

Official Newsletter of the Illawarra Amateur Radio Society

Volume 00.07 Issued 1 October 2001 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 O Box 1838 Wollongong 2500.

Well, here we are once again pressing on after the Annual General Meeting (AGM) for the year 2000 and 2001.

Thank you must go to Lyle Patison VK2ALU for so competently filling the role of Chairperson. For those who were unable to attend the meeting, the election of office bearers was conducted in accordance with the rules of the Illarrawarra Amateur Radio Society.

The office bearers are, President Brian Farrer VK2UBF, Vice President Ted Hawkins VK2TTH, Secretary Bill Stone VK2JBS, and Jim Christensen VK2CAV continues on doing an excellent job in the position of Treasurer.

The Committee remains the same apart from those who have been newly elected to their roles. The Repeater Committee is also unchanged under the co-ordination of Rob McKnight VK2MT. It is the seemingly tireless efforts of these men and those who support their efforts in many and varied ways which make the IARS the success it has been over the years. I personally look forward to an enjoyable twelve months as the Editor of the Propagator.

A General Meeting of IARS was held 11th September 01 where, Secretary Bill Stone VK2JBS tended his resignation, due to work commitments. Richard Cannan VK2HSW stepped forward to fill the role, thank you, as we all know what an important position Secretary is, considering how much time is needed.

Minutes of meeting on Page 2.

The next meeting will be held Saturday 6th October 01, at Cataract Dam arriving from around 10:30 am. Meeting will start at 12 noon followed by a BYO, BBQ. If it is raining, the meeting will be held Tuesday evening 9th. Rob Heyer VK2XIC

Minutes Of General Meeting September 11th.2001

Opened at 1935 hours Brian VK2UBF in the chair

Attendance: 32

Apologies: VK2's KRH, XRT, AXJ, ZDM

Visitors: Darryl Guest Speaker

<u>Correspondence In:</u> Membership renewals from:- Brian Clarke, John Bussing, Michael Cheng, Peter Corkeron, Ian Bowmaker, Philip Miller, Mike Ramsay.

Thank you letter from Mrs Noel Black VK2TNB SK Mr Matt Brown MP re the site fees and Transgrid. Letter from Mr Kim Yeadon MPre site fees for Transgrid. Membership Applications from Keith Kennedy VK2PRK, Peter Booth VK2UEB

W.I.A. Council Meeting Minutes July 2001

News letters from: Central Coast, B.R.A.G and Dragnet

<u>Correspondence Out:</u> Letter of thanks to Dowcom for the donation of the cordless phone and who won it.

E mail from Rob McKnight re the Transgrid fees. This was also forwarded to the IARS mailing list.

E mails to Daryl Smith re this meeting.

Letter to W.I.A re increasing the Public Liability for ALL affiliated clubs to cover \$10,000,000

E mails to Rob VK2XIC re items for the Propagator.

Minutes of meeting being have read. Moved VK2UBF. 2nd. VK2JBS

Correspondence In and Out Moved VK2JBS 2nd VK2UBF

Matters Arising: None

<u>Treasurers Report:</u> Given By Jim VK2CAV and attached. Move VK2CAV 2nd VK2UBF

Repeater report: Not given as Rob was not there till late

General Business: Getting new secretary. Nobody stood up. Will try after the meeting.

Then Guest speaker gave a great talk on APRS. With many questions asked at the break.

General Meeting: will be held: Saturday if not raining at Cataract Dam arriving firm around 10:30am meeting will start at 12 noon followed by a byo BBQ. If raining the meeting will be the following Tuesday evening as usual.

Meeting close: 9:30pm

Raffle prize was won by VK2KEJ?

ILLAWARRA AMATEUR RADIO SOCIETY INC

PO BOX 1838 WOLLONGONG 2500

TREASURERS REPORT FOR YEAR ENDING 30-6-2001

INCOME	OPENIN	IG BALANCE 1-7-2000
	RAFFLE SALES\$	479.00
	MEMBERSHIP DUES(72 MEMBERS)\$	1172 . 50
	DONATIONS\$	212.55
	EQUIPMENT SALES\$	1530 . 45
	ADVERTISING\$	
	AUCTION LEVY\$	32.00
	AUCTION PROFIT\$	92.70
	BANK INTEREST\$	3.08
\$3762.28	MODO	
EXPEN	10.20	224 (2
KAFFI	LE COSTS\$	224 . 63
	RING COSTS\$	
	ATER MAINTENANCE\$	
	ATER SITE RENTALS (2)\$	
	ICENCE RENEWALS (5)\$	
	ANCE PREMIUM\$	
	AGE\$	
POST	OFFICE BOX RENTAL\$	49.50

 PRINTING
 \$ 18.45

 WIA (CONFERENCE)
 \$ 30.00

 DEPT OF FAIR TRADING
 \$ 37.00

 RUBBER STAMP
 \$ 27.75

 PETTY CASH SPENT
 \$ 20.03

 \$ 2511.42

CLOSING BANK BALANCE 30/6/2001 \$2875.19 PROFIT FOR YEAR \$1250-86

Jim Christensen (VK2CAV)
HON TREASURER IARS INC

BANK BALANCE 30/6/2000 \$2051 . 33 \$2857 . 17 LESS PRE-PAID MEMBERSHIP \$ 445.00 \$1606 . 33 \$1606 . 33

> BANK BALANCE 30/6/2000 \$3272 . 19 LESS PRE-PAID MEMBERSHIP \$415 . 00 \$2857 . 19

ASSETS

RADIO REPEATER TRANSCEIVERS (5 VOICE & 4 PAKET)

\$1000.00

BANK \$3272.19

TOTAL ASSETS \$4272.19

Jim

Snap Shot Of A President

Happy to lead the IARS to new heights and search new horizons.



Brian is a true son of the Illarrawarra, born in March 1945 and lived most of his life at Bulli. See, it is the culture in his voice he's not a pom after all.

As all of us who have had contact with him, knows he has a great passion for Bulli. Brian said about Bulli and the Illarrwarra, "I think it is the most beautiful place on earth." See Photo.....

His interest in radio, like many of us goes back to when we were younger, to those days of Short Wave Radio

Listening (SWL) days of QSLs from VOA, BBC, AFRTS, HCJB yes and in my case I even QSLd Radio Of Australia and Papua.

Brian had a nephew come to live with the family and it was he who wanted uncle Brian to buy him a CB radio. "What for?" "To talk to me' friends from school." After a few weeks the lad lost interest, Brian was drawn in. After a number of contacts he came to realise CB Radio had an uncle Amateur Radio.

Brian attended an amateur radio course for those who wished to obtain their call sign at TAFE and had OK success. He was tickected February 1993 (VK2UBF), and the bands have not been the same. "I use the local repeaters as well as the IRLP."

Other haunts of his is the 29 MHz section of 10 Meters, as well as the DX section of 6 Meters, 50.110 Mhz, where he has made some good contacts. Brian, the members look forward to a productive and entertaining year with you as Chairman, did I say chairman, sorry Chairperson. Rob Heyer VK2XIC

Modifications For Kenwood TS-680

Being a person who favours Kenwood equipment, I thought there would be one or two others in the IARS who operate Kenwood gear. This led me to reproduce the following mods I have gleaned up off the net.

I realise not all of the modifications will be of interest but there may be one or two which could cause you to open that Kenwood Black Box and at least have a look at things.

.Add Squelch To All Modes

By Chris WB5ITT and Dave Underwood WB5HJV <u>dunderwd@dlkbox.com</u> **Parts**

Lets have a look at the parts needed for this mod.

1 each 100 uF 20V capacitor

1 each 10k ohm 5% 1/4W resistor

2 each IN914 small signal diodes

Modification

All modifications are to the signal board. Remove the signal board to gain access to the bottom of the board.

Remove R178 100 ohm resistor. (1 cut the land between Cl77 and R178) (Removes FM chip control voltage) R178 is on the bottom of the board. Add jumper with a diode in series between IC6 pin 14 and the base of Q57. Cathode of the diode goes to the base. (This is the squelch trigger control voltage) Q57 is on the bottom of the board.

Connect a diode between the 8V line (very near IC6) and pin 4 of IC6. This activates the FM chip (IC6) all of the time. Cathode goes to pin 4, anode to the 8 volt line. Now connect a 10k ohm resistor between IC6 pin 4 and IC6 pin 14.

Connect a 100 uF 25 volt capacitor between 1C6 pin 14 and ground. (This slows this quick squelch down a little bit) Tests have shown (using commercial communications monitor) that activating FM chip 1C6 does not degrade IF strip performance at all.

I have had this mod in my TS-680 for about year and a half and it is still working great! 19 July 1998

Eric - WB4Q0V has added these extra notes on the subject. A schematic will aid in locating the area affected.

To perform the modifications you will need to open up the radio and split the halves (open it like a book) as the board you need to access is inside. Have the front of the radio facing away from you and remove the screws holding the signal board down. Unplug the antenna from the board (lower' right) and also unplug CN27 from the 13 pin jack on the rear panel. This allows you to raise the board for access to the foil side where all the SMT parts are tacked on.

IC6 is located near the left middle of the board. Its pins are aligned from side to side on the board so it shouldn't be too hard to find.

Q57 is a surface mount component as are R206 (1k) and R205 (3.3k). These are located on the foil side of the board near the lower left corner close to the front panel. By referring to the SMT resistor code you should be able to find the three of them eventually. The base of Q57 is connected to a pad with R147 (1k) and R207 (10K). This is where you can connect the diode in the modification.

You can obtain the 8 Volts DC from CN9 (pin 1) on the signal board. Reverse the assembly procedure to reassemble the unit.

It goes without saying that this *modification might void the manufacturers warranty* but not having to listen to the background noise is well worth it!

TS-680S Increase 6 Meter Power Output

Adjust VR15 (50M) control on the SIGNAL UNIT board while monitoring 6 Meter transmit power out put into a 50 ohm dummy load. I adjusted mine while also monitoring the ALC level to insure that I still had some ALC action.

Using this method I have increased my 6 Meter power output to approx. 25 Watts.

Broadcast Sensitivity Modification for the TS680S / 140S

Between .500 kHz and 1.6 MHz attenuation is added to reduce front-end overload on the Broadcast band.

Some of us BCB DXers find this a HIGHLY undesirable feature.

If I want attenuation I will use the front panel switch. The following mod will restore the sensitivity

Cut the land between IC 1 pin 11 and R7 (SIGNAL UNIT, M54581P) Cut the trace between IC I pin 12 and R10 $\,$

Add a small signal diode (IN914, IN4148) between IC1 pin 11 and R7 (Cathode towards R7) Add a small signal diode between IC I pin 12 and R7 (Cathode towards R7)

Trace the lands from pin 11 and 12 of IC1 and you will find a good place (to the left of connector CN5) to cut these traces as well as pad to solder the diodes to.

Dave Underwood WB5HJV dunderwd@dlkbox.com

TS-680S Frequency Extend Modification

This modification will allow out of band transmissions on the Kenwood TS-680S. Remove the bottom cover, in the middle of the board is a diode marked D31 just clip it and reinstall bottom cover. This will allow transmit from 1.6 MHz to 33 Mhz and 49 Mhz to 56 Mhz. The Editor doesn't recommend this mod unless you have the appropriate licence to cover the frequencies you wish to transmit on.

The Aropagator "M" Theory

Questions for those working towards an amateur exam. Or just test yourself. Answers on page 10

- 1. When two resistors are connected in series:
- a) They must both have the same resistance value.
- b) The voltage across each must be the same.
- c) They must have different resistance value.
- d) There is only one path for the current through both resistors.
 - 2. In a diode the forward current increases when:
- a) The anode voltage is made more positive.
- b) The anode voltage is made less positive.
- c) The collector voltage is made less negative.
- d) Reverse bias is applied.
 - 3. The term "vertically polarised electromagnetic wave" refers to a wave in which the:
- a) Magnetic component oscillates vertically.
- b) Electric component oscillates vertically.
- c) Magnetic component has been eliminated.
- d) Electric component has been eliminated.
 - 4.Lead-acid cells may be connected in parrel to:
- a) Increase the voltage.
- b) Increase the internal resistance.
- c) Decrease the current capacity
- d) Increase the current capacity.

THE DLACE ALL AMATEURS GO WHEN THEY NEED NEW EQUIPMENT



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General Ettie Kettie For IRLP Use

A suggestion for announcing that you are going to try and access the IRLP network would be; "This is VK2 ABC IRLP wait 5," connect: wait for 5 seconds and then send the DTMF tone required.

When the node you are calling responds with *link on*, listen for 5 seconds in case you have broken into a local QSO, then announce your call sign, node and country wait for a response.

If none is forth coming, announce that you are terminating the link.... wait for 5 seconds in case there is any other station wishing to try for a connection. If nothing is heard, close the link.

If you establish a link and a local station calls you before you make a contact, inform them of what you are doing and ask them to stand by. If you wish to talk locally, close the link. The other end of your link does not want to hear you waffle, as they may want of make a link of their own.

Once a link has been established, the usual call sign exchange should take place. Remember, you only need identify yourself every 10 minutes, not every over. Use the *correct phonetics*, as substitutions can often cause unnecessary confusion. Once the call signs have been established, use the abbreviated form i.e.- VK2ABC not VICTOR KILO TWO ALPHA BRAVO CHARLES The operator's name should be sufficient when changing overs.

KEEP YOUR OVERS SHORT. Long overs are completely unnecessary. Many IRLP Nodes are linked to other repeaters and you don't know the timeout periods of them so you may well shut down an entire system.

This is not HF. The audio is exceptionally good. There is no need to shout or draw out pronunciations. Say your words clearly and it will be easier to understand them.

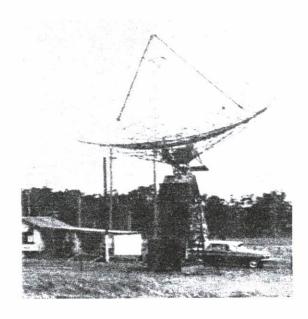
When you have the over passed back to you, please, please count to 3, push the PTT, and count to 2 and then talk. This will give everything a chance to reset and or key up. Remember, there is most likely more than 1 repeater in the link. Key up to soon and the other end of the link will miss the first 3 or 4 words of your over.

Make sure that you have fun and enjoy amateur radio.

PHOTO FROM THE PAST

Questions:

Does anyone know what this structure is?
What was it used for?
Where was it located?
If you have a good memory, when was the structure used?
What was the size of the dish?
What were the two bands used at this site?



I will endevour to bring you another photo from the past as well as a summary of the facts surrounding this photo in the next edition. ED

"M" Theory

Answers:-

- 1. (d)
- 2. (a)
- 3.(b)
- 4. (d)

Annual Auction Rules

The Illawarra Amateur Radio Society annual November Auction in recent years has had a few practical problems. The committee this year discussed the question, 'would we have an auction at all, in light of the work needed and the small return the club received.' At the September general meeting it was decided, to have the annual auction, with a few changes to previous years procedures. This format was then developed for this years' auction.

Rules:

- 1. Lot numbers will be issued for \$1.00 EACH LOT non refundable.
- Lots must be described for auctioneer's use.
 Lot must be packaged and labelled with owner's name or call sign.
 Lots to be less than 20kg to allow single person handling
- 3. Lots to be presented prior to 7-15pm. All items to be booked in BEFORE that time to allow for the closing of the book.

No Lots will be given out after closing of the book.

- 4. Bidding will be under the auctioneer's directions. The minimum bid will be \$1.00 or multiples thereof.
- 5. Commission on sales over \$10.00 will be 10% of the auctioned price and rounded up or down in multiples of \$1.00

- 6. Buyers must not take possession of any goods until the paperwork is complete and the financial clearance has been given.
- 7. Sellers will be settled up only after buyers have paid.
- 8. Payment of auctioned items will start 15 minutes AFTER the auction has finished.
- 9. All payments *MUST* be made within 30 minutes of the auction finishing. Lots not paid by this time will be given back to the owner.
- 10. Be patient, please do not hassle the helpers and enjoy the night.

The committee wants this auction to be an enjoyable and entertaining night for the members and visitors.

So please follow these simple steps set out helping to ensure a successful and enjoyable night of spirited buying and selling, as old Joe the gadget man used to say:

"Don't forget to bring your money with you" The doors will open at 6:30pm SO COME EARLY

There are No exceptions to the above rules

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 tons 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

VK2XGJ.

Call sign	Freq In/Out	Type	Location	Linked To
VK2RUM	29.520/29.620	Voice	Knights Hill	Off Air
VK2RBT	146.075/146.675	Voice	Mt Boyne	RMP & RIS
VK2RMP	146.250/146.850	Voice	Maddens Plains	RIS & RBT
VK2RIS	146.375/146.975	Voice	Saddleback Mt	RBT & RMP
VK2RUW	433.225/438.225	Voice	Knights Hill	Off Air
VK2RMP	433.725/438.725	Voice	Maddens Plains	RGN, RHR RGI & RTW
VK2AMW-3	144.700/144.700	NODE DIGI	Maddens Plains	VK2AMW-4
VK2AMW-4	144.925/144.925	NODE DIGI	Maddens Plains	VK2AMW-3
VK2AMW-5	147.575/147.575	NODE DIGI	Mt Boyne	
VK2AMW-7	147.575/147.575	NODE DIGI	Mt Murray	
VK2XGJ	53.100/53.100	BBS / SATGATE	Dapto	
VK2XGJ	144.700/144.700	BBS / SATGATE	Dapto	
VK2XGJ	147.575/147.575	BBS / SATGATE	Dapto	
VK2XGJ	440.050/440.050	BBS / SATGATE	Dapto	



) ~	, ~	
President	Brian Farrer	VK2UBF	Ph 4267 2296 0415 430 676
Vice	Ted Hawkins	VK2TTH	
President			
Secretary	Richard Cannan	VK2HSW	Ph 4295 1227
Treasurer	Jim Christensen	VK2CAV	
Committee	John Hodkinson	VK2BHO	
	John Lawer	VK2KEJ	
	Jim Beaver	VK2ZWG	
	Peter Read	VK2HPR	
Repeater Offr	Rob McKnight	VK2MT	Ph 040 8480630
Repeater	John Lodding	VK2ZLJ	
Committee	Chris Stephens	VK2XBC	
	Phil Howchin	VK2TPH	
	Brian Farrer	VK2UBF	
	Simon Ferrie	VK2XQX	
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	Graeme Dowse	VK2CAG	
	Lyle Patison	VK2ALU	
	Rob McKnight	VK2MT	
	A-7-00		

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 on the third Wednesday of each month.

Membership:

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

Visit the Illawarra Amateur Radio Society inc. Homepage IARS@learth.net.au IARS Email IARS@learth.com.au

Disclaimer:

All articles presented in this publication are as given. The IARS accepts no responsibility for any damage to equipment arising from same. The views expressed within are those of the contributor not necessarily that of the Editor.

HANDLE WITH ENTHUSIASM



ROB MCKNIGHT
16 LOMBARD AVENUE
FAIRY MEADOW



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THE PROPAGATOR

VK2AMW SINCE 1948

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If undelivered please return to PO Box 1838 Wollongong 2500.