

# BARG News



Official Newsletter of the Ballarat Amateur Radio Group Inc. # 6953T  
ABN 44 247 200 143

**VOLUME 32 ISSUE 2 February 2009**



President: Doug Raper VK3VBA  
Secretary: Doug Ellery VK3FDRE  
Treasurer: Peter Pollard VK3FPOL

**NEXT MEETING - FRIDAY February 27, 2009**  
At 7.30 pm

## Contacting us

You can write to the club at the address below, or e-mail the secretary.

The Secretary : B.A.R.G. Inc.  
Box 1261  
Mail Centre  
Ballarat. Vic. 3354.

Or E-Mail: [vk3bml@barg.org.au](mailto:vk3bml@barg.org.au)



## BARG Inc. Life members

Kevin Hughes	VK3WN
Ian McDonald	VK3AXH
Charlie Stewart	VK3DCS
Bob Terrill	VK3BNC
Jim Wright	SK
Norm D'Angri	VK3LBA
Phil Seddon	
Stan Widgery	SK
Gordon Cornell	VK3FGC

## CLUB INFORMATION

### REPEATERS and BEACON

#### D—STAR

<b>CALLSIGN:</b>	<b>MODE:</b>	<b>FREQUENCY:</b>	<b>TX OFFSET:</b>	<b>USER SETTINGS</b>
VK3RBA A	Digital Data	1298.700 MHz	Nil (half duplex)	URCALL: VK3RBA RPT1: VK3RBA A RPT2: not in use
VK3RBA B	Digital Voice	439.9875 MHz	-5.0 MHz	URCALL: CQCQCQ RPT!: VK3RBA B RPT2: not in use

VK3RBA (UHF) (70 cm Voice Repeater (Uses CTCSS of 91.5 Hz to access)	439.275 Mhz	Mt Buninyong
VK3RBA (VHF) (2 m Voice Repeater)	146.750 Mhz	Mt Buninyong
VK3RWA* (2 m Voice Repeater)	147.100 Mhz	Mt Ben Nevis
VK3RPC (2 m Packet Repeater)	144.750 Mhz	Mt Warrenheip
VK3RBU (70 cm Voice Repeater)	438.475 Mhz	Mt Hollowback
VK3RMB (70 cm Beacon)	432.535 Mhz	Mt Buninyong
VK3RBU-1 (2 m APRS Repeater)	145.175 Mhz	Mt Hollowback

\* IRLP Node 6310 using VK3RWA

**CLUB e-mail** [vk3bml@barg.org.au](mailto:vk3bml@barg.org.au).

**CLUB NET** VK3BML 3.610+/- QRM Thursday Nights at 8 pm E.S.T (Summer & Winter)

**WIA Broadcast and Club Call Back.** Sunday's 11.00 via VK3RWA (IRLP Node 6310)

**NEWS ITEMS** Send to Harry VK3KGL

Or mail to Box 1261 Mail Centre BALLARAT 3354 or e-mail [yk3kgl@barg.org.au](mailto:yk3kgl@barg.org.au)

#### Broadcast Times and Dates on VK3RWA Repeater

Every Sunday at 11.00 am, WIA National News, followed by VICLINK

Every Monday night at 9.30 pm, ARRL News

Every Tuesday night at 9.30 pm, WIA National News Repeat

Every Wednesday night at 9.30 pm, Spectrum Tasmania News





## QST Report with Craig, VK3CMC

Content review of current QST in library

QST Review 2009-1 Jan



- P30 Launch a Met balloon to lift that Low Band loop antenna.
- P33 Building a 1927 Regenerative Receiver. {Uses 80yr old parts}
- P36 When radio Transmitters were Machines. {Pre vacuum valves}
- P39 Resurrecting a Command Set Transmitter.
- P43 Review Elcraft K3/100HF &6M transceiver.
- P50 Remote control your amateur station.  
[Uses Microsoft's *Remote Desktop* {RDP} application.]
- P52 Antarctica Experience.
- P54 Contents of the Nov/Dec 2008 QEX magazine.
- P55 Morse Code: Efficient or over the Hill. ? Worth a read if you want to really challenge yourself!
- P 59 Dxpedition to MARS.
- P65 Emergency Communications for the Red Cross
- P67 The Doctor is in: Coaxial feeder chokes. HF dipole feeds,stacking dipoles.Comparisons of switchmode and normal power supplies.  
Open ladder line and nG5RV's through metal window frames.
- P69 Short Takes: External keypad for FT-817/857/897 transceivers.
- P70 Shop Safety. Some simple but important ideas to maintain.
- P71 Selecting your transmission Line.
- P73 Bring that WW2 Command Receiver back to Life.
- P76 Hands on Radio Ex #72 Return Loss and S Parameters.
- P78 You have your First HF antenna: time for another.
- P79 Hints & Kinks. Use a mouse holder for an HTT. Proper earthing for power supply. Feedline stretcher. Foam PCB soldering holdfast.
- P85 Hows DX?: Desecheo Island. KP5
- P87 World above 50Mhz. Call frequencies on 33cm.
- P 90 Eclectic Technology. Pushing the Meteor Scatter envelope.
- P91 Microwavelengths. Microwave DX. Hepburn, Waveguide polarisation, SMA pin damage.
- P93 Old Radio. Homebrewed HF rig {Circa 1960} of W9ARZ [SK]
- P95 New Books reviews/
- P100 QST Reviews for January of 1934, 1959 and 1984.
- P101 Hamspeak. Glossary of terms used in this edition.

Adds, adds adds and more adds.

**Craig.  
VK3CMC**



ROGER, VK3ADE

## From our "Roving" reporter

Roger, vk3ade

A recent trip to Ben Nevis with Spectrum Analyzer yielded some information but nothing absolutely stand out.

There is a very broad noise floor in the 2m region but no extremely strong adjacent signal sources.

Listening on the input frequency with a receiver resulted in both Bob VK3BNC and myself identifying a very weak carrier with very faint tone of about 1000Hz on it, this signal came and went, interestingly it was more obvious when we were within the confines of the tower structure.

This is most likely the cause of the repeater randomly keying, it had the same sort of randomness to it as did the repeater keying. With such a large coverage area, identifying the source of the interference would be extraordinarily difficult and time consuming, most likely it will never be found.

Ben Nevis is a very sensitive repeater in terms of RX and this is part of the problem, we could probably wind the mute back bit this would reduce the coverage area dramatically, the interfering signal is at the extreme limit of the RX sensitivity so it never blocks any of the repeaters normal traffic. Given this the best solution is to require a CTCSS tone of 91.5Hz to key the repeater and also to keep the repeater keyed, this work has already begin. CTCSS will also those Bass Hill conversations that used to drift and out reasonably frequently, if Bass Hill device to run CTCSS in the future they will most likely use a frequency of 123.0Hz so we done back to the bad old days.

The output of the repeater will also have a 91.5Hz CTCSS tone on it, so if your receiver has a tone squelch facility you can block those pesky pagers and just open the VK3RWA mute on genuine traffic.

Don't expect the repeater back in service until the end of March or early April, some bits have to be ordered and we all have our day jobs as well. When it does go back in service we are going to run split antennas for a while to try and identify where the 'crackling' comes from when the wind gets above about 10 knots on Ben Nevis. With that in mind I am looking for about 4m of around 50mm heavy wall galvanized pipe as a temporary mast, it gets pretty bleak up there at times so it need to be reasonably thick walled, certainly not light weight TV type masting.

Finally, the repeater had been running on batteries for the 2 days prior to its removal, the 35Amp bridge rectifier in the power supply had failed, the most likely cause is probably a combination of heat and the continuous cycling on and off, it is currently being repaired and beefed up a little.

In summary we should get an even better repeater when we re-install!

Roger VK3ADE..

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Neil, VK3GND

This is really me.....

Davo, vk3kqq.....SORRY I FORGOT... VK3GND

### I'm fine thank you!

There is nothing the matter with me,  
I'm as healthy as can be,  
I have arthritis in both my knees  
And when I talk, I talk with a wheeze.  
My pulse is weak, and my blood is thin,  
But I'm awfully well for the shape I'm in.

Arch supports I have for my feet,  
Or I wouldn't be able to be on the street,  
Sleep is denied me night after night,  
But every morning I find I'm alright.  
My memory is failing, my heads in a spin  
But I'm awfully well for the shape I'm in.

The moral is this as my tale I unfold –  
That for you and me who are getting old,  
It's better to say "I'm fine" with a grin,  
Than to let folks know the shape we are in.

How do I know that my youth is all spent?  
Well, my "Get up and Go" has got up and went,  
But I really don't mind when I think with a grin,  
Of all the grand places my "Get Up" has bin.

Old age is golden I've often heard it said.  
But, sometimes I wonder as I get into bed,  
With my ears in the drawer, my teeth in a cup,  
My eyes on the table until I wake up.  
Ere sleep overtakes me, I say to myself,  
"Is there anything else I could lay on the shelf?"

When I was young my slippers were red,  
I could kick my heels over my head.  
When I was older my slippers were blue,  
But still I could dance the whole night through.  
Now I am old my slippers are black,  
I walk to the store and puff my way back.

I get up each morning and dust off my wits  
And pick up the paper and read the "Orbits"  
If my name is still missing I know I'm not dead,  
So I have a good breakfast and go back to bed.



## A few words from “Macca”

Ian, vk3axh

### Construction Group

Construction Group: Around 9 members attended the construction group meeting where Neil VK3GND presented his BALUN for the HF Offset Dipole Project that appeared in AR recently.

I can report that Neil now has the antenna in the air and is very happy with its operation with SWR better than 1.5:1 on all bands 80 - 6 metres.

In addition to the above it was a great opportunity to have a good chat and laugh about many topics including amateur radio and other subjects. If you would like to take part in this or any other project let us know at the next meeting and join in the fun.

### Propagation:

During the recent extremely hot days there has been some exceptional propagation conditions on VHF and higher bands.

Of note Kevin VK3WN had many contacts into VK4, VK5 and VK7 on both 2m and some 70cm. Also taking advantage of the conditions were VK3CMC, VK3ADE, VK3GND and possibly others as well.

Ian VK3AXH was fortunate to work Colin VK5DK on 3 separate occasions on 2.4GHz over a distance of 270Km at signal strengths of S9+. At the same time signals on 2m, 70cm and 23cm also being very strong at S9+ with as little as 5 - 10 watts of power.

### 73, Ian VK3AXH



## A bit from the very past ..... From Brian, vk3kqb

### A LITTLE BIT OF HISTORY.

I was stationed at the R.A.A.F School of Radio between 1950 and 1956 and served as an Instructor for five of those years. As well as lecturing trainees in the mysteries of Radio and Radar I also was given the task of constructing training aids to be used in the Theory Sections demonstration laboratories. The circuits of amplifiers and other devices were built up on masonite boards and were laid out to depict the circuits taken from the drawings in the text books. The leads between the components consisted of tinned copper wires 1/8 inch in diameter and were all straight or bent at right angles as depicted in the diagrams.

The Officer in Charge of the Section was sent off to a demonstration of some new components by the Phillips Company at Adelaide. This was probably 1954 or thereabouts. Upon his return I was called to his office and presented with “ONE ONLY” OC70 transistor that he had been given to be brought back to School. I was given also the circuits for the three configurations, grounded base, grounded emitter and grounded collector and instructed to produce a demonstration board for each circuit. I was also told that, as this was the only transistor that we had, the boards had to be foolproof.

I made up a small clear box of perspex fitted three “banana plugs” arranged in the configuration as the base, emitter and collector would appear in a circuit diagram. The three boards were then each produced with three sockets so that the OC70 could plugged into circuit being demonstrated.

Transistors were thus introduced into the training course for R.A.A.F. Radio Technicians.

This is not all that long ago, only half a century, and what progress we have seen in the semiconductor industry. A germanium transistor was an amazing device in those days and I guess that not many of us would know what an OC70 looked like.

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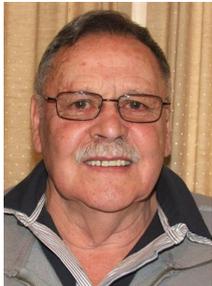
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Doug, VK3VBA

# Presidents Report

What a month its certainly one that all Victorians would all like to forget, as a young boy I experienced being flooded out in 1946 the house was a mess and very smelly but we had a house to come back to more than I can say for the current fire victims.

It’s hard to comprehend that complete towns are no longer there.

I sent an email to all committee members suggesting that we send a donation to the fire victims the response was immediate with everyone agreeing that we should send money and this was duly done, more about that at our February meeting.

On the lighter side of things March is a busy month ( eg) John Moyle contest---- BBQ at Lanacourie with two other clubs plus the usual club activities.

At our February meeting after the meeting it has been decided that we have a trivia night with great prizes so read your n/papers it may help.

Also a bus will be going to the EMDRC hamvention if sufficient numbers are available numbers will be taken at our next meeting ( not before) the date is March the 22<sup>nd</sup>.

That’s all for now hope to see a good roll up at our next meeting.

Doug vk3vba

<p><b>FOR SALE</b></p>	
	<p><b>YAESU 301D Transceiver. Some Digits ‘lost’.</b> <b>Intermittent transmission. Too good for Boat Anchor!!!</b> <b>John, VK3CFH - Ph. 53391971</b></p>



Doug, VK3FRDE

# The Secretary's Page

## **Minutes of the BARG General Meeting – 30<sup>th</sup> January 2009**

Meeting opened at 1930, Bob NBV in the chair.

### **Apologies**

VK3VBA, VK3CAZ, VK3BVI, VK3HRZ, VK3AXH, VK3KQB, VK3ADE, VK3FIVE, VK3FGC, VK3VCI, VK3IDL, VK3GND, and 2 more, which I recorded as VK3FARZ and VK3RAY which are apparently not allocated calls.

### **Attendance**

Approximately 15 Members

### **Minutes of the Previous**

(November) general meeting were read by President Doug, as some members had not received them. There were minor amendments to callsigns AIG, CFH and 3UR which I had recorded incorrectly, otherwise they were passed as correct.

Moved Craig CMC / Bob BNC carried

### **Secretary's Report**

Correspondence In:

From Gordon VK3ABI, not renewing membership

From Scott VK3FSDH, not renewing membership

From Jeremy Glenn, advising of the passing of James Glenn VK3AIQ

From WIA re application for a Beacon Licence

From WIA re change of address

Moved VK3CFH / VK3ADE

Correspondence Out: Nil

Moved John AIG / Ted HHK - Carried

### **Treasurer's Report**

Moved FPOL / CFH – Carried

## **Other Reports**

### **From the committee meeting**

There had been a suggestion from a member that perhaps the club could buy a sheetmetal bender for the use of members homebrewing chassis and boxes etc. The members at the meeting thought that this would be of benefit to very few members, and that the cost of around \$700 was probably not justifiable.

The workshop needs to be tidied up, surplus items removed, the mower, fuel and other combustibles removed, perhaps to a shed or locker outside of the building.

The meeting adjourned to the workshop and there was much discussion about what should or shouldn't be done, the only real decision was that the ginpole should be on wall mounted brackets which would make access to the rear door much simpler and safer.

There is a leak in the roof of the clubhouse which needs to be repaired before we get too much wet weather.

### **Education – Craig CMC**

Craig is planning a foundation course for 28<sup>th</sup> and 29<sup>th</sup> of March – approximately 5 takers at this stage.

### **General Business**

John AIG will repaint the initial letters on the club sign at the front of the airport when he has some spare time, they are very pale and faded, and difficult to read.

Inter club Barbecue at Laanacoorie is on 1<sup>st</sup> March, as many as possible are encouraged to attend, Ballarat is responsible for bringing salads.

Ross Anderson from Ararat CFA had contacted the group with regard to providing assistance during emergencies, the thought was that this was a matter for WICEN.

The John Moyle Field Day contest is on March 14<sup>th</sup> and 15<sup>th</sup>.

Bob NBV will contact the Ballarat News with the intention of getting a regular notice in the club news pages.

Kevin VK3WN has found several interesting sites on the internet – a video on YouTube of a man making his own triodes, VK4DD on 2 metre sporadic E.

Bob NBV will order 10 new call books for members, and the club library from ARV, and will also enquire about the QEX CDs.

Meeting closed 2100, next meeting 28<sup>th</sup> February at 1930

*Disclaimer: While I have endeavoured to make these minutes an accurate record of the meeting, I may not necessarily have succeeded. If I have upset anyone by error or omission I apologise.*

**Doug Ellery**

**VK3FDRE**

**Secretary BARG**