 ALWAYS WELCOME

Editorial

Well watts happening with amateur radio in the Illawarra? Well as you can see in the adjacent column this is one of our major projects for this committee and of course the club. And there are other developments on the horizon with the repeater system but I won't take Robs thunder.

On the topic of repeaters I would have to say we had a most enjoyable time up at the repeater site having a chin wag over a few snags, fiddling around with the repeater, mast, and antenna. I thought Rob was joking about painting the tower (If she aint broke don't fix it) The tower had a certain "rustic" charm, but after a good rub down and a coat of bright environmental green paint the tower looked quite professional. (one rumour has it that the 2 extra S points was solely due to the RF enhancing green paint).

Got some crystals for a Plessey radio I bought at the last auction this afternoon. Will I do the Propagator tonight as I planned or get the Plessey on air (*no decision there ..Ed*) You're right the club can wait for their Propagator

.....half an hour later.....

Well I'm back again the tuned circuits wont quit tune down far enough I'll have to put a few puffs here and there, I might just procrastinate and do the Propagator instead.

73s, de Ken VK2KWG

Paket Seminar

From : VK2XGJ
To : ALL@VK2
Type/status : B\$
Date/time : 10-Aug 17:06
BID (MID) : 47134_VK2XGJ
Message # : 47134
Title : Packet Seminar.

The Illawarra ARC Inc. is looking at holding a Packet Seminar some time mid 1995. The Seminar would cover all aspects of Packet Radio from the "Oh-migawd-what-do-I-do-now-that-I-have-a-TNC_??" through to the use of Packet on the satellites in about seven or eight steps. Each lecture would cover approx. 3/4 Hour with notes available at the end of the lecture. Any expressions of interest in attending or taking part would help get the Seminar moving. This is the first mention of this on the Network so some feedback would assist.

73, John de Vk2XGJ

End of message #47134 to ALL from VK2XGJ

Coming Events

September

1. Dave Thorncraft VK2UDT will be giving a talk on WICEN and
2. Rob will be showing a video of the latest Mt. Murray adventure

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

Beware the Feral Spellin Checker

The feral spelling checker "FSC", not to be confused with its distant cousin the "FST" (Feral shopping trolley) gets up to all sorts of antics if the editor doesn't have his wits about him. Last month Lyle's Surname fell victim to it! Who will be next.

Lost and Found

Yes indeed I found this message on my PMS

Stat : PR
 Posted : 08/23/94 07:32
 To : VK2KWG
 From : VK2UBF
 @ BBS :
 BID :
 Subject: propagator item.

Hi ken colud (*could* ..FSC) you include this in the next issue (*issues* ..FSC) tnx (*tax* ..FSC) brian (*Brian* ..FSC).

POSITIONS VACANT.

re advertised. CANTEEN OPERATOR.

As i will be busy for the next few months with work committees etc 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 when the milk is OFF.
- 3 Able to wash up cups and clean up the mess left by the members.
- 4 A knowledge of first aid just in case the pikletts (*piglets* ..FSC) are OFF.

This position offers a good chance of advancement, maybe president one day!

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

Applly (*Apply* ..FSC) 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. Maybe one meeting NO tea/coffee and those heavenly pikeletts (*pickets* ..FSC) (got it right this time around).

SORRY FOR ALL THE TYPO IN THIS ARTICAL (*ARTICLE* ..FSC) BUT AS YOU ALL KNOW IF ALL THESE HATS I'M WEARING IT'S VERY AHRD (*HARD* ..FSC) FOR ME TO SPELL WITH THE WEIGHT ON MY HEAD. Cheers the all round nice bloke.(not enough room for me to put all my titles).

Lost

Brian UBF sent me a paket message along the following lines

On the 8th and 9th of October Waters will be holding a furniture fair at Steelers Stadium. The club has been offered \$200 if we provide parking attendants for the 2 days.

Brian will clarify the arrangements at the September meeting.

(Any one finding this paket message wandering aimlessly about the ether please forward it to its rightful owner)

Quote of the Month

Those aren't rust marks they're ants That's why they call it an antenna. *(ykq debating the need to paint the tower)*

Classifieds

For Sale

RF enhancing green paint (2 S points per coat)
\$50 per litre see Repeater Chairperson.

(Yes you to can turn your trash into cash in the Propagator Classifieds)

Wanted

Your ad to put in this space

Leather Tongue

Yes indeed the infamous leather tongue has been found Rob VK2MT had it. The prestigious award was ceremoniously handed over to a fine upstanding fellow in Brian VK2UBF for strange utterances put on air after the last earth tremor.

It was also duly noted the man of many hats was the only one not have a hat whilst working at the dizzy heights of Mt. Murray...tisk...tisk

NEWTEC ELECTRONICS

Reseller for:- Altronics, Arista, Jacar, Rod Irving

Stockist of:- Alarm accessories, UHF antennae, tools, computer accessories, test equipment, cables, R.F. sprays, and electrical components for the professional, Amateur and Hobbyist.

Call in and see jack at:-
102 Kembla St. Wollongong
Phone and Fax 271620
If we haven't got it
we'll be happy to get it in.

Way Back Then

Episode 33.

The VK2AMW Moonbounce Project - 1983.
Part 2.

- (i) First Sun Noise test.
- (ii) First 1296MHz EME echoes, on 10th September.
- (iii) First 1296MHz EME contact - on 10th September - with Z25JJ using a "temporary setup".
- (iv) Completion of permanent installation.

By mid August the W2IMU feedhorn was being installed on the feed tripod in the dish - to make ready for Sun noise tests which would indicate to us -

- (i) how well the dish was tracking along a true East - West line
- (ii) allow optimisation of feedhorn position for max. dish gain
- (iii) measure antenna "half power" beamwidth
- (iv) from (iii), determine actual antenna gain
- (v) measure Sun noise level in relation to the background noise level of the "cold" sky from (iv) and (v), make a close estimate of the noise figure of our receiving system and thus its 1296MHz EME path capability.

To produce the best results for (v) and (vi) above, it was necessary to use the best available receive preamplifier. VK2ALU had just completed three 1296MHz preamplifiers, each using a Gasfet, but each of a different design. The Gasfets had been supplied by overseas EME operators who had access to some of those recently becoming available! ("its who you know!!").

Two of the preamps seemed to be working quite well, so each was tried at the dish feed and the better one selected for the taking of measurements.

This preamp, together with a receive system isolating relay were then installed in yet

another weatherproof box, located adjacent to the receive port on the feedhorn. Temporary runs of coax and power supply cables to the various items in the complete receive system then provided us with a means of carrying out all the above tests - which commenced on 20th August.

13dB of Sun noise was initially received and antenna half power beamwidth was measured at slightly less than 2 degrees, giving a calculated antenna gain of 38dBi.

The dish tracking was out by the equivalent of 0.5 degrees for each hour of dish travel - a situation which we could "live with" for a while, but which would have to be corrected before we would be ready to commence general EME skeds.

We were now "working against the clock" - as we hoped to carry out a 1296MHz EME test with Peter, Z25JJ, of Harare in Zimbabwe, (the only EME station on the African continent) before he dismantled his EME system prior to moving QTH to South Africa about the end of September. Peter planned to start pulling out his equipment on 5th September.

Weatherproof steel cabinets to take the main transmitter driver unit and all transmitter power supplies, plus the receive converter and a receive postamplifier, if required, with their regulated power supplies etc, were installed at the base of the dish structure and the various units temporarily set up in them. The 144MHz oscillator unit and receive IF amplifier, system interlocking, control, remote readout setup and their power supplies were placed in the refurbished security cubicles in the Operating Building with the dish control unit. All was then ready to "fire up" the complete EME system - if only on a "jury rigged" basis!

On the 4th September both Z25JJ and ourselves were ready to give it a go - but luck was not on our side. The receive system would not work! Later we found that there was a problem with the receive isolation relay - too late to fix for the sked period.

A call to Peter on 20 metres, to explain that we did not have a major problem, convinced him that it would be worth trying again on 10th September - but that would be the very latest that he could delay his removal schedule!

We were finding that our power amplifier output was falling away fairly quickly and as this unit was in an inaccessible position on the back of the dish, it could not be checked out without placing the dish in a certain position

and using a long ladder for access. The problem was being caused by detuning of the PA output circuit due to heating, even though we had a large blower installed on the amplifier chassis.

The solution was to install remote tuning of the PA plate circuit. Geoff, VK2ZHU, donated a small motor/gearbox unit which was quickly installed - together with a tuning capacitor position indicator, with control and meter indication etc, on the meter panel in the Control Cubicle in the Control building.

This "worked like a charm", and using the remote indication of transmitter output power on the same panel, allowed the operator to maintain maximum power output continuously.

My Project Diary indicates just how "hectic" things were at that stage!

By Saturday, 10th September we were "going for broke"!! - but the weather decided to turn wet. The test was scheduled to start at 0700Z and we had arranged for Graeme, VK2AGV (later VK2CAG), to set up a 20 metre link from his home station with Z25JJ and a 2 metre link to the EME site - for conveying any last minute changes in transmit/receive times etc between us.

By about 0500Z the clouds were starting to break, so Morry, VK2EMV, one of the group on site, was stationed next to the dish to let us know when the moon became visible in gaps in the clouds so that we could make any small corrections required to dish pointing.

Others kept an eye on equipment operation at the outdoor cubicles or worked as "dish panel operators" under the direction of VK2ALU, who with VK2EXN assisting, was trying to "keep the whole shebang on the rails". We learned very quickly as we went! Mike, VK2DFK, was our "official camera operator" and was kept busy with his camcorder, taping events "for posterity"!

By 0515Z we were receiving our first echoes from the moon - and, after minor corrections, they were up to 3dB above noise - enough to make them clearly readable.

The first hurdle had been surmounted!!

By "start of test time" at 0700Z, the HF link had been established with Z25JJ - and it was "all systems GO"!!

Suffice it is to say that from then on "all went swimmingly". The cloud cleared away and we heard Z25JJ within 10 minutes of our first receive period. He was clear copy ("O" grade signal in EME parlance), but our transmission was initially 15KHz low in frequency. This had just been corrected when we were told over the 20 metre link that it was so. The link was working!

By 0805Z the official procedure required to make a valid EME contact had been completed and we had received an "O" report etc. from Z25JJ on 1296MHz.

Much joy was evident! We had done it!! We had now worked Z25JJ on both 432 and 1296 EME.

The videotape tells the story!

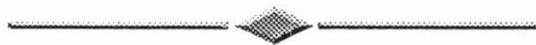
We then set about dismantling the temporary setup and over the next few months carried out the installation of equipment on a permanent basis.

To correct the slight misalignment of the dish tracking, VK2EXN and crew got to work on the base of the structure. Mounting holes in the base RSJ's were elongated with an oxy torch, then, using heavy jacks, sledge hammers and wedges, the whole steel structure was rotated slightly - until Sun tracking checks confirmed that all was now truly positioned - the 1 inch dia. bolts were then tightened down again.

In the meantime VK2ALU was building a 144MHz VXO, which with very fine tuning and accurate calibration, ensured that from then on the transmit frequency would be correct over the narrow range allocated to EME operation at 1296mhz.

Various other "loose ends" were also tidied up, so that by year's end we had 140 watts o/p from the transmitter (100-105 watts at the feedhorn) and were ready to start organising tests with the handful - but steadily growing number - of stations in several countries around the world "playing 1296 EME".

Lyle VK2ALU.



Swineherd

"Swill from the PIG Sty"

David Henderson, VK2YKQ

AMPnet: david@sparky.vk2ykq.ampr.org

Internet: wehend@itwol.bhp.com.au

This month starts the first of a series articles on the use of the Wollongong Packet Internet Gateway (PIG). I make no apologies for these articles being centred purely around TCP/IP, for that is the main reason for the gateway being installed - to encourage experimentation with this protocol. If you happen to prefer NET/ROM or one of the many packages which present a friendly GUI interface for using straight AX.25 on a TNC - great - how about writing another column for the editor - I'm sure he'd love to receive more articles! Lets assume that you have your computer set-up, and happily running TCP/IP (a bit of an assumption - I know!). Well, what can the PIG do for you?

1. Local Routing. When you set your machine up, (in Wollongong) you should have a command in your config file something like this:

```
route add 44.136.24.0/24 ax0
```

What this command says is that to transmit a packet to a station whose IP-address starts with 44.136.24.something, then send the packet direct to that station out of interface ax0. The 'ax0' is the label that you have given to the interface port which connects to your TNC and transceiver. The 24 at the end tells the NOS to match only the first 24 bits of the IP-address. What this says in plain English is: "if a packet is going to a station in our local Wollongong IP-address range, then send it to my transmitter".

2. International Routing. One of the important things the PIG provides is an international routing service. To take advantage of this service, you simply add the following line to your NOS config file:

```
route add 44/8 ax0 44.136.24.9
```

This command tells NOS to send any packet bound for IP-addresses starting with 44 to the PIG (that's its IP-address on the end). When trying to determine where to send a packet (where to route it to), NOS will scan your route commands and find the most precise match. So if I were to send a packet to 44.136.24.34, NOS would transmit it directly to air, expecting to find that machine locally. If on the other hand, I were to send a packet to 44.199.41.99 - then NOS would send

that packet to the gateway and let the PIG worry about what to do with it from there on. How the PIG handles routing to all of the other areas is via hard-coded tables of point-to-point links to other PIGs around the world, set-up through the Internet. We swineherds set-up these links between ourselves, and they are invisible to the packet users at each end.

3. Domain Name Server DNS gives you the option to use names instead of numbers for IP-hosts. This means you are able to:

```
telnet uow-gw.vk2amw.ampr.org
```

instead of:

```
telnet 44.136.24.9
```

-assuming you prefer the former! How this works is using a piece of NOS functionality called a name resolver. When you type in a host name, your NOS will look it up in a table and replace the name with the IP-number. Now, you could have a file on your computer with the IP-addresses and names of ALL of the ham stations around the world - it would be a little large - but it would work - although keeping it up-to-date with all the new stations that come on air - and all the old ones that leave would be impossible. The PIG will solve the problem for you. All you need to have in the local resolver file on your machine (which is called domain.txt on most NOS versions) are two entries: one for your machine and one for the PIG. You also need the following line in your NOS config file:

```
domain addserver 44.136.24.9
```

Your NOS will now direct any enquiries about a host not in your table to the PIG. It is, of course, sensible to have the stations in your local area (i.e. 44.136.24.0 in Wollongong) in you local file as well - it just saves time. For Wollongong stations, the file domain24.txt stored in the PIG's public directory contains all of our local stations and can be down-loaded by anonymous ftp to your machine. Well that's enough for another month - more in the next issue.



The Lighter Side

Disappearing Whiskey

I won 24 bottles of whiskey in a "jackpot " at poker and I had 18 bottles in my cellar when I was told by my wife to empty the contents of each bottle down the sink or else.

I said I would proceed with the unpleasant task.

I withdrew the cork from the first bottle and poured the contents down the sink with the exception of one glass, which I drank. I then withdrew the cork from the second bottle and did likewise with the exception of one glass which I drank. I then withdrew the corks from the third bottle and poured the contents down the sink which I drank. I pulled the cork from the fourth bottle down the sink and poured the bottle down the glass which I drank. I pulled the bottle from the cork of the next and drank one sink from it and threw the rest down the glass.

I pulled the sink out of the next glass and poured the cork down the bottle, then I corked the sink with the glass, bottled the drink and drank the pour. When I had everything emptied I steadied the house with one hand, counted the glasses corks and bottles with the other which were 29 and as the houses came by again I counted them and finally had all the houses in one bottle, which I drank.

I am not under the affluence of-of incohol as some thinkle peep I am.

I am not half as thunk as you may draink. I fools so feelish and I don't know who me is and the drunker I stank here the longer I get.



To : VK2KWG
From : VK2MT
@ BBS :
BID :

Subject: Sept Article - 3

Here is an interesting message picked up from the FIDO network.

Hope Ron does not mind.

>From : Ron Collins

3:800/851.0

To : All

Subj : Hong-Kong Guarantee.

When European clients of an (un-named) Company took delivery of an air-compressor in Hong-Kong recently, they found an "Instruction and Guarantee Card" which said:

1. This is an excellent equipment with very few noise and excessive reliability. Though un-fragile, it is also robust and should not be belted.
2. Circuit arrangements ensure environments and input current is best at both temperatures including snow and hot.
3. Very heavy fuses are supplied in plenty.
4. Stability is good on full battery and this should be lowered , but the input may be reduced to Danger level if preferred.
5. The Negative will be and the Positive is not if supply polarity is incorrect. Also, a humming noise will be introduced together with smoke.
6. When setting up, the best angle has no smoke and slight smell.
7. For accessibility without vandalism, use the many entrances but switch them all off afterwards and before.
8. When aligning, twiddle for strong current and prevent sparks.
9. The motor should be good for ever, but pregnant wear-out may occur after a few summers if heat is applied. DO NOT DOUBT THE GUARANTEE, IT IS BACKED BY MANY YEARS IN HONG-KONG WITHOUT ODOUR, PATIENCE OR THREAT.

Now I know EXACTLY why I had a problem with my Cordless Phone..... HI!.. de Ron, VK5RY. (Sorry Folks)



Repeater Report

1/8 - 4/9/94

VK2RAW (6850)

As reported in previous Propagator's, 6850 has been suffering from poor coverage & "daytime desense" to the Rptr's RXer. Well yesterday the 3/9, a large group of IARS members attended Mt. Murray for a working-bee to try & remedy the Rptr's problems. As quite a few members indicated they would be able to attend, we also decided to do some much needed maintenance on the Rptr's mast/tower sections. We also had to reinstall the Solar Panel

Regulator (which prevents over-charging of the batteries), that had failed previously & had since been repaired (as reported last Propagator).

In attendance for the working-bee were: VK2XGJ, VK2FPN, VK2SRB, VK2UBF, VK2YKQ, VK2ZLJ, VK2XBC, VK2KWG (& harmonic), VK2CAG, VK2TKE, VK2MT (& harmonic). We met at Mt. Murray around 12pm & proceeded to lower the antenna mast section. Of course, this didn't quite go to plan as the winch cable kept jamming at the top pulley & required gentle persuasion from Peter & Ken. The lowering proceeded without incident, (unlike the last time when the winch cable snapped & allowed the mast (& antenna) to fall with considerable force, slightly bending the 4" diameter mast. John & Ray (PHD/XCC) almost allowed their bodies to get between the falling mast & the ground.)

While this was happening, Brian was collecting firewood & cooking lunch for us all on a BBQ. We stopped for lunch & enjoyed sausage sangas with cheese, tomatoes, onions & coleslaw, finished off with tea & coffee. Yes, it was tough! I might add a certain BBS sysop preferred instead to have his seafood salad & Hermitage Estate wine! Anyway, lunch was enjoyed by all & I'm sure all those who attended, were very appreciative of Brian's culinary skills at such a remote & inhospitable site.

With the mast lowered, the heliax feedline was first checked to confirm that it was not contributing to the antenna system's high VSWR. This checked out fine, so it appeared that the colinear antenna was indeed the culprit for the 7 to 1 VSWR. The antenna was removed & replaced with 7275's old Colinear antenna. (7275 presently operates into a Diamond X-200

VHF/UHF antenna along with 8725 Rptr.) The 7275 antenna is slightly longer than 6850's as it has an extra half-wave element inside. The total length is a rather long 27'. A check of the VSWR now showed around 1.1 to 1, a rather considerable improvement.

Meanwhile in the cubicle, Graeme & Ken were attending to the RXer desense problem. They first confirmed that the desense was occurring, by running the Rptr on a variable P/S. At around 12V, the Rptr TXer started putting out a heap of spurious signals. Below this voltage, all was OK. They started at the input to the exciter & worked their way through to the output & onto the PA stage. By re-tuning all stages, in particular the PA, they were able to get rid of all the spuriis that were causing the RXer desense. A BIG thank-you to Graeme for this one, as we had no idea where to start on this problem.

The Solar Panel Regulator was also reinstalled, unfortunately this didn't quite go as planned. An explanation of the regulator's design is necessary to explain what happened when installed. The device is a "Shunt" regulator, which means when a preset voltage (14V) is reached, it shunts to ground any excess power that the panels produce, thus limiting the maximum voltage to the batteries & preventing over-charging. For the past month, the regulator had not been there (while being repaired), so the panels had managed to charge the batteries to around 15V. Without realising the consequences, the regulator was connected to the batteries where-upon the regulator detected the high voltage & tried valiantly to shunt this power to ground, all 200A plus amps! Well the two MJ-2955 shunt transistors (rated at 15A each) didn't particularly take kindly to this sort of current & promptly went "phhht" (i.e.: carked it). Oh well, we'll take the regulator back to the workbench again.

With the antenna replaced, work commenced on removing the accumulated rust on the mast & tower. This was hard work & took a long time. The badly rusted sections were then primed ready for painting of the whole structure with Endrust "environment green". This took a few more hours, with quite a few workers (including me), managing to get more paint on ourselves rather than on the tower. The end result was very pleasing to the eye & should give us many good years of service.

By now it was 5.40pm so we decided to call it quits as the sun was setting on the horizon & we all headed home. Overall, the day was a good one & I think all who came up & helped had an enjoyable afternoon. If any of this sounds interesting, we may show the September meeting

a video taken of our exploits. Then again certain individuals may pay us not to!

VK2RIL (7275)

Well 7 weeks has progressed since the SMA attended to the Pager Intermod interference that had been emanating from Telecom's W'gong Exchange for many years. In this time I have not heard one Pager "blorp" come through the Rptr. The Rptr is still suffering from what appears to be a slight desensing of the Rptr's RXer when the 2 Telecom Pagers are TXing (producing the greatly reduced intermod). The desense is not due to any "overloading" of the RXer front-end, more it appears that very weak Amateur signals on 147.875MHz are being "drowned-out" by the slightly stronger intermod 12.5kHz higher in freq. Anyway, the overall result to the Rptr is a HUGE improvement to before & we intend leaving the system as is for a while now, that's not to say we'll stop looking for a possible better site for the Rptr though.

By the September meeting, it will be 3 months since the IARS was informed by the NTAC Chairman of NTAC's proposal to address SMA re the whole Pager interference situation. Does anybody know if anything has been done yet? As the IARS was asked to participate in this venture, (by moving 5650 back to 7275 which we did), I guess we will be kept involved & informed about what is happening.

VK2RUW - (8225)

A couple of things have happened in the last month to this system. On the 23/8, Michael (XCE) went to Knights Hill to remove the ROSE Digipeater for a check-up (info about this in the Packet section below). He removed the VHF & UHF ports, the TNC & Power Supply. This all went fine, except all was not well with 8225 from that evening. First noticed the Goulburn Link transceiver had stopped RXing & TXing. This radio (a Philips FM-747), has been fairly reliable since installation, so it's apparent "failure" was a surprise. We thought about it, then pinned our hopes on the idea that Michael had perhaps accidentally knocked out the power plug for the FM-747 when removing the digi eqpmt.

Another apparent problem was a little bit unusual.

When stations were talking through the Rptr (or when the Clock was announcing), there was music being re-transmitted on the output.

This went on for a day or so while deliberation & debate went on as to what was causing the

induced music. As it turned out, the audio was coming from one of the three high-power FM stations on site (Power FM, Wave FM & 198FM). Sometimes it was Wave FM, then it may be Power, then maybe a combination of 198 & Power, etc. It was only low level & actually sounded like anyone using the Rptr had an FM radio turned on in the background. Once again, this generated considerable debate over it's cause. The first thought was that now that the Packet gear had been removed from the Cubicle, the Packet antenna (which is only about 80' away from the FM station's antennas radiating over 50kW), was picking-up a lot of this signal, bringing it down the heliax & into the cubicle. It could be expected that there could be many volts of RF across the N-type plug & possibly this RF was somehow being induced into the Rptr's audio system. (Note, the FM radio signals were being induced into the Rptr's audio section, NOT coming through the RXer RF stages. Note also that the cubicle is fully double-shielded & earthed by way of it's design, so any signal getting inside the cubicle has to come in via the feedlines.)

The above was a possibility, but then we thought it may be coming through the un-powered FM-747 somehow. By using the Rptr's DTMF remote control systems, we disconnected the FM-747 from 8225 (this is by way of a 4PDT replay that physically disconnects the RX audio in & out plus the COR & PTT lines). When this was done, the induced audio ceased, thus proving to us that the FM-747 in it's un-powered state, was somehow demodulating the FM stations signals & spitting it out to the Rptr's mixer/audio amp stages & thus getting to air.

A site investigation was in order & fortunately Graeme (CAG) had to attend Knights Hill yesterday morning (before meeting us at Mt. Murray) for some commercial gear maintenance. So while he was there he had a look at our Rptr eqpmt & found that yes the FM-747 was indeed turned off, but not due to the power plug being knocked out. The in-line fuse holder had failed & had fallen apart. Graeme fixed the problem & we are now back on-line to Goulburn without any musical accompaniment.

I still find it hard to understand how an un-powered UHF narrow-band (5kHz) transceiver with fairly good front-end filtering, can somehow demodulate a 100kHz wide FM broadcast signal through a bunch of dead components & reproduce a fairly listenable signal on it's audio output.

Anyway, all is OK again. By coincidence, on the way up to Mt. Murray yesterday, I received a progress report on the proposed linking of our

8225 (& Goulburn 8325) to Canberra's 8525. The report came by way of a contact with a VK1 aeronautical mobile flying into Albion Park Airport. The contact was on 6850 & he was also on 7275 earlier. He informed us that the 23cm link eqpmt has been built by the VK1 Rptr Group so maybe (just maybe) we're not too far away from the connection. He said he'd contact me in the near future to organise the connection ideas. Fingers crossed...

VK2RIL (8725)

All is well with this Rptr. As reported last month, we are proposing to link 8725 to another Rptr. There are a couple of little hurdles to overcome, but I'm fairly confident it won't be too long before it happens. If you have any ideas/input re this proposal, we would be happy to hear from you.

VK2RUW (Packet)

As reported in the 8225 section, Michael (XCE) went to Knights Hill & removed the ROSE digipeater on the 23/8. On the evening of the 20/8, the UHF port transceiver had gone into continuous TXmit. This continued off & on till it's removal. Michael has since given the UHF set a going over & found nothing wrong. He gave the radios a quick tune & check & was going to reinstall the system yesterday before meeting us at Mt. Murray, but unfortunately his work commitments prevented this. It shouldn't be too long before the digi is reinstalled, at least by the time you read this Report.

Hopefully it won't be long before we can retire this unreliable system, as South Coast WICEN have proposed to replace the whole system with a (hopefully) much more reliable one. This is to help in the South Coast

Packet Group's quest to connect all Packet users south of W'gong (to Eden) through to the Sydney systems & ROSE backbone.

Till next time...

Rob - VK2MT



WICEN News

One of the secondary roles of WICEN is that of providing extra radio operators for other services existing Radio Systems, i.e., the SES or Bush fire Brigade may require extra radio or telephone operators during an emergency, and they may call on us. I find that whilst doing my job with the Police Radio, that I am dealing with people that have no telephone skills at all. This is the ability to say what you mean clearly and concisely over the telephone.

If we are called to assist on the phones during an Emergency, it is important to have some idea of what you might ask someone who is giving you information via the telephone.

The first and most important thing is to ask the person where the incident is occurring. If that is the only information you get out of the person before the line drops out, then at least you have somewhere to start. When getting a location, you should get an address as well as a nearest cross street (if they know it) or distance from a known landmark. Some country properties require detailed directions. Make sure they are taken down correctly.

The next thing to do is to find out what is happening. Accept facts no hear-say or rumours. Find out if there is any one injured. If so, how many? what is the nature of their injuries? Is anyone trapped? All of these will determine the type and speed of response.

At the end of the call you should get the name of the person calling and a contact phone number for them. If they are calling from a public phone you should note that on the message sheet.

remember that the caller may be in a distressed state. Get down all important information, always stay calm and try to be as helpful and understanding as you can. When contacting other emergency services you should first identify yourself and where you are calling from. You should then relay the information that is relevant to them, and supply them with a contact number for yourself and the location of the incident. When dealing with other services it is unprofessional to act in a "panicked" manner.

Extract "NSW WICEN NEWS

by Greg Wilson VK2DIL

RCO Northern Rivers.

This article is certainly relevant to us as Amateur Radio Operators, we may be called upon to

respond to an emergency call and should know how to act in getting help quickly.

0430 hrs

Briefing at Nowra Polo Club where we are allocated our check points for the horse trial which is about to commence in a short while. It certainly was a cold morning standing on the corner waiting for the first riders to appear. It was great to see the lights of the torches carried by the competitors as they rode around the designated course. We used a simplex frequency to keep in touch with base. Our job was to record horse numbers and generally cover the safety aspect of the Trial.

He had to stay in the van on the mountain as logs had fallen across the path cutting off the road out. He managed to get back to Batemans Bay on Sunday afternoon after the Bushfire Crew cut up the logs blocking the path. It was a difficult situation.

Most of the radio operators were stationed along the course and were given the task of conveying car times to the Base Operator and generally keeping an eye on the safety of the Rally Drivers during the event.

Once again we used a Simplex Frequency on 2mtrs. and set up a vertical antenna on the patio outside the Comms Room at the motel. Computers were set up by the rally organisers, to compile the race results.

Available in our junk yard.....

1. Electronics bits and pieces (millions!)
2. Meters, gauges, instruments, cables, wires etc.
3. Metal sections:- copper, brass, aluminium, s/steel
4. Motors, gearboxes, pumps, assorted machinery
5. Steel sections, sheet, planks, ladders, shelving
6. Scales, safes, compressors
7. We buy all metals including platinum and gold

Two acres jammed full of practical and valuable government disposals.

**Our regulars swear it is
the best place for value**

CAYIONS

11 Molloy St,
Bulli
Ph (042) 846838

Dave thorncraft VK2UDT, who is to be our Guest speaker at our next club meeting, was Base Operator and was able to bring to the job experience gained at the 2GO Car Rally at Newcastle earlier in the year. Being a WICEN member is great, and knowing that you can use your knowledge of radio Communications in an emergency for the good of others is worth all the effort.

The communications van was set up near the "nerve centre" of the Horse Trial so as to pass on the information from the radio operators in the field quickly. We used a vertical antenna attached to the van and power was taken from the Centre to work the radios.

2m radios were used, many of the operators using handhelds although I managed to use my 2m Alinco in the car when it got too cold to stand outside.

Saturday August 13th at Batemans Bay Rally

Briefing at Mariners Lodge Motel where a communications Centre was set up for the Bay Stages Car Rally which was to be held during the day. WICEN set up a repeater for the event at Mt. Balero west of Batemans Bay on the Friday before and the batteries and the antennas were assembled in position near the Communications Van. Unfortunately Bushfire personnel were backburning in the area, which made conditions difficult for the radio operator who had to get to the van to replace the batteries for the repeater.

Ron Hanks VK2UR

WICEN Sth. Coast Region



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 Meeting 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	
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	VK2KVH	Vic Hee		
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	VK2UBF	Brian Farrar		
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	VK2OB	Keith Curle		