Christmas Edition

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

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BARG NEWS









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



NEXT MEETING NO MEETING IN DECEMBER

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



CLUB INFORMATION

REPEATERS and BEACON

D—STAR

CALLSIGN:	MODE:	FREQUENCY:	TX OFFSET:	USER SETTINGS
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.

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 vk3kgl@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

Newsletter for December was going to be a couple of pages, until someone kept sending me email after email and that's how it grew to 8 pages.......

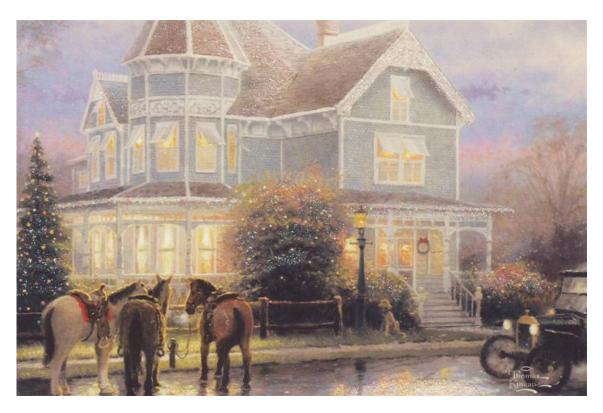
Don't forget for January next year.....

Don't forget Friday night BARG Dinner at clubrooms. Ladies bring salad or sweets

BARG Dining night January 16, 2009 at Market Hotel

Committee meeting Wednesday 21, 2009

Coffee morning at Beechworth Bakery Thursday January 26, 2009 at 10.30 am General meeting at Friday January 30, 2009



Wishing you a Merry Christmas And a New Year filled with happiness



Young BOB, vk3nbv

From our roving reporter

Some more images from Hamvention













Our annual Christmas Breakup will be held at our clubrooms on Friday December 12 at 6.30 pm.

Ladies could you please bring a salad or sweet?

Meat and bread rolls will be supplied.

We hope you can come along and enjoy the fellowship and get into the Christmas spirit .

Doug, vk3vba



QST Report with Craig, VK3CMC

Content review of current QST in library



QST Review 2008-11 Nov

P30	Anatomy of home brew. One microphone for two radios.
P33	Greening up your station. How to save on Energy.
P36	Modular Receiver for LF/VLF Bands. [0 –510Khz]
P40	All Weather Coax Bulkhead.
P43	Universal Keying Module.
P46	Product Review. Battery boost regulators.
P50	DSP speakers. Compares two manufactured systems.
P52	Tech Correspondence.
	Errata for Sep QST re Precision Rotator Display.
	Audio interface for Field day.
	Forget Restance, Reactance and Impedance and lets reuse
	Conductance, Susceptance & admittance.
P54	Overcoming Antenna Restrictions. Two examples.
P58	60M band operation in the USA.
P61	Frequency Measurement test 2008. Read your Mark from your Space.
P70	The Doctor is IN. Answers a range of interesting questions.
P72	Short Takes: Review. Antenna.us 70cm Satellite Antenna
P73	Wireless PTT Sw for Mobile Operation.
P76	DC distribution System made Uninterruptible.
P78	Some thoughts on Solar trackers.
P79	Shortakes – Transworld Adventurer Antenna. 20m-10m.
P80	Hands on Radio. Exp #70 Three Terminal Regulators.
P82	Hints & Kinks:
	SMD Holder uses magnetic clamp
	Make an Expanded scale voltmeter
	Hearing aid Headphones
	Add on Fan cooling for Power supplies with RTTY
P84	Ecletic Technology. Tracking trains on 900Mhz.
	D-Star TV data on 1200bps.
P95	Old Radio. Classic 1930 Transmitter – from QST Nov 1930
	See how Amateurs once made their Transmitters.
P100	Reviews QST for Nov 1933, Nov 1958 and Nov 1983.

Rest of magazine is filled with advertisements and ARRL club matters.

P101 Ham speak. Lists word bibliography used in this edition.

That's all for Nov 2008.

P158 Index to Advertisers

Craig. VK3CMC



Craig, vk3cmc

Craig's SAFETY MATTERS

Safety warning.

I have just been reading up on getting a High Power valve linear on air and a particular comment was found in the text which I think should be circulated for the safety of the operator. This article refers to the process and procedure to be adopted by anyone in carrying out any tests and adjustments to a high powered valve amplifier. The valve is the 4CX250 or similar and may have something like 2000Volts on its anode. Mention is made of a mnemonic to be used when handling a live transmitter with high powered linear.

"If you run high power, your power supply, particuarly the anode supply is lethal. Do not attempt any adjustments without switching off, isolating the supply, discharging the capacitors and earthing the anode supply."

S.I.D.E. which stands for;-

Switch off. Isolate supply. Discharge electrolytics. Earth the supply before touching anything.

In todays electronics there isnt as much conact with HV circuits but those who do still operate HV need to be reminded occasionally I believe.

Another good point to remember when working on live gear, especially voltages above say 50volts is to keep one hand behind the back or in a pocket while is the gear is alive.

73 Craig VK3CMC







Craig, vk3cmc

Craig's December DX Report.....

For the DX band reports.

Great things to report for this weekend. I was fortunate to go into shack around 1319K and hear the VK5RSE beacon coming in at 5/7 -5/9 so called on 144.1 to the west but no activity heard that way.

There was a slight splash on frequency so swung the beams to the East and heard Andrew VK3OE at very strong strength off back of his antenna working Bob ZL3TY. Bobs signal was only 4/2 when I first heard him and had some rapid QSB. I then called him and he responded with a 5/2 and we exchanged Locator numbers. I gave him a final 5/7. Also calling him was Kevin VK3WN but I gather they didn't make a two way exchange. There were others worked across Tasman earlier and I think the band closed shortly afterwards.

Also at this time I heard on 50.046 MHz, VK8RAS at Alice Springs coming in here at 5/9. The NZ TV channel 1 [50.75Mhz]was pinning my S meter at 5/9++ and I was listening to the sounds from the V8 motor racing. Tried calling CQ to the North but no responses heard.

Unfortunately I was not able to work any other ZL's or even stations up North from here and the opening had disapeared for me by 1352K.

Hopfully this is just a taste of the coming season.

73 Craig VK3CMC

From VK4DD [VK-VHF] ES report 7 Dec 2008

Sunday 7 December:

Wooow what a day full of Es on 2m....

2 excellent openings: one from VK5 to Far North VK4 - a 2.5 hours opening from VK2 and VK3 to the South Island of ZL.

The ZL opening was for for some of us a first to ZL, while others kept on adding more stations to their logs....While to path to ZL can also be Tropo, this opening was Es with Christchurch on the East side of the south Island also worked from VK.

The first opening supported even the smaller stations like Brian VK5BM/MM. He managed to work John VK4FNQ on a 5/8 vertical....

Good to see that the opening was in the weekend when most of us have the opportunity to be on the air. Here is how the day started:

Kevin VK4BKP a real got spotter of FM broadcast and TV was the first to saw it coming 06-Dec-08 22:36 VK4BKP >> VK5PJ in PF95MK on 144.1000 SSB 55 > QG48OV @ 1794.0km 211° My

First 2m E's for me this season thanks Peter. VK5PJ Reported: Kevin, totally unexpected for me, you broke the mute and gave me a huge surprise.....

Meanwhile John VK4FNQ also spotted video on 138.260 and started calling on 2m. And from than on the reports of new contacts kept coming for the next 3.5 hours...

06-Dec-08 23:01 VK5NY (PF94HS) >> VK4FNQ (QG39EX) up to 57 144.100

SSB thanks John for my first 2m Es this season.

06-Dec-08 23:27 VK5ACY >> VK4FNQ in QG39EX on 144.1000 SSB 59 > PF94GV @ 1838.0km 26.° And finally VK5PJ (PF95) also worked VK4FNQ (QG39).

The opening started to spread out and ...06-Dec-08 23:28 VK4BEG >> VK5ACY in PF94 on 144.1000 SSB 52 > QH22TQ @ 2091.0km 198°

06-Dec-08 23:47 VK5BC/MM >> VK4FNQ in QG39EX on 144.1200 SSB 59 > PF95TC @ 1777.0km 23.° (Brian using 5/8 vertical from a house boat).

06-Dec-08 23:57 VK5ZK >> VK4FP in QH30JO on 144.1000 SSB 52 > PF94JL @ 1951.0km 25.°

06-Dec-08 23:57 VK5ZK >> VK4FNQ in QG39EX on 144.1200 SSB 59 > PF94JL @ 1871.0km 25.°

The Opening to ZL and how it started: At 00:02 Z ZL3TY reported New Castle TV (QF57SC) on 138.2760 with 53 signals into RE57OM.

Soon after that VK2ZT got the first ZL in his log:07-Dec-08 00:13 VK2ZT >> ZL3OZ in RE55OO on 144.1000 SSB $59 > QF57WF @ 2114.0km 133^{\circ}$

07-Dec-08 00:18 VK2ZT Yep E's he is using a 3 element yagi fed with RG-6 and 200 watts , he is still calling 5/9 ...

Followed quickly by others ...07-Dec-08 00:16 VK2HN >> ZL3TY in RE57OM on 144.1000 SSB 57 QF55JK @ $1975.0 \text{km} \ 90^\circ$

Mean while VK4FNQ reported that the band was still open to VK5.

- 07-Dec-08 00:35 ZL3JT >> VK2BHO in QF55 on 144.1000 CW 539 > RE66GK @ 2110.0km 310°Tks John
- 07-Dec-08 00:36 ZL3JT Also VK2AH, VK2BXT, VK2BZE, VK2ZEJ
- 07-Dec-08 00:40 ZL3JT >> VK2APG in QF55DI on 144.1000 CW 539 > RE66GK @ 2155.0km 310°
- 07-Dec-08 00:47 ZL3NW worked VK2BHO, VK2BZE, VK2APG, VK2HN on 144.100
- 07-Dec-08 00:52 VK3OE >> ZL3TY in RE57OM on 144.1000 SSB 59 > QF22QC @ 2252.0km 111°
- 07-Dec-08 00:53 ZL3TY >> VK3ZYC in QF31NT on 144.1000 SSB 58 > RE57OM @ 2097.0km 275°
- 07-Dec-08 00:53 VK5PJ vk4fng still there on 144.10
- 07-Dec-08 00:54 VK2GKA >> ZL3JT on 144.1000 SSB 56 > QF55EN
- 07-Dec-08 00:55 VK3MIR >> ZL3TY in RE57OM on 144.1000 SSB 55 > QF22QD @ 2250.0km 111°
- 07-Dec-08 00:57 VK2GKA >> ZL3JT on 144.1000 CW 569 > QF55EN
- 07-Dec-08 01:00 VK5ACY >> VK4FNQ in QG39EX on 144.1200 SSB 59 > PF94GV @ 1838.0km 26.°
- 07-Dec-08 01:05 VK3KAI >> ZL3TY in RE57OM on 144.1000 SSB 55 > QF31FQ @ 2147.0km 110°
- 07-Dec-08 01:08 VK3HZ >> ZL3TY in RE57OM on 144.1000 SSB 57 > QF22NE @ 2275.0km 111°
- 07-Dec-08 01:09 VK3TPR >> ZL3TY in RE57OM on 144.1000 SSB 59 > QF22OD @ 2265.0km 111°
- 07-Dec-08 01:15 VK2GKA >> ZL3NW on 144.1000 CW 519 > OF55EN
- 07-Dec-08 01:15 ZL3JT >> VK2GKA in QF55EN on 144.1000 CW 539 > RE66GK @ 2161.0km 310°Wkd ZL3NW
- 07-Dec-08 01:19 ZL3TY >> VK3AMZ on 144.1000 SSB 57 > RE57OM Arie I have worked 20 VK3s worked on 2m
- 1 hour later .. the band was still open to ZL...
- 07-Dec-08 02:15 ZL3TY >> VK3BQJ on 144.1000 SSB 57 > RE57OM 0.0 Still open...
- 07-Dec-08 02:20 VK3OE >> ZL3TY in RE57OM on 144.1000 SSB 59 > QF22QC @ 2252.0km 111°
- 07-Dec-08 02:20 VK3CAT >> ZL3TY on 144.1000 SSB 56 > QF22MC 0.0
- 07-Dec-08 02:27 ZL3TY >> VK3CMC in QF12TE on 144.1000 SSB 52 > RE57OM @ 2390.0km 273°also VK3WN

07-Dec-08 02:28 ZL3TY VK3OE 59 now 144.1

Band closes to ZL after 2.5 hour Es opening!

73's and good Es

Ron VK4DD

Solutions for connecting you... Ballarat's fastest broadband Affordable Chatphone VolP phone service Great value cable television For commercial subscriptions call Heather James on 0427 007 893. For residential subscriptions call our Customer Service Centre on 1300 366 248. Terms and Conditions Standard Neighbourhood Cable Terms and Conditions apply, ¹ Speeds vary depending on a number of circumstances including network traffic, customer hardware, equipment and operating systems,download site traffic, download site bandwidth and size of file being downloaded.





Craig, vk3cmc

Craig's book review				
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RECENTLY ARRIVED BOOKS.

The club has just purchased the latest VHF/UHF Handbook by G8ATD for the ARRL. This book was purchased from the WIA book service. First published in 1997the second edition is definitely been upgraded since then bringing it into the 21st century. A glossy 302 pages with indexing the book should become a frequently borrowed one.

The chapters cover the following topics:

- 1. Intro to VHF/UHF
- 2. Getting started.
- 3 Propagation
- 4 Rx, Tx and Transceivers
- 5 Antennas and Transmission lines
- 6 Electro Magnetic Compatibility
- 7 Data Modes
- 8 Amateur Television
- 9 Satellite Communications
- 10 Repeaters
- 11 Test Eqpt, Methods & Accessories Appendix and Index

The editor has included design foils for the Printed Circuit Boards with the proviso that it isn't made to the exact size so beware that artwork IS NOT produced to the final size. You will need to scale to 1:1 before making boards or contact the individual authors for a ready to use board.

Make sure you get to borrow the new book if you have an interest in the subject area.

Another book recently purchased for the BARG library is the ARRL's ANTENNA COMPENDIUM Vol 6.

There is an accompanying CD-ROM associated with the book.

The CD has source files and aqn innovative propagation prediction program. There are input data files for different antennas for use with software programs like EZNEC, AO,NEC/WIRES and NEC2. The IBM-PC commercial programs ARE NOT supplied.

The book has 43 articles covering antennas from 160Metres through to 10Metres, Antenna modeling and computation programs, Multiband antennas and tower support tips. Tuners & transmission lines, Quad and vertical antennas. All this covers mainly High Frequency devices. Three further articles are for VHF/UHF antennas.

Good reading everyone.

Craig, vk3cmc