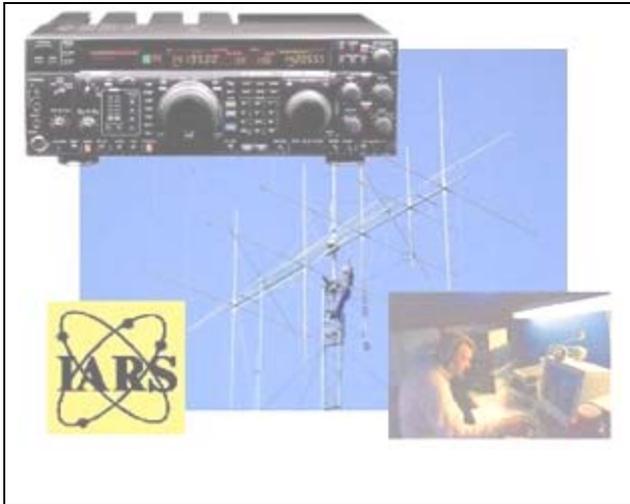


The Propagator

	<p>Official Newsletter of the Illawarra Amateur Radio Society Issued 4 March 2003 Published Bi-Monthly</p> <p>Editor – Rob Heyer VK2XIC</p> <p>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</p>
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IARS PO Box 1838 Wollongong 2500.

ILLAWARRA AMATEUR RADIO SOCIETY REPEATER SERVICES - REPORT

The Illawarra Amateur Radio Society currently sponsors one 10 Metre repeater, one 6 Metre repeater, three 2 Metre repeaters and two 70 centimetre repeaters. They also have several Packet digipeaters and APRS wides. Unfortunately their 10 Metre repeater has been off the air for a couple of years due to the intolerable amount of pirate activity from Australia's north on it's input frequency. With the current downward Solar Cycle they intend putting it back on the air shortly.

The 6 Metre repeater is VK2RMP on 53.650MHz and is located at Maddens Plains, which is halfway between Sydney and Wollongong.

The three 2 Metre repeaters are VK2RMP on 146.850MHz also located at Maddens Plains, VK2RIS on 146.975MHz at Saddleback Mountain, which is near Kiama and Nowra and VK2RBT on 146.675MHz at Mt Boyne, which is halfway between Ulladulla and Batemans Bay.

The two 70 Centimetre repeaters are VK2RMP on 438.725MHz, also at Maddens Plains and VK2RUW on 438.225MHz at Knights Hill, which is south of Wollongong and is also the main television and FM radio broadcast site for the south coast.

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The three 2 Metre repeaters are all linked together in a system called "Coastline". This system allows continuous mobile coverage along the coast from north of Sydney all the way south to Narooma. In the near future, they plan to also link VK2RHR on 146.825MHz at High range, which is located in the southern highlands. This additional repeater will fill-in the coverage gap for mobile operators who head south down the Hume Highway, rather than along the coastal Princes Highway. Plans are also in the pipeline to allow user-selectable linking to VK2RFS on 146.750MHz located on the far south coast, which would allow continuous mobile coverage well into Victoria.

All of the VHF "Coastlink" repeaters are also connected to the Club's IRLP Node 6010, thus allowing worldwide linking to the 800 plus other IRLP Nodes.

The VK2RUW UHF repeater at Knights Hill is also linked into the "Eastlink" UHF Repeater system, which currently has repeaters in Wagga Wagga, Canberra, Goulburn and the southern highlands.

Control of all of the Club's six mountain-top sites with their many repeaters, links and other functions, is achieved with the use of DTMF tones that can be "inputted" into any one of the repeaters to control that or any other site.

On Sunday mornings and evenings, the VK2 Division Broadcasts are automatically connected into the Club's 6m repeater and to all of the VHF "Coastlink" repeaters, plus from today the 2nd of February, the Broadcasts will also now be linked through to all of the UHF "Eastlink" repeaters. Thus, the Illawarra Amateur Radio Society will be transmitting or linking the VK2 Broadcast onto the 6m, 2m or 70cm bands in a geographical area bordered by Sydney in the north, Narooma in the south and west to Goulburn, Canberra and Wagga Wagga.

The Club also runs call backs after each Broadcast and welcomes calls from operators on any of the nine linked repeaters.

by Rob VK2MT
Repeater Officer

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TIME, RELEVANT, OR IS IT?

The end of daylight saving is almost upon us again for another summer season.

Ever experienced the wrath of an amateur operator who wants to take you to task because he / she maintains that your logging of the time of the contact was incorrect and therefore you are deemed to be a goose. Well if we lived a 100 or more years ago, before the start of the 20th century we would have been happy to have logged a DX call on the correct day, let alone the correct time GMT.

HISTORY OF STANDARD TIME ZONES

Time for man not so long ago, indeed even in some countries today, that are seen as the holiday destinations, consisted of daylight and darkness, the changing lunar phases and the seasons.

Astronomers, through their observations of the skies, found that the sun moved slowly eastward among the stars to make one full cycle around the sky in one cycle of the seasons.

Historians cannot agree on who first divided the days and nights into hours - the Babylonians, Egyptians and Greeks get the credit in various references. The Egyptians and the Romans also share the credit for dividing hours into minutes and seconds.

In the early days of Australia, each town, indeed each family, kept its own time as indicated by the sun. Even the Toowoomba State High School I attended had a sundial, maybe as a work of art but the device had also been set in place to be a time piece.

State Historian of Victoria, Dr Bernard Barrett has done considerable research on the significance of clocks and time in the development of Australia. He said the first public clock in any Australian town was probably one, which a jeweller displayed in his window. Should there be more than one jeweller, their clocks may have differed in time. Dr Barrett said it was the practice, in such circumstances, for a public meeting or event to be advertised as "starting at 8 m by Mr Smith, the jeweller's clock.

Harking back to my boyhood in Toowoomba I can still recall the local radio station 4GR, having an advertisement for a jeweller each morning at 8:00 am just before the news. "The time by my Royal Wallis Bishop watch is 8 o'clock."

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Dr Barrett said clocks and time began to become more important in the 1850's with the development of railways. "The railways had to have the same time at both ends of the line - this was Melbourne time - not Geelong or Ballarat time.

"Development of the telegraph in the 1850's enabled Melbourne time to be flashed throughout Victoria - even so a country town could find that its Post Office Clock and Railway Station Clock frequently did not agree." Dr Barrett said.

In the second half of the 19th century, economic and technological developments made life more complicated and there was an increased reliance on time. Factories, stores, and schools all had their arbitrary and standardised starting and finishing times. Towns and suburbs built splendid town halls with their clock tower to give an increasingly necessary standard time for all citizens.

"Pocket watches, a status symbol on well-fed waistlines, became popular, and it was a daily ritual to set your watch by the town hall clock." However, it was still possible to miss a train or the post because of the lack of complete synchronisation between clocks.

In the 19th century, each Australian capital city had its own Local Time - six capitals with six times. This was SOLAR TIME - the difference came about because the sun rises earlier in Sydney than in Melbourne and even earlier still in Brisbane.

It was not so much of a problem in the early days because the six different colonies had customs barriers at Albury-Wodonga and other such places.

The idea of standard time zones based on Greenwich Mean Time (GMT) originated in the 1870s. This began first in the USA and Canada, stimulated by development of railways stretching ultimately coast to coast. In Australia, interstate railways linked Albury in 1883 at the Victoria / South Australia border in 1887. At Albury railway station there were two clocks, one for Melbourne Time and the other Sydney Time.

At an international conference held in Washington DC in 1884, attended by 25 nations, the concept of Standard Time was adopted with every clock to have the same minute and second, only the hour would be different. This resulted in the world having 24 Standard Time Zones, 15 degrees longitude or an hour apart, starting at Zero Meridian at Greenwich.

The government surveyors from the six Australian colonies agreed on this system in 1892. Australia was to have three zones - Western Australia was eight hours ahead of GMT, South Australia nine hours ahead and the Eastern States were ten hours ahead.

The six colonies legislated accordingly in 1894 / 95, South Australia amended its time zone by half an hour in 1898 making it now nine
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and a half hours ahead of GMT. The change by South Australia was due to the geographic closeness of Adelaide to Melbourne. South Australia's time zone was originally based on 135 degrees East, near Port Lincoln, but was moved to 142.5 degrees East, which runs through Broken Hill. Australian Eastern Standard Time (EST) is based on 150 degrees East, which happens to be Gabo Island in far eastern Victoria on the border with New South Wales. Western Standard Time is based at 120 degrees East, between Perth and Kalgoolie.

Interesting to note that solar time varies by a minute for every 13 kilometres you travel east west, or for every one degree in longitude it changes four minutes.

A very interesting book " LONGITUDE " by Dava Sobel looks at the history and the importance of having accurate local time and accurate Greenwich Mean Time when navigating at sea and of course when aircraft fly the skies.

Sources WIA AR

Rob Heyer VK2XIC

REVISED REGULATIONS - AMATEUR SERVICE

There is an important matter for all of the members of the Illawarra Amateur Radio Society Inc, particularly Novice 'calls' which don't have access to the 6 Metre band.

In a clause of the LCDs, (*Regulations, for amateur stations*) the so called "Novice filter" restriction appears that prohibits crossband or linked repeaters from re-transmitting signals from their users on a frequency or band, to frequency or band is not permitted to use - for example a Novice using a 2-Metre repeater which has a link to 6 Metres repeater.

This basically makes repeater licensees legally responsible for the actions of the people who use their repeaters. Hence the need for access control such as CTCSS, forcing all users to generate tone to use cross-band facilities in accordance with their licence conditions.

And how does this "Novice filter" restriction apply to Amateur Internet Linked Systems
The WIA is still seeking clarifications from the ACA on that matter.

The full LCDs can be read at

<http://www.sma.gov.au/legal/determinllcd/amateur.htm>

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Our HomePage

Illawarra Amateur Radio Society Homepage can be found at:

<http://www.iars.1earth.net/>

Work is still to be done, small step improvements...

Countries with IRLP

3 March 03



Wollongong Node 6010 VK2RMP 146.850 MHz

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AMATEUR ABBREVIATIONS - PHONE OPERATORS

I have taken this opportunity to include abbreviations which may sometimes be heard when operating on phone.

The last article on CW abbreviations in the Propagator was to be the final one in the series, but I felt that I couldn't just leave 'it at that,' so I will look a few phone abbreviations. The abbreviations have their roots in the radio operation procedures of NATO.

At no point will I be referring to the **10 Code**.

The table I have put together below contains listings of 'pro-words' used while operating on phone.

Rob Heyer VK2XIC

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SOME COMMON MESSAGE FORMATS

IN Messages <i>(to you)</i>	OUT Messages
<p>Sending operator offers message: Think over what you want to say.</p> <p>THIS IS Call sign MESSAGE - OVER.</p> <p>When ready to receive, say:</p> <p>THIS IS Call sign SEND - OVER</p> <p>Sending Operator: THIS IS Call sign MESSAGE FOLLOWS: You start writing in log - Date-Time (sent as TIME) Originator's Number From</p> <p>When message received say: THIS IS Call sign ROGER - OUT</p> <p>Write time you give ROGER in Log.</p>	<p>As sending operator you offer message: Think over what you want to say.</p> <p>Write text of your message clearly and briefly as you can on notepaper, for transfer to Log later.</p> <p>Write Date - Time of origination.</p> <p>Write Originator's No. - Prefix same as one to which you are replying - if no previous message</p> <p>Write Callsign of station you are going to send message to.</p> <p>OFFER Message - When receiving operator says 'SEND', transmit message, reading of Log</p> <p>When receiving operator says 'ROGER' write time in Log (Time of Despatch).</p>
<p style="text-align: center;">COMMON</p> <p><u>Ending Transmission</u> OVER My transmission is ended and I expect a reply (<i>NOT used with 'OUT'</i>) OUT My transmission is ended and I do NOT expect a reply (<i>NOT used with 'OVER'</i>). WAIT I must pause for a few seconds. WAIT OUT I must pause for longer than a few seconds (This allows other stations to transmit).</p>	<p><u>PROWORDS</u> <u>Particular Person</u> FETCH Please bring <i>name</i> to the set to speak. LISTENING is ready to speak on the set.</p> <p><u>Messages</u> MESSAGEI have a message for you which you will have to write. SEND Go ahead, send your message.</p>

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<p><u>Repeats</u> SAY AGAIN Repeat all of your last transmission (or the portion indicated) MESSAGE ENDS - That completes the text of the message I SAY AGAIN I am repeating my transmission. ALL AFTER (BEFORE) Used to indicate the portion of the message referred to - normally used with 'SAY AGAIN' WORD AFTER (BEFORE) Used to indicate the portion of the message referred to - normally used with 'SAY AGAIN' SPEAK SLOWER - You are transmitting too quickly for me to write WORDS TWICE Say (or I will say) each word twice CORRECT Your version is correct. CORRECTION An error has been made - the correct version is</p>	<p>TIME Date & Time BREAK I am about to transmit the text. MESSAGE ENDS That completes the text of the message (usually followed by) READ BACK Repeat this entire transmission back to me exactly as received. <u>Receipt Of Messages</u> ROGER I have received your message. WILCO I have received your Message, understand it and will comply with it. (NOT used wither 'ROGER')</p>
<p><u>All Stations Calls</u> When Control calls 'ALL STATIONS` the stations on the net answer in the order of their <i>Callsign</i>. You answer immediately after the station with the next Lower <i>Callsign</i> number to yours. If that station fails to answer, wait five seconds and then answer yourself. <u>Signal Strength Reports</u> These should not be called for or be used -unnecessarily - No report by a station indicates LOUD AND CLEAR.</p> <p><u>Report</u> LOUD AND CLEAR I can hear and understand you perfectly. READABLE Your signal is not very strong but I can understand what you are saying. WEAK I can just hear you. UNREADABLE I can hear you but you are too weak to be understood. DISTORTED Your signal is strong enough but is so distorted I cannot understand the words.</p>	<p><u>Phonetic Alphabet</u></p> <p>ALPHA NOVEMBER BRAVO OSCAR CHARLIE PAHPAH DELTA QUEBEC ECHO ROMEO FOXTROT SIERRA GOLF TANGO HOTEL UNIFORM INDIA VICTOR JULIETT WHISKEY KEELO X-RAY LEEMA YANKEE MIKE ZULU</p>

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COMING EVENTS

IARS Meeting

11 March 2003 at Wollongong SES LHQ meeting room, start at 19:30 Hrs.

IARS Meeting

08 April 2003 at Wollongong SES LHQ meeting room, start at 19:30 Hrs..

set to start at 19:30 Hrs.

IRAS Experimental SSTV Group

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

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SOME HUMOUR

A new monk arrives at the monastery. He is assigned to help the other monks in copying the old texts by hand. He notices, however, that they are copying from copies, not the original manuscripts. So, the new monk goes to the head monk to ask him about this, pointing out that if there were an error in the first copy, that error would be continued in all of the subsequent copies.

The head monk says, "We have been copying from the copies for centuries, but you make a good point, my son." So, he goes to the library with one of the copies to check it against the original.

Hours go by and nobody sees him. So, one of the monks goes downstairs to look for him. Hearing sobbing coming from the back of the library, he finds the old monk leaning over one of the original books crying. He asks the old monk what's wrong, and in a choked voice came the reply, "The word is celebrate."



This cartoon came from an old copy of Electronics Australia, it captures the imagination as to what the conversation is about.

*I wonder if anyone has a few words to offer as to what could be used as a caption with the cartoon which would bring a smile to us. No prizes guys, just the glory of having it in the next **Propagator**.*



SATELLITE GATEWAY & BBS -Note

John VK2XGJ suffered major damage to the hard drives of the PC that keeps his SatGate and BBS system up and running.

The hard drives were over twelve years old, (John sure got his moneys worth) and were replaced and re-configured.

As John said, "The early bird may get the worm but the second mouse gets the cheese!"

Phil VK2TPH and John VK2XGJ are continuing to conduct further Packet experimental work on the 6 Metre Band, the node is VK2AMW-6 and operating on 53.100 MHz. The aerial which is being used at present will be made more permanent in the next few weeks.

Thanks guys for the service.

I will keep you posted.

Rob Heyer VK2XIC



Batemans Bay

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THE IARS REPEATERS



The Illawarra Amateur Radio Society operates several repeaters on the Illawarra & South Coast.

Below is the listing of frequencies in use.

Access 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	Type	Location	Linked To
VK2RUW	29.520/29.620	10m Voice	Knights Hill	Off Air
VK2RMP	52.650/53.650	6m Voice	Maddens Plains	<i>Linked to 146.850 for Broadcasts</i>
VK2RBT	146.075/146.675	2m Voice	Mt Boyne	RMP/RIS
VK2RMP	146.250/146.850	2m Voice	Maddens Plains	RIS/RBT
VK2RIS	146.375/146.975	2m Voice	Saddleback Mtn	RBT/RMP
VK2RUW	433.225/438.225	70cm Voice	Knights Hill	RGN/RHR RGI/RTW
VK2RMP	433.725/438.725	70cm Voice	Maddens Plains	
VK2AMW	144.625	Morse Beacon	Sublime Point	10 wpm
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/Satgate	Dapto	
VK2XGJ	147.575	BBS/Satgate	Dapto	

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VK2XGJ	440.050	BBS/Satgate	Dapto	
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If you are aware of any problems with the above systems, please contact Rob VK2MT on 0408 480 630 or e-mail on mcknightr@winns.com.au

ILLAWARRA AMATEUR RADIO SOCIETY OFFICER BEARERS

President	John Peary	VK2JJP	
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	Lyle Patison	VK2ALU	
	Rob McKnight	VK2MT	

Club 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.

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Membership:

Full - \$20 Concession - \$15. Membership expires after the AGM in August.

Visit the Illawarra Amateur Radio Society inc. Homepage IARS@1earth.net.au

IARS Email IARS@1earth.com.au

Disclaimer:

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