

THE PROPAGATOR

VOLUME 3, ISSUE 99

AUGUST 1999

It seems that every time the AGM comes around there is the usual looking at the floor kicking imaginary rocks routine when it is time to take on a position. This year is to be different as I the outgoing President will definitely not be standing for re election this year. (see accompanying excuse)

Rob VK2MT is in a similar situation and will not be standing for secretary as various other family commitments have to be considered. As dictated in the articles of the club the outgoing president must remain as a committee member for the next 12 months.

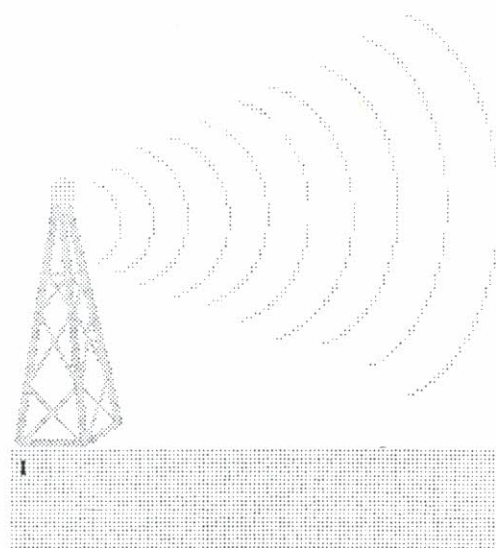
THE AGM

Hi there ! You thought that I had gotten a terminal case of writers cramp didn't you. Well you were wrong .I had in fact gotten a case of terminal not enough bloody time to scratch my bum cramp, on account of

Don't forget the November annual auction

the new employment which doesn't really get me home at a reasonable time to be productive.

Its now a case of hello kids,



what did you have for dinner, good night, fall asleep on the lounge, see half the first half of the footy *ZZZZZZZZZ!!!*

VK2AMW 50 years Since Issued

Yes , I know that there are people being very patient for their special event QSL. They have not been printed yet

as the printer is a tad off colour and the guy who is going to fill them in uses the excuse in the previous paragraphs.

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PRESIDENT'S REPORT

The last few years have been fun on the committee of the Illawarra Amateur Radio Society. Just ask the other guys on the committee.

The committee now only meets once every even month the Wednesday after the club meeting. This has not always worked in well with the Propagator, but then thetas life and I'm not going to loose any sleep over it. I would like to thank the various committees over the past couple of years for their support and hard work, especially with projects like the FM900 series of radio, the upgrading of the local paket radio network to get the club members in and out of Wollongong with information. Unfortunately it appears to have seen the demise of the P.I.G. (the paket internet gateway) but as I

write this I am waiting on information from Richard, that is hope fully encouraging.

The clubs repeater systems have undergone the most comprehensive upgrading program in the last couple of years, and on completion they will all be of commercial grade and specification, thanks in no small part to Rob VK2MT the man who can operate with no sleep for weeks at a time.(stuffed if I know how he does it) Go to any of the repeater sites now and the only difference between us and the commercial systems often sharing the same rooms is that our installation are neater and cleaner and more professional looking.

Any way I have another bash a few years down the track, but now I'll hand you over to the new President ! 73's

NOVEMBER ANNUAL AUCTION

We are going to try something a bit different this year. We are going to have 2 auctions.

This is in order to separate the types of goodies that appear each year, from what's that... to Wow what's THAT!!!

Here's the rules.....

OCTOBER Auction

Nothing over \$10.00 dollars to be in a lot. If you bring stuff that you want more money for bring it to the November auction

NOVEMBER Auction

Lots of OVER \$10.00 only

What do ya reckon ???!!

THE AGM

To be held the second Tuesday in August.

All club positions will be relinquished and new officers will be elected on the night at the AGM.

Club memberships will become due immediately following the AGM. Don't crush the new/old treasurer in the rush to pay up.

I believe that there are 2 bright young lads wishing to give the Propagator a bash as well.
Cheers!!

MOBILE ????????

vehicles are easily damaged by radiation from high power radios.

Toyota has prepared an installation guideline stating the the maximum output of a transmitter must be 100 watts or less. The antenna cable must be routed no closer than 20cm to the vehicles electronic sensors and well away from the wiring harness. Any damage caused by higher powered mobile radios is specifically excluded from warranty coverage. Toyota vehicles of 1993 vintage and earlier have a 10 watt power limitation.

SUZUKI - Suzuki will not support or endorse the installation of any aftermarket equipment and any problems arising from the use of such equipment will not be covered under warranty.

SUBARU - Subaru says they have not experienced any problems with the installation of onboard transmitters. If any aftermarket radio causes damage to the vehicle, that damage would not be covered under warranty.

VOLVO - Volvo builds and tests vehicles to international EMC standards. Volvo tests their vehicles with transmitters with

a frequency range from 1.8 MHz to 1 GHz using 10 different antenna locations. They claim that vehicle performance will not be affected by transmitters in the 200 watt range and that no system in the vehicle will be damaged by a field strength of 200V/metre. (maybe the guys in hats know summit we don't.ED).

VOLKSWAGEN - All vehicles are tested for EMC for RF exposures at 120V/metre for frequencies from 3 to 30 MHz and 80V/metre for frequencies from 30 to 1000MHz.

Volkswagen have no reports of problems caused by using transmitters in their vehicles.

HONDA - Installation of amateur transceivers has not caused a problem with Honda vehicles. The installation of an aftermarket transmitter does not necessarily void the warranty, but if the work was not done properly or if damage was done by a defective transmitter, it would not be covered.

HYUNDAI - Hyundai tests for EMC at the factory in Korea. Medium

MOBILE DANGERS CONT.....

powered, correctly installed transmitters should not cause a problem with Hyundai vehicles. All problems encountered by owners so far have been resolved by the local Hyundai dealer.

NISSAN - Installation of a transmitter should follow the Nissan guidelines but high transmitter power can cause malfunction and/or damage to electronic control systems of any vehicle. Installation of a radio will not

in itself void the warranty, but any expense incurred in protecting the vehicles systems are not the responsibility of Nissan. Moderate power levels may be used in Nissan vehicles defined as less than 100 watts below 500 MHz, 10 to 40 watts between 500 and 1000MHz and 1 to 10 watts above 1000MHz.

From QST

MISS STEAKS CONT....

the error rite.
It's vary, vary
grate. I've run
this poem
threw it, I'm
shore your
pleased to no,
it's letter per-
fect in its
weigh. My
cheque tolled
me sew.

Sauce
unknown.

TRY THIS
STORY IN
YOUR SPELL
CHECKER>>>

A poem for
computer
users. Poet
Tree with Mist
Aches.....

I have a
spelling cheque
it came with
my pea sea. It
plainly
marques for
my revue Miss
steaks eye
cannot sea.

When I strike
a quay or
right a word
I weight for it
two say
weather I am
wrong oar
wright.

It shows me
strait away as
soon as a mist
ache is maid.
It nose bee fore
two late and
eye can put
(CONT OVER)

HOW MOBILE IS YOUR MOBILE

THIS ARTICLE NICKED FROM THE
WESTLAKES CLUB NEWSLETTER.

Once upon a time, the only thing to consider when installing a transceiver in a car was where to mount it and how to route the wires to the battery. Today, things are more complicated because cars now have micro-chip processors, engine management systems, and electronic control modules.

Some manufacturers even use "slave" microprocessors such as rear end lights, running only one cable to the back instead of an entire wiring harness to control blinkers, tail, stop, hazard, and reversing lights. The more complex things get, the more likely it is things can go wrong.

Now, vehicle electronics can be affected by strong electromagnetic fields caused by transmitters installed in vehicles. Some stories tell of damage such as rendering the engine's computer being temporarily knocked out after using modest power on 2 metres or 70 cm's

If you blew up your brand new cars electronics, would it be covered by

warranty?

the following responses to this question were received from US manufacturers to the ARRL.

Although the survey is American, most vehicles are global models and manufacturers have common warranty policies in Australia. *BMW*- BMW does not test its cars for the installation of HF, VHF or UHF transmitters.

However, the electronic systems in their vehicles are designed to be protected from EMI sources outside the vehicle. A repair would not be covered under warranty as it was caused by the installation of a non-approved aftermarket accessory.

FORD -their electronic modules are subjected to test for immunity to EMI. These tests are designed to reflect the use of 100 watt transmitters installed in the vehicle. installation of such equipment does not necessarily void the warranty, but any damaged caused by the installation would not be covered.

MOBILE CONT...

General Motors- GM offer advice on installing transmitters in their vehicles such as :-

- * locate transceivers (with remote heads) in the boot
- * mount one piece radios on the transmission hump away from the air bags
- * mount the antenna on the centre of the roof or the centre of the boot lid
- * use quality coax and route it well away from the vehicles electronics. Even so, the vehicles operation may be still

adversely affected by using a transmitter such as the performance of the engine, driver information, entertainment systems, and electrical charging systems. Expenses incurred to protect the vehicle systems from the effect of using a transceiver are not the responsibility of General Motors.

Toyota -Toyota says that engine management systems in all modern

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Barriers to Innovation: How Specs Live Forever

The US Standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches. That's an exceedingly odd number. Why was that gauge used?

Because that's the way they built them in England, and the US railroads were built by English expatriates.

Why did the English people build them like that?

Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used.

Why did they use that gauge then? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

Why did the wagons use that odd wheel spacing? Well, if they tried to use any other spacing, the wagons would break on some of the old, long distance roads, because that's the spacing of the old wheel ruts.

So who built these old rutted roads? The first long distance roads in Europe were built by Imperial Rome for the benefit of their legions. The roads have been used ever since. And the ruts? The initial ruts, which everyone else had to match for fear of destroying their wagons, were first made by Roman war chariots. Since the chariots were made for or by Imperial Rome they were all alike in the matter of wheel spacing.

Thus, we have the answer to the original questions. The United States standard railroad gauge of 4 feet, 8.5 inches derives from the original specification for an Imperial Roman army war chariot.

Specs and Bureaucracies live forever. So, the next time you are handed a specification and wonder what horse's ass came up with it, you may be exactly right. Because the Imperial Roman chariots were made to be just wide enough to accommodate the back-ends of two war horses.

Why do YOU do the things you do?

There's an interesting extension of the story about railroad gauge and horses' behinds.

When we see a Space Shuttle sitting on the launch pad there are two big booster rockets attached to the sides of the main fuel tank. These are the solid rocket boosters, or SRBs. The SRBs are made by Thiokol at a factory in Utah.

The engineers who designed the SRBs might have preferred to make them a bit fatter, but the SRBs had to be shipped by train from the factory to the launch site. The railroad line to the factory runs through a tunnel in the mountains. The SRBs had to fit through that tunnel. The tunnel is slightly wider than a railroad track, and the railroad track is about as wide as two horses' behinds.

So a major design feature of what is arguably the world's most advanced transportation system was determined by the width of a horse's backside.

REPEATER REPORT (1998 – 1999)

Well another year has passed & here I am typing another yearly Report on our Club's Repeater systems. When I was first lynched, sorry, elected to look after the Club's Rptrs back on the 10/7/90, I used to hand write my Reports, which were then transcribed to a "state-of-the-art" XT computer & printed on a 9 pin dot matrix printer. At one stage I used to drive down to Peter VK2FPN's home at Kanahooka during lunchtime to type the Report straight into his very "up to date" 386 computer. Later I was able to type on my own computer, originally an XT, sending it via Packet (sometimes with a lot of problems) to the Editor's computer to be printed on a 24 pin dot matrix printer. Now I'm typing this Report on a Pentium on my desk at work. When finished, I'll send it via e-mail to the Editor's work computer, where it could be printed on either a photo-quality colour bubble-jet or laser printer. I know I'm only stating the obvious, but technology sure has changed hasn't it, even in just 9 years.

With the recent 30 year anniversary of the Apollo 11 moon landing, it is even more incredible to realize what they achieved. Comparing today's technology to 1969, those astronauts should not have even made it to the moon, let alone land, take-off & return to earth. The lunar module's computer had less computing power than the \$4.95 calculator you can now buy at Clint's. You think winning Lotto is lucky, those Astronauts were extraordinarily lucky (& of course very brave). As reported recently, President Nixon had even written & recorded a speech to be played to the world when the astronauts died, that's how confident the White House & NASA was that were going to return.

I know this digresses somewhat from a Repeater Report, but just think how much has changed in the last 10 to 20 years & how it has changed your way of life, some for the better, some for the worse, in particular our privacy. I'm not paranoid, but there are dozen's (perhaps hundreds) of computer databases out there full of your personal details. This personal info is even bought & sold on the open market. Every time you receive unsolicited mail, do you ever wonder how the hell that company got your details? Of course there is plenty of wonderful things that have come about from this increased technology. Health is a great example & our powers to cure more & more, until recently, untreatable terminal illnesses. Of course another great example of the good that technology can bring, is how much easier it is for the banks to screw us little people out of more & more of our hard-earned money. Wonderful isn't it?..... (Does that sound bitter? – of course not.)

Start HERE for Repeater Report:

What your Repeater Committee has achieved in the last 12 months....

- 2m Voice Repeater 6675 established at Mt Boyne between Ulladulla & Batemans Bay to help fill in the gaping hole in Amateur Repeater coverage till you get to Bega. (Has Voice ident & DTMF remote control).
- 2m Packet Digipeater also established at the same site.
- Two 2m Packet Digipeaters at Knights Hill, linked together with one facing south & one north.
- Updated/replaced Repeater (FM-814 50 watt unit) for 6975 at Saddleback.
- Updated Repeaters (FM-814 & FM-815 50 watt units) modified & ready for installation to replace 6850 & 8725 at Maddens Plains. The new 6850 rptr will have a "world-class" RXer with extremely good specs – far better than commercial eqpmt.
- Knights Hill 8225 Repeater Link Interface Unit rebuilt. Was only one link capable, now can support linking to three systems.
- All 2m Repeaters have had an extra antenna installed. This allows the Repeater to RX & TX on separate antennas (previously combined), giving added isolation & better interference protection.

The previous page is only a list of the major new additions to our inventory. As well there is lots of new little things that have been done, too numerous to mention.

Of course while the above new stuff has been achieved, continuous maintenance of current gear has to be done. Keep in mind, most organizations with communications equipment, have a full-time technician or even a department to maintain their gear.

As an Amateur Club, you all should be aware & justifiably proud that our equipment & installations at these commercial sites, are as good if not better than many of the co-sited "professional" installations. Considering the huge difference in budgets, it's quite amazing we can manage to have anything on the air!

I recently did an estimation, just out of my own interest, to see how much it would cost if we were to actually replace all our existing systems with new equipment. (eg: Repeaters, link transceivers, TNC's, feedlines, feedline hangers/brackets, plugs & sockets, power supplies, antennas, antenna brackets, back-up batteries). Now I know most of our eqpmt is "second-hand", but it still does an equivalent job to brand new shiny gear bought off the shelf. In "ball-park" figures, I reckon our entire Repeater inventory would cost \$35,000 to \$40,000. Now that doesn't include Labour Costs to build, modify & install all this gear & it also doesn't include on-going costs for maintenance & also very importantly site fees. If we were to pay what the commercials pay for being on the same sites with them, (remember we have access to 5 top-notch sites), we would be up for around another \$25,000. Put in that perspective, it's amazing what you can achieve with an annual budget of about \$500 (plus a lot of begging, borrowing & the old blood sweat & tears).

Plans for the next 12 months – into the next Millennium!

- Keep working on removing or reducing our intermittent interference problems on 6850. (I'm fairly optimistic about this)
- Re-install linking from 6850 to 6675 & also include 6975.
- Encourage further linking on 8225 rpt system. (WIA wants to be involved)
- Re-install the 10 metre rpt. Biggest problem – the pirate activity from Asia is absolutely horrendous, if 29.620 is back on the air, it may just be full all day with annoying chatter, rendering it useless.
- Continue updating our rpt systems with quality commercial eqpmt (which we have already obtained.)

Before finishing, I must publicly thank those who have helped me immensely in maintaining what I truly believe to be one of the best Amateur Club Repeater systems on the south coast, maybe even NSW or dare I say – Australia? John VK2ZLJ Phil VK2TPH Brian VK2UBF Simon VK2XQX Chris VK2XBC

Anyway, better finish off.
Rob – VK2MT

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Address:.....

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Postcode:.....

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I wish to renew my membership in the I.A.R.S

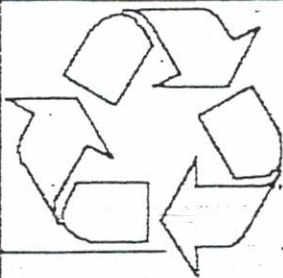
I enclose, Cheque/cash

I am a member of the W.I.A yes no

Fees full \$20 concessions \$15

Fees must be paid before the end of August or a late fee will be payable.

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VK2RMP	438.725	VOICE	MADDENS PLAINS	OFF AIR
VK2RBT	146.675	VOICE	MT BOYNE	
VK2RIS	146.975	VOICE	SADDLEBACK MT.	FUTURE
VK2RUW	438.225	VOICE	KNIGHTS HILL	VK2RGN VK1RGI
VK2RUW	29.620	VOICE	KNIGHTS HILL	OFF AIR
VK2AMW-6	144.700	PAKET	MADDENS PLAINS	
VK2AMW-5	147.575	PAKET	MT BOYNE	
VK2AMW-7	147.575	PAKET	MT MURRAY	
VK2XGJ	144.700	PAKET	DAPTO	
VK2AMW-3	144.825	PAKET	KNIGHTS HILL	VK2AMW-4
VK2AMW-4	144.925	PAKET	KNIGHTS HILL	

*CLUB MEETINGS HELD 2ND TUESDAY OF EVERY MONTH EXCEPT
JANUARY @ 7.30PM IN THE SES HQ MONTAGUE ST NORTH W'GONG.*

COMMITTEE MEETS 3rd WEDNESDAY OF EVEN MONTHS

MEMBERSHIP \$22.00 PA \$17.00 CONCESSION EXPIRING

IMMEDIATELY AFTER THE AGM IN AUGUST

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VICE PRESIDENT	VK2TPH	PHIL HOWCHIN
SECRETARY	VK2MT	ROB McKNIGHT (02)42847889
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