# The Propagator



## Official Newsletter of the Illawarra Amateur Radio Society

Issued 6 May 2003 Published Bi-Monthly

**Editor** – Rob Heyer VK2XIC

IARS meets at 19:30 Hrs. on the second Tuesday of each month (except January) in the SES LHQ Montague St. North Wollongong.

VK2AMW Since 1948

IARS PO Box 1838 Wollongong 2500.

# ILLAWARRA AMATEUR RADIO SOCIETY GENERAL MEETING - SUMMARY REPORT

At the last meeting of the Illawarra Amateur Radio Society held on the 8 April, there was a great deal of good, informed and constructive discussion, which can only be described as healthy.

It was encouraging to hear thoughts being expressed and views being put forward which reflected a desire to see the further development of our Society.

**H**ere is a brief summary of a report presented to the meeting - The Committee held a special planning meeting on Wednesday 19 March and the following key items were approved at the last general meeting in April.

**Repeaters** - Even with some doubts about finances, the whole repeater network is to remain operational through out 2003 - 2004. **Membership Fees** - The membership subscriptions have not been changed for a number of years and the Committee ratified the view to increase the Society's fee for 2003 - 2004. Therefore as from the 1 May 2003, the renewal and new members fee will be -

- Regular Membership \$25.00
- Pensioner / Concession **\$20.00**

**T**here is a conservative Business Plan for 2003 - 2004. Finances are tight and with the budget we will be able to ensure that the plan will be workable. We need to make a real effort with fund raising such as the Art Union, and we therefore ought to cover all costs and *maybe* find a little left over to make up for any deficit for this year.

## Fund Raising Sub-Committee.

A fund raising sub-committee has been established comprising of (Brian UBF, Jeff HIC, Peter HPR) This sub-committee will focus on ALL aspects of fund raising for the club. The sub-committee would be pleased to hear from any members who are willing to volunteer to assist in this important area. If you would like to indicate your desire you will be most welcome.

#### Licence Examiners.

The Secretary has written to NSW Division of Wireless Institute of Australia seeking detailed information to allow us to restore license examination facilities for our area here on the Illawarra and South Coast.

## Future Projects.

To develop more interesting activities and projects for the Society members, there will be a 'brainstorming' session conducted by Rob VK2XIC at the May general meeting. This is an excellent tool to gain a good focus on what we can be doing for the future.

### Social Activities / Meetings.

The next social outing will be a BBQ at **Cataract Dam** on **Saturday 17th May**. You could start to arrive at the site from about **10.30 am**. As usual BYO everything, but BBQ facilities and hot water are available.

#### ART UNION.

**T**his is a chance for us to raise funds to cover most of the cost of the repeater network in one effort.

The Art Union is sponsored by "ROTARY", first prize is a motor car and our club receives 80% of the value of all tickets that we can sell. Our target is to sell at least 50 books of 20 tickets. Ticket price is \$2-00

i.e. Worth at least \$800 to us, the more we can sell, the more we get!

We urgently need support of all members to make this a success. Here is how you can help.

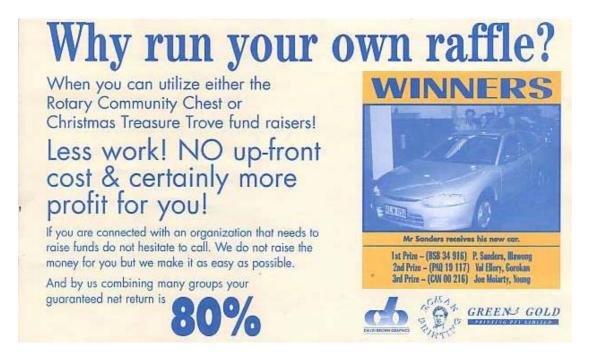
You can take a book of tickets, buy some yourself and sell some to neighbours, friends and relatives. Contact any Committee member and we can send a book to you. (If every member took and sold one book, we would sell over 70 books)

You will be able to buy tickets at any club meeting from July to November.

If you can't come to meetings and want to buy a few tickets, contact the committee and we will send them to you.

If you really want to help in a big way, you could volunteer a few hours to help with sales in shopping centres. We have access to four (4) venues and need volunteers.

For more information about the Art Union, contact Brian VK2UBF, Geoff VK2HIC, Peter VK2HPR or Ted VK2ARA.



## Change of Vice President.

**A**t the February meeting, Ted Hawkins VK2TTH asked to be relieved of his Vice President and Printing Officer roles.

On behalf of the Committee and members, we say many thanks to Ted for his significant but largely unseen efforts. Our best wishes are with you and hope you soon return to full health and vigour.

Rob VK2XIC will manage the printing of Propagator until the AGM in August.

Ted Thrift VK2ARA has filled the casual vacancy of Vice President, until the next AGM.

#### **Welcome New Members**

David A Nelson **VK2TDN** Ramon N Young **VK2ARY**Gerry Rosam **VK2APG** Geoffrey J Carmont**VK2HEF**Jim Hayes **VK2JM** 

Ted VK2ARA.

## **ERM Regulations - Amateur Service**

This is an important matter for all of the members of the Illawarra Amateur Radio Society Inc.

Look up the information supplied on the Internet by the ACA at the URL

http://www.aca.gov.au/consumer\_infor/issues\_alerts/amateur.rtf

If you don't have access to the internet at home, try your local council or educational organisation's library and obtain a printed version. I would point out that in most cases there is likely to be a cost associated with any printing at such institutions.

## CALLING ALL NET SURFERS

Why not use the ISP that the IARS uses? If you would like to send email, E-QSL Cards, download the latest amateur radio programs or just surf the net.

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## How Long Is A Piece Of String?

## How good is the piece of co-ax?

The answer to both these questions is simply a matter of measurement, as radio amateurs we do not normally care how long the piece of string is, but how good an old piece of co-ax might be is of

great interest. I cannot recall the exact quote or where it came from, but I recall it went something like this,

"Unless you can express and explain a problem by numbers, you have little knowledge or understanding of the subject."

Well to disprove the quote, I will attempt to show how simple it is to test the loss in that old piece of co-ax that you may wish to use, co-ax comes in one form only, a central conductor suspended by insulation inside a shield, which confines the signal travelling along the central conductor, there are several actual manufacturing methods used, but the results are much the same.

Losses occur as a signal travels along the co-ax. The amount of loss is determined by the characteristics of the individual co-ax, physical size, method of construction, type of central conductor, insulation, and lastly the frequency of operation, co-ax used by amateurs for most applications is usually 50 or 75 ohms surge impedance for eg: RG58/u, RG8/u, RG213/u, RG11A/u

Cable type characteristic properties indicate parameters including a dB loss usually expressed in dB at attenuation / 100 feet of cable at several frequencies, eg

RG58/u 1.3 @ 0 Mhz, 4.3 @ 100 Mhz, 8.7 @ 300 Mhz, 18.1 @ 1000 Mhz

These tables are the references used to determine if that piece of co-ax that you wish to use is still in good condition.

Before you go to the trouble of setting up this test, do the basic DC continuity for both inner and screen and test the insulation resistance between inner to screen.

A simple RF. Voltmeter is constructed with a NON inductive terminating resistor or the station dummy load can be used, a 50 ohm signal source at the required frequency is terminated and the voltage is recorded (V1), the co-ax piece is now inserted between the source and the termination and the voltage is again recorded (V2)

Let the maths begin ...

As you all learnt during your studies, Voltage loss or gain in dB = 20 Log V1 /V2

Our piece of RG213/u co-ax is 19.8 metres (19.8 $^{*}$  39.37) / 12 = 65.5 feet

Metres \* inches per metre / 12 = Feet At146 Mhz we estimate the nominal loss at 2.5 dB per 100 feet Our piece should have a loss of (65.5 / 100) \* 2.5 = 1.6 or 1.7 dB approx.

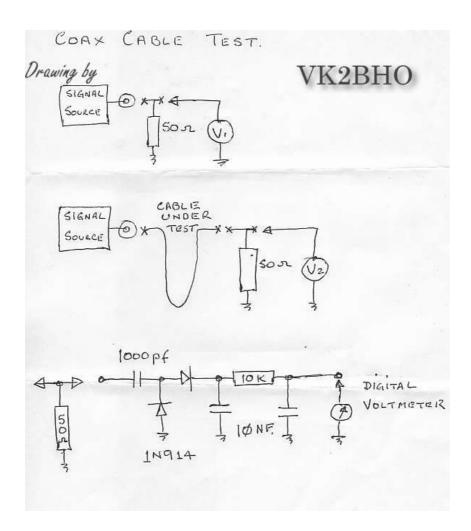
We measured V1 at 9.3 volts and V2 at 7.45 volts at this point you need to consult the log tables. Log of 9.3 = 0.9685 log of 7.45 = 0.8722, to divide by logs subtract the values

So log 0.9685 log  $0.8722 = \log 0.0963$ , now dB loss = 20 \* 0.0963 = 1.926 dB loss

This test would indicate that the piece of co-ax tested was close enough to the published performance figures.

Well that's how it's supposed to work, this simple test is a guide only and would be no better than plus or minus 10%, but that can save you a lot of head scratching when you run the co-ax, erect that new aerial, and the transceiver fails to perform because you scrimped on the co-ax. Remember "Test it, before you use it".

73 John VK2BHO



## **E**DITORIAL

**I** believe that each editor of the Propagator, in their turn has left their particular stamp on the newsletter, and this of course is what is expected. We are all different, so our style has reflected our different skill and vision.

The Propagator editor is a person who has a desire to see amateur radio progress and the IARS Inc grow in fellowship and strength.

What is the point of all this?

Well, sadly I have come to the realisation that I can't continue in my role of editor of the Propagator. Not because I want to stand aside, but because of the restraints of 7day 3 shift system that I am employed under does have a big impact on what I am able to do.

The last two years of producing the Propagator has been most enjoyable and stimulating. The challenge of making changes,

hopefully has made the reading as pleasant for you, as it has been for me to produce.

I would like the new editor, whoever he or she may be, to take over in time for the next issue, which will be after the AGM

My thanks go to those who shared my vision by contributing as often as they did, especially John VK2BHO, Vaughin VK2KBI, and Rob VK2MT.

Also I acknowledge the valuable support from my wife, Cathy, who helped with proof reading, and the folding etc so the "hard" copies could be sent out.

Many thanks to you all for your support, and I know that the new editor will have the necessary support to continue to produce the newsletter.

Rob Heyer. VK2XIC

## Our HomePage

Illawarra Amateur Radio Society Homepage can be found at: <a href="http://www.iars.learth.net/">http://www.iars.learth.net/</a>
Work is still to be done, small step improvements...

### Ham How To

Fred Backer VK2JFB has developed a HomePage, which is an excellent introduction to the science of amateur radio. He covers where to look, who to contact and how to study for an amateur radio licence The URL to look up is:

"How to Become a Radio Amateur in Australia"

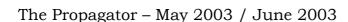
You can find it at:

http://www.thebackers.net/hamhowto/

It is worth the time to look at it. Thanks Fred.

## **IRLP Nodes**

As at 6 May 03 there are 917 operational nodes world wide. Wollongong Node 6010 VK2RMP 146.850 MHz



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## **COMING EVENTS**

## **IARS Meeting**

13 May 2003 at Wollongong SES LHQ meeting room, start at 19:30 Hrs.

## **IARS Meeting**

09 June 2003 at Wollongong SES LHQ meeting room, start at 19:30 Hrs. Set to start at 19:30 Hrs.

#### **Art Union**

Volunteers needed for the following dates and places to sell tickets to raise funds for IARS Inc.

#### Corrimal Court

Saturday 16th August and Thursday 21st August.

## Shellharbour Square

13th September

#### Wollongong Mall

Saturday 4th October

Brian VK2UBF has arranged these dates with the shopping centre managements, so please contact Brian and set aside the dates and times in you diary.

### **IRAS Experimental SSTV Group**

Monday evenings 19:30 hrs and Saturday afternoons 13:30 hrs local times.



At the left, a nice transmit ion of the Logo.

On the right John VK2BHO found this lovely family photo of Brian VK2UBF, only the 'mo' is changed.







With some members having picked their seat in the house, and their eyes fixed on the prize, "no worries" the IARS has a magnificent future.

## SOME HUMOUR

**Woman**: Is there a problem, Officer? **Officer**: Ma'am, you were speeding.

Woman: Oh, I see.

Officer: Can I see your license please?

Woman: I'd give it to you but I don't have one.

Officer: Don't have one?

**Woman:** Lost it 4 times for drunk driving.

**Officer:** I see...Can I see your vehicle registration papers please.

**Woman:** I can't do that. **Officer:** Why not?

Woman: I stole this car.

Officer: Stole it?

Woman: Yes, and I killed and hacked up the owner.

Officer: You what?

Woman: His body parts are in plastic bags in the boot if you want to see.

The Officer looks at the woman and slowly backs away to his car and calls for back

Within minutes 5 police cars circle the car. A senior officer slowly approaches the car, clasping his half drawn gun.

**Officer 2:** Ma'am, could you step out of your vehicle please! The woman steps out of her vehicle.

Woman: Is there a problem sir?

**Officer 2:** One of my officers told me that you have stolen this car and murdered the owner.

Woman: Murdered the owner?

**Officer 2:** Yes, could you open the boot of your car, please. The woman opens the boot, revealing nothing but an empty boot.

Officer 2: Is this your car, ma'am?

**Woman:** Yes, here are the registration papers.

The officer is quite stunned.

**Officer 2:** One of my officers claims that you do not have a drivers license. The woman digs into her handbag and pulls out a clutch purse and hands it to the officer. The officer snaps open the clutch purse and examines the license. He looks quite puzzled.

**Officer 2:** Thank you ma'am, one of my officers told me you didn't have a license, that you stole this car, and that you murdered and hacked up the owner

Woman: I bet the lying dog told you I was speeding, too......

#### DX Note

#### 6 Metres

Norm VK2ZXC, Phill VK2FHN and some others have had some excellent contacts in the last couple of weeks, to say the least, by working China.

It's my understanding that the contacts made on 6 Metres with China, are a first.

Well done fellows, the spirit of amateur radio is still drawing on.

Norm VK2ZXC's station has a 6 Metre 10 Metre FM 6 element wide spaced yagi at 15 metres high. Also a 6 Metre 6 element over 6 element yagis 50 metre high.

Norm operates Slow Scan TV PSK31 & SSB. He is not only a member of the IARS Inc but is a member of the WIA and the ARRL. I asked Norm



for a copy of the stations he worked from the 1st April to  $19^{th}$  April. Remember it 6 Metres and not 15 or 20 Metres.

01-04-2003

0209 Hrs NH7RO 0211 Hrs KH6SX 0213 Hrs KH6IAA 0215 Hrs JA8CAR 18 04-2003

Norm said, "Day started with S9+++ power line noise which has been present for several weeks now due to a faulty 11kv transformer 40 metre away from the tower, it has been reported but no action as yet. IHave thought about getting out 12 gauge to put it out of my misery. All DX worked with S9 line noise. All stations had to over ride the local noise."

| 0109 hrs | N6XQ  | 0123h       | rs XE1B | EF 12      | 28hrs  | N7CW    |
|----------|-------|-------------|---------|------------|--------|---------|
| 0158hrs  |       | XE2ED       | 0205hrs | BK2AIF B/S |        | 0208hrs |
|          | KC6NE | BI          |         |            |        |         |
| 0215hrs  |       | N6CA        | 0217hrs | N6HY       | 0221hr | 'S      |
| K6CF     |       |             |         |            |        |         |
| 0235hrs  |       | VK4ABW      | 0228hrs | V73GOD     | 0258hr | 'S      |
| VK3DU    | JT    |             |         |            |        |         |
| 0300hrs  |       | VK4BLK      | 0303hrs | VK2BTL     | 0310hr | 'S      |
| VK2BJ    | Г     |             |         |            |        |         |
| 0316hrs  |       | KC6NBI 5/9+ | 0318hrs | WA6JRA     | 0320hr | 'S      |
| W6EG     | Z     |             |         |            |        |         |

| 0330hrs | W9EC | 0340hrs | KG6KKV | 0349hrs |
|---------|------|---------|--------|---------|
|---------|------|---------|--------|---------|

K6ZH

0359hrs VK4JH 0400hrs VK4WR \* 0408hrs

VK2GJH

0820hrs BD4ABC 0840hrs BG9AB 0900hrs JA,s heard

by 5BAFL

1217hrs VR2XMT 5/9++ \*Port Lady Elliott Island

19-04-2003

Mobile worked 6K2BTX SUNG in South Korea, 5/7 both ways in heavy traffic heading to Sydney his Grid PM37. Also heard BG6 and very strong JA station.

Many other stations called but could not hear them over the NOISE.

C21SIX has been in every day for the last 2 weeks up to 20/9 at times. China is a new country for me."

## **BUY SWAP OR SELL**

If you have any thing you have to sell or swap then there may be a buyer for your goodies.

There are some rules if you choose to use the Propagator or the HomePage. Please contact one of the committee to find out more.



## **Batemans Bay**

Call in and visit Michael Corbin

266 Beach Road Batehaven Phone 02 4472 7555

## We have the latest video titles, top quality games, DVD titles and a great selection of classics.



The final clue to understanding that you are being blamed for the TVI caused by a faulty 11kV transformer.





**T**he Illawarra Amateur Radio Society operates several repeaters on the Illawarra & South

Below is the listing of frequencies in use.

**A**ccess tones are not required.

Their status is also displayed along with the type of repeater.

The listing below also includes the Satellite Gateway and BBS run by John Simon VK2XGJ.

Repeater Site

| Call sign | Freq In/Out         | Туре        | Location     | Linked To                 |
|-----------|---------------------|-------------|--------------|---------------------------|
| VK2RUW    | 29.520/29.620       | 10m Voice   | Knights Hill | Off Air                   |
| VK2RMP    | 52.650/53.650       | 6m Voice    | Maddens      | Linked to                 |
|           | ·                   |             | Plains       | 146.850 for<br>Broadcasts |
| VK2RBT    | 146.075/146.6<br>75 | 2m Voice    | Mt Boyne     | RMP/RIS                   |
| VK2RMP    | 146.250/146.8       | 2m Voice    | Maddens      | RIS/RBT                   |
|           | 50                  |             | Plains       | -                         |
| VK2RIS    | 146.375/146.9       | 2m Voice    | Saddleback   | RBT/RMP                   |
|           | 75                  |             | Mtn          |                           |
| VK2RUW    | 433.225/438.2       | 70cm Voice  | Knights Hill | RGN/RHR                   |
|           | 25                  |             |              | RGI/RTW                   |
| VK2RMP    | 433.725/438.7       | 70cm Voice  | Maddens      |                           |
|           | 25                  |             | Plains       |                           |
| VK2AMW    | 144.625             | Morse       | Sublime      | 10 wpm                    |
|           |                     | Beacon      | Point        |                           |
| VK2AMW-1  | 145.175             | APRS Digi   | Knights Hill | APRS "Wide"               |
| VK2AMW-2  | 145.175             | APRS Digi   | Mt Boyne     | APRS "Wide"               |
| VK2AMW-7  | 147.575             | Packet Digi | Mt Murray    |                           |
| VK2XGJ    | 53.100              | BBS/Satgat  | Dapto        |                           |
|           |                     | e           |              |                           |
| VK2XGJ    | 147.575             | BBS/Satgat  | Dapto        |                           |
|           |                     | e           |              |                           |
| VK2XGJ    | 440.050             | BBS/Satgat  | Dapto        |                           |
|           |                     | e           |              |                           |

If you are aware of any problems with the above systems, please contact Rob VK2MT on 0408 480 630 or e-mail on mcknightn@winnsw.com.au

# ILLAWARRA AMATEUR RADIO SOCIETY OFFICER BEARERS

| President Vice President Secretary Treasurer Committee | John Peary Ted Hawkins Hank Laauw John Lawer John Hodkinson Ned McIntosh David Downie Peter Read | VK2JJP VK2TTH VK2BHL VK2KEJ VK2BHO VK2AGV VK2EZD VK2HPR | Ph (02) 9520 0237 |
|--|--|---|-------------------|
|  | Brian Farrar   | VK2HPK<br>VK2UBF  |                   |

| Repeater Offr<br>Repeater | Rob McKnight  | VK2MT  | Ph 040 8480630      |
|---------------------------|---------------|--------|---------------------|
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|                           | Phil Howchin  | VK2TPH |                     |
|                           | John Lodding  | VK2ZLJ |                     |
|                           | Brian Farrar  | VK2UBF |                     |
|                           | Simon Ferrier | VK2XQX |                     |
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| Printer                   | Rob Heyer     | VK2XIC |                     |
| Canteen                   | Geoff Howell  | VK2HIC |                     |
| Life Members              | Basil Dale    | VK2AW  |                     |
|                           | Keith Curle   | VK2OB  |                     |
|                           | Graeme Dowse  | VK2CAG |                     |
|                           | Lyle Patison  | VK2ALU |                     |
|                           | Rob McKnight  | VK2MT  |                     |

**C**lub meetings are held 7:30 PM on the second Tuesday of each month, (except January) at the SES Building Montague Street North Wollongong

Committee meetings are held bi-monthly on the third Wednesday.

#### Membership:

Full - \$25 Concession - \$20. Membership expires after the AGM in August. Visit the Illawarra Amateur Radio Society inc. Homepage <u>IARS@1earth.net.au</u> IARS Email <u>IARS@1earth.com.au</u>

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