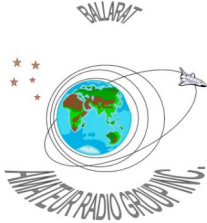


BARG News



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

VOLUME 34 ISSUE 3 March 2011



President: Craig Cook VK3CMC
Secretary: Doug Ellery VK3FDRE
Treasurer: Bill Wells VK3PAL

NEXT MEETING - FRIDAY March 25, 2011
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

BARG INC. LIFE MEMBERS

Gordon Cornell	VK3FGC
Norm D'Angri	VK3LBA
Harry Hekkema	VK3KGL
Kevin Hughes	VK3WN
Ian McDonald	VK3AXH
Phil Seddon	
Charlie Stewart	VK3DCS
Bob Terrill	VK3BNC

CLUB INFORMATION

REPEATERS and BEACON

VK3RWA*	(2 m Voice Repeater) (Uses CTCSS of 91.5 Hz to access)	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
VK3RBT	(2 m Voice Repeater) (Uses CTCSS of 91.5 Hz to access)	146.650 MHz	Green Hill

* IRLP Node 6310 using VK3RWA

CLUB e-mail vk3bml@barg.org.au.

CLUB NET VK3BML 3.608+/- QRM Thursday Nights at 8 pm E.S.T (Summer & Winter)

WIA Broadcast Sunday 11.00 am via VK3RWA (IRLP Node 6310)

NEWS ITEMS Send to Harry VK3KGL

Or mail to Box 1261 Mail Centre BALLARAT 3354 or e-mail membermember member.vk3kgl@barg.org.au

Broadcast Times and Dates on VK3RWA Repeater

Every Sunday at 11.00 am, WIA National News.

Every Monday night at 9.30 pm, ARRL News

Every Tuesday night at 9.30 pm, WIA National News Repeat



QST Report with Craig, VK3CMC

Content review of current QST in library

QST Review 2011-2 Feb.



What to find in this months edition.

- P4/5 Index this month.
- P9 Editorial. "A Good year to Upgrade" Even in Australia that sound like a good idea too.
- P30 New Transponder in orbit called ARISSat-1 . Article includes a simple description and band plan.
- P34 Simple four element yagi for 2M. Ideal for backpacking.
- P37 Compact 40M receiver
- P41 Build your own Signal Tracer test box.
- P45 Making better Homebrew traps from Coax.
- P49 Selecting the Best Coax cable for your next Antenna.
- P50 Flexible Audio limiter with shunt diode strings. A good project activity.
- P52 A 2Kwatt HF dummy load.
- P54 REVIEW: Ten Tec R4020 two band CW QRP Transceiver.
- P56 REVIEW: Mini Circuits USB Power sensor.
- P59 REVIEW: Upgrade a Bird 43 Wattmeter to Digital Display.
- P60 New Product: Large Cross needle SWR/Wattmeter by MFJ.
- P61 Doctor is In. Halo/Turnstile ant for 2M mobile, .Pacemakers and RF fields. Shorting inductors to band change transmitters.
- P63 Short Takes. MicroHAM DigiKeyer 2.
- P64 Hands on Radio. Exp 97. Programmable Frequency Reference.
- P66 Short akes looks at Solar panels & Charge controllers.
- P67 Hints & Kinks. Mobile logbooks, Batt pack repairs,EMI problems, Tune up TenTec 238B tuner, Gel cell maintenance.
- P70 Interested in Award Hunting?
- P72 Where in World is Marion Island.?
- P73 YI9PSE Iraq 2010 An Extreme adventure.
- P76 Simple Solar design for schools shack.
- P92 World above 50Mhz. Magic days on Long path on 50Mhz Part 2. Read about TPL/TEL [Long Path Extended]
- P96 Evolve or Die.! Looks at AR and evolving other mediums .
- P97 Eclectic Technology. WIN 7 Taking the plunge.
- P98 Vintage Radio. From the 1920's Joe W2BZM. Also good to read about the Old Timers.
- P102 Index to 75, 50 and 25 Years ago.

Hamspeak is no longer printed at the rear of the magazine but all technical terms used in articles are now included within each article. Still worth the time to read them.

73 Craig
VK3CMC
Feb 2011



Doug, VK3FDRE

The Secretary's Page

Minutes of the BARG General Meeting – 25th February 2011

Meeting opened at 1935 by President Craig VK3CMC

Attendance

Craig VK3CMC, Doug VK3FDRE, Bill VK3PAL and approximately 15 other members.

Apologies

VK3HHK, VK3CAZ, VK3BVI, VK3HRZ, K3FIVE, VK3DET.

Kathy VK3HRZ had also been an apology the previous month, but had not been recorded as such.

Minutes of the Previous

(January) general meeting had been distributed previously, they were passed, with minor amendments as being correct.

Moved Ian VK3CIS, Doug VK3VBA

Secretary's Report (Correspondence)

In:

From Neighborhood Cable – notification of direct debit, notification of impending name change.

From WIA – Invoice for call books.

From Wiltronics, invoice for repeater materials.

From Council – March rent notification.

From Australia Post – Post Office box renewal.

From ACMA – Invoice for Green Hill repeater licence.

From Council – Notification that grant money had been deposited.

January QST.

Out:

To Council – Seeking information on our 2010 grant payment.

General Business

At the March meeting we will have some members from GRES to visit, we will also have a guest speaker for the meeting.

There was some discussion regarding the Airport Open day on April 3rd, it was agreed that our best chance of attracting people to the club would be to have some form of display or activity at the Airport, and direct anyone who wanted to know more to the clubrooms, Craig collected names of some volunteers for the day.

Someone (I didn't record who, and don't remember) had been contacted regarding the possibility of providing communications for a mountain bike riding event at Avoca on 17th April, John VK3CFH and the person concerned were to ascertain what was required / feasible.

George Fowler memorial auction is on 29th May, get your treasures shined up and ready to sell on the big day.

Raffle was conducted, Charles VK3FCSC won both prizes, and shouldn't be allowed to enter for the next 6 months.

Ian VK3AXH has made a box to house the cavities for the Green Hill repeater, is having a bit of trouble getting the tuning right, but we have no doubt he will succeed.

Ian also has some PC boards for a 432MHz transverter that are available at no cost to anyone who wants one.

There had not been a great turnout to construction night, and very little in the way of actual construction – what do we need to do to encourage more members to come along, participate, and enjoy construction activities? Bob VK3BNC had brought along some ideas to the previous meeting but had very little feedback.

Craig VK3CMC has prepared a mowing roster for the next few months, 2 at a time for both safety and sanity reasons.

The Internet sub-committee is to meet and discuss to see if we can secure an adequate service at a lesser cost than we currently pay.

Craig VK3CMC had been contacted by someone interested in purchasing some of the D-Star gear. If we decide to sell we would first need to offer it to our own members as per club rules.

Steve VK3SE reported that he had heard someone, apparently an amateur, on 145.750, and 439.950 swearing and misusing the bands, not using a callsign, and hence not complying with regulations. This sort of behaviour reflects badly on the whole amateur community, we can only hope that the person concerned either tires of his stupid behaviour, or is caught and prosecuted.

There being no more business the meeting closed at 2052.

Following the meeting Craig VK3CMC gave a presentation including photos and newspaper clippings, about his early involvement with community radio as a foundation member of the Whitehorse FM Public Radio Station committee.

Whitehorse FM commenced full time operation in September 2001 after 10 years of test transmissions and red tape.

Next Meeting - 1930, Friday 25th March 2011.

Usual 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



Craig - VK3CMC

Presidents Report

Well another month catches up and we have to review our activities.

It would seem that things do not slow down when we retire and sit back. They just get faster and faster and we can either let them flow on or try and jump back on the roundabout. That's what this month has done for me anyhow. Trying to keep up with club activities and to attend to a myriad of jobs about the place has kept me very busy this month and On Air time has been at zero. I hope that you are all aware that the new club repeater VK3RBT [up on Green Hill] is now officially installed and operational. We would appreciate reports of its coverage both from base and mobile usage about town. The frequency is 146.650 negative offset and it has CTCSS tone of 91.5Hz to access it. Read QST for Mar and see the article on programming memories into radios when you set up the frequency. Reports so far indicate good signals but the through audio is a bit thin and lacking in the Bass area. This is apparently the normal quality setting of the commercial rigs in use and without major surgery is not user adjustable. Please try and use it as it's taken some time to get our own repeater back into Ballarat and surrounding district.

Club activities have been light on this month but we have a guest speaker, and a visit from members of the Geelong Radio & Electronics Society this Friday night. We will have also have a lecture demonstration for next month [April] and for May. I am hoping to also get Drew Diamond VK3XU back to talk and show some of his Low band radios as described in his book Volume 4, for later this year.

Remember the George Fowler annual auction is Sunday 29th May so start digging out some gear to donate to the auction. We will again have a soup and rolls lunch before the event. Mark the diary now.

Sat 14th May also we will be visiting the Geelong gaol and look at the historic radio collection on display there before retiring o a BBQ lunch at the GRES club rooms afterwards. Again mark the diary and please inform the committee if you are attending for catering purpose. Partners are most welcome to attend. Timing starts about 1030 at Geelong. We may have a bus available.

Finally anyone looking for an activity this Sunday (20th) may care to come to the Cape Clear recreation oval for the "Slow net Yacht race" and Craft market along with some games activities for the children.

This is a fundraiser activity for the local community committee which is raising monies for a water bore and fire tank at the oval. A number of yacht entries have been received and a multi prize raffle is also being run. Hope to see a few club members there between 1-4PM.

Ballarat airport open day on Sun 3 April, we hope to conduct a display and have the club rooms open. Some members have indicted their availability on the day and others are welcome to share the load. This is a great opportunity for a recruiting display for new members.

National Parks Awards

BARG recently received a notification in regard to the Keith Roget Memorial National Parks Awards (NPA). The details are set out at AR Vic's Website. <www.amateurradio.com.au>

Now the good stuff, some of our members have built portable antennas recently like the squid pole. There is the possibility of running with the NPA as a club and organising activity not only for our own club but interaction with other clubs and on a personal level. A BBQ at for instance Mt Franklin near Daylesford for some portable operations and perhaps engaging with another club like(GRES) who may decide to operate down in the Otways somewhere.

There is a potential to develop our own club awards along the lines of fostering firstly portable operations and also developing your own portable station equipment such as antennas, power supplies and interfacing equipment. Perhaps the recent floods up and down the country is a timely warning that our skills as emergency people and preparedness need some honing up.

Well in a nutshell there it is, let's take the gear we have built and give it a good test and at the same time have fun. I would be pleased to hear from any interested parties and kick this about. What can you do? Its simple get on the website have a look at the NPA and see how we could enjoy what it offers as a club and dovetail into this activity.

If you really want to get down to "making" things then there are such things as building your own low powered transmitters and really testing your operating skills. Working someone on something you have built, its easy and its simple. A hot soldering iron and your away!

This months "Lo-Key" has a good idea for mounting your "Squid Pole". This and other back copies are available from me if you are interested. OK kick this one about and drop the Editor a line with your comments please!

73's Bob. VK3BNC.

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Vale John Edward Brown VK3CJB.

1924- March 2011

John was born and raised in the Mother State and during the war years moved to Ballarat Airforce Radio School as an Instrument technician. His sporting passion was Hockey and in later times lawn bowls. After de-mobilisation John moved into Ballarat School of Mines as a Senior Technical Officer where he remained until his retirement

John had a great passion for music and in particular for singing. His strong tenor voice distinguished him at Royal South Street and he appeared in many local theatre productions.

His Radio exploits included manufacturing lots of antennas and it was his VK2ABQ beam that graced his home for many years. John enjoyed his radio and was an active member of BARG.

In later years John enjoyed going around Ballarat entertaining the “elderly” with his music. A great family man with a strong faith. He is survived by his wife Ruth and his three daughters, Caroline, Kay and Vicky to whom we extend our condolences.

We salute your memory as a friend and colleague, 73's

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http://www.ldgelectronics.com/assets/discontinued_manuals/Z-100Manual.pdf

Check out page 3 for specifications, page 4 with pictures and page 6 with pictures of installation.

Contact: Len, VK3BMY (Sunbury)

Tel: 97407761

Upcoming Dates for BARG members.

Sun 3 April	Open Day recruiting at Airport.
Mon 11 April	Construction activity.
Sun 17 April	WIA National Field day
Thur 14 April	10AM Coffee on Club.
Thur 21 April	10AM Beechworth Bakery
Mon 25 April	Anzac day
Fri 22 April	1830 Dine out night Yet to advised.
Fri 29 April	1830 Gen meeting. Speaker Ian VK3AXH. Demo.
Sat 14 May	Geelong . Visit gaol, radio display and BBQ lunch
Sun 29 May	1200 George Fowler auction and lunch.
Fri 29 July	Annual General Meeting.

For benefit of some !!! We have other dates for May which I didn't bother to add just yet, HOWEVER we do have a General club meeting on Friday the 27th May and we WILL have a guest lecturer who WILL be Bob vk3BNC talking on Radio Astronomy. He may even have hand outs and free samples to give away. !!!

Gordon VK3FGC is also looking for support at Damascus college on Wed/Thur 11/12 May.

I just havent bothered to do too many dates at this time as some find it overloading to the RAM cells.

73 Craig

The BARG go to the Royal Australian Signals museum at Watsonia.

On Tuesday the 8th March we travelled down to visit the museum and relive some early memories of some great radio equipments and also look at photos, maps, uniforms and any thing that was related to the Australian armies communications past.

Taking the mini bus down which was filled up we met three other members down there for what I believe was a most enjoyable day out.

The museum has been at Watsonia [Simpson Barracks] for about forty years since coming up from the old Balcombe camp on the Mornington peninsula where it was established just after WW2. It has been co sited with the armies School of Signals all that time, but unfortunately the military hasn't always taken a great interest in its own history so museums like this have been found lacking and generally only maintained and supported by volunteers .

It is only open to the public now on Tuesdays from 10AM to 3.30PM and found at Melways 20G7.

Although well represented with WW2 equipment and modern up to the recent RAVEN HF equipments it does have equipment dating back to before WW1. There are a couple of trench radios on display and of course the old semaphore flags and the Aldis signaling lamps.

Some of the equipment there that I have either used or owned and done repairs on were the famous AR7 [known there as the C1 receiver], PRC-10, PRC 26. The Plessey C42 VHF and the C11 HF units. They had a HRO receiver from which the idea for the Kingsley AR7 may have been borrowed with its five plug in coil boxes.

For the morse operators there were a wide range of keys both British and foreign design and the teleprinters included the Model 15, with a model 14 tape perforator and the 14TD tape reader unit. The museum has a large and extensive library which I only had a quick look at but there was a plethora of histories as well as technical references.

For the military historian there is enough to look at and read about the various soldiers who served with distinction, look at the medal collection along with different service dress displays.

The back room houses a diaorama display of the signals centre that was established in an underground water tank in the famous garrison town of Tobruk during WW2

Not only vehicle and manpack radios are displayed but the rear link equipment like that from the Rockbank and Diggers rest stations were displayed. This includes HF transmitters rated at 5KW that look exactly like the standard broadcast transmitters I remember from days in commercial radio. They also had a 500W unit that was just a bit too large to get in the bus for home. Would have made an ideal HF linear unit Old fashioned telephones, the Fuller, Freddy and type L with modern K phones and cables such as Don10

An assortment of the exchanges used by the military.

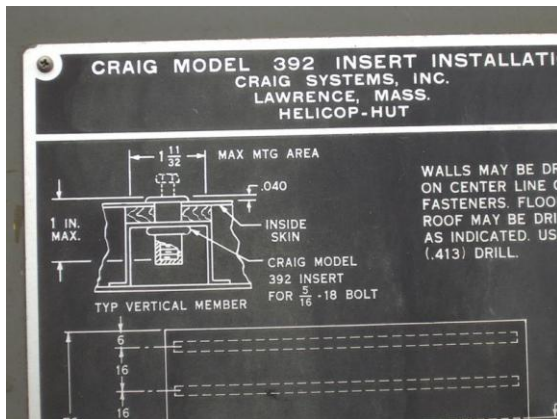
Outside the building is a couple of vehicles and trailers but one was a WW2 Blitz wagon which will one day be reequipped for set up for mobile radio

There are a couple of portable air liftable shelters which can be delivered on a truck or by helicopter and they would normally contain a complete radio link system or be set up as a forward signals centre. One shelter we looked in had housed a VHF/UHF radio link system that operated in four plug in band units between 50 to 600Mhz with a 24/48 channel telephone carrier system for the telephone service.

What a great day it was and there is still a lot more to be seen so I will go back again one day.

Perhaps others may care to make thr trip.

Contact museum manager Maj Jim Gordon VK3ZKK on 0407 264 961 or email him at jim.gordon@vicsig.net for an appointment



**Guess who has just hit 66yrs. Hutch VK3FHUT has cracked it.
He had "some" friends to lunch today.
Happy birthday Hutch.**