

BARG News



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

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President: John Kennedy VK3AIG
Secretary: Doug Ellery VK3FDRE
Treasurer: Roger De Valle VK3ADE

NEXT MEETING - FRIDAY January 25, 2013
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

We're on the web
www.barg.org.au

BARG INC. LIFE MEMBERS

Maurie Batt *	VK3FGC
Gordon Cornell	VK3LBA
Norm D'Angri	VK3KGL
Harry Hekkema	VK3WN
Kevin Hughes	VK3AXH
Ian McDonald	VK3AQM
Phil Seddon	VK3DCS
Charlie Stewart	VK3BNC
Bob Terrill	
Stan Widgery *	
Jim Wright *	

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 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

BA'S AUDIO WORKSHOP PTY. LTD. ABN 59 007 427 778
trading as

BALLARAT
AUTO SOUND SPECIALIST

and
Radio Communications Systems Specialists
Supply and Service

8 EASTWOOD ST., BALLARAT 3350
Tel. 5333 4465 Fax. 5331 5851

HEWITT & WHITTY Pty. Ltd.
Outdoor Power Equipment

Cnr Carrngham Road
& Wiltshire Lane
Ballarat VIC 3350

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Fax: (03) 5336 1027

Damien Hennessy

Sales / Spares

Mobile: 0417 313 811

Email: damo_611@hotmail.com



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**CHIPPER
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ep
Engineered
Products Group

KOHLERengines

COFFEE at the CLUB

(A Cuppa Tea is also available)



Join us for a Cuppa and a yarn or two on the
2nd and 4th Thursday of each month
(except January & December) at the Clubrooms.

We start at 10.30am and finish at about
11.30am, in time to get home for lunch.
**COME ALONG AND JOIN US IN A NIBBLE
AND A NATTER. (XYLs ARE WELCOME.)**



B.A.R.G Items for Loan.

Antenna Analyser MFJ269 HF-VHF-UHF

Antenna Analyser MFJ249 HF/VHF

UHF Antenna Analsyer

Antenna Analyser VHF. Autek.

Receiver Drake SSR-1.

Receiver FRG-7.

Transceiver TS-530.

Oscilloscope BWD 509.

Grid Dip Oscillator.

Safety Belt.

Antenna Gin Pole.



BARG VHF NET

VK3RBT 146.650Mhz FM

EVERY TUESDAY NIGHT at 8 pm.

Control Station, JOHN, VK3AIG

BARG HF NET

3.608 MHz +/- QRM

EVERY THURSDAY NIGHT at 8 pm E.S.T.

VK3BML



BARG CHRISTMAS BBQ DINNER

DECEMBER 14, 2012

Held at our clubrooms

All meats and onions supplied

Ladies bring plate salads or sweets

This is our last function for the year

DON'T MIS IT!



BARG FIELD DAY

November 25, 2012

Well the BARG Summer Field day activity is over and only five club members decided to go out from comfort of home and play at being a portable field station for a few hours. Two members opened up the clubrooms and operated VK3BML which gave bonus points, thanks John and Mal. Another two came up from home to pass out some extra contact points to field operators. Considering the weather conditions the day was very pleasant and suitable for a small jaunt into the sticks for a couple of hours of amateur radio operation. I set up my station on the back of a truck in a nearby paddock at Cape Clear which was situated at Lat -37.7901 Long 143.6364.

The station used was a Kenwood TS130S initially set up with 100Watts but reduced to 40W for most of the day. The antenna was a Half wave dipole [without a Balun] strung between two trees at 12 and 20 odd feet high. Antenna was aligned roughly on an East West bearing.

Power was from a Sealed lead acid battery and had two others for standby use but not required. Antenna was resonant and had only a minor SWR reading (1.2:1) so an ATU wasn't used.

Station was sited under a tarpaulin suspended from a tree and gear operated from a truck back parked underneath. The tarp was supported along one side by the tree and two guyed tent poles on the west side to allow for lowering as any bright or hot sun shined on the station. The temperature started around 18 C in the morning and rose to a max of 26 C at 1430hrs. It averaged 24C all day.

We experienced a very light breeze from the SW most of the day until the temp rose and we had a dry 30% RH.

Although the day was ideal weather wise and this was also the Summer VHF field day weekend I was a bit disappointed that we didn't have more BARG club members either out in the field or come up on air and give reports to others who were there. Apart from working the club station once [VK3BML] I could only work four other club members who were portable and the two home stations.

The rest of my contacts were either repeats to club members in the field every hour or the interstate stations heard on the band.

Band conditions didn't appear too bad although one station I worked had a high local noise and had difficulty in receiving me while he was armchair copy to us. I guess we did have an advantage with the nearest power line about 1Km away from the location.

WHAT CAN YOU DO TO OPERATE YOUR STATION IN THE FIELD?

I would encourage all members to reconsider the ease of portable or field day operations. While you do not need to take backup equipment for redundancy like I usually do it can be a very simple task to set up a station for field days. Generally the overriding consideration is the weather. Is it going to be too hot, the winds will be strong or even maybe it's too wet and I will be sitting in the cold wet and in the open air. Well that's a choice you must get over first, and then consider where you can operate from easily. Local parks are convenient for first timers and a car park at some local venue even for a few hours. You do not have to "bush bash" and go to mountain tops in the back blocks although they do give some advantages with height, suitable sky hooks to anchor antennas etc. and privacy if you do not want people around while you operate. Really though a public presence is good because you can pass on information about the hobby and maybe recruit new members to the fraternity.

ANTENNAS: An HF Antenna is really not a problem if you want to go portable because it's very easy and simple to construct a lightweight wire half wave dipole for the intended HF band i.e. 80 and 40 are the most common. If you want to operate VHF and above of course there are further things to be considered such as beams and microwave dishes and they do require some different thoughts as to how they are supported. This isn't my intention to look at just now.

A wire antenna is much simpler to use and deploy in the field generally and there have been innumerable articles and even at club level exercises to construct different wire antennas for portable and home use. The

simplest is probably the long wire and ended via an ATU. This implies a random length of wire and matching it to the transmitter through a suitable matching device. The club has made one of these and there are plenty of articles available should you choose to build one. If you run low power the tuning capacitors can be salvaged from old broadcast radios which are a good saving against high powered units. The other option is to purchase one but you would gain more knowledge if you had a go and built one yourself. This would be an ideal project for a Foundation licensee to start with and it's within their license capabilities.

Another option for portable/field day use is the Squid Pole antenna.

The popular squid pole can be used to support a light weight wire such as used by a long wire or even ends of a dipole. It can be the center support for an inverted V antenna which is just a dipole with the center feed at height and the two ends tapering down to a convenient height above the ground. Care with the gauge and weight of wire and feed coax's is needed but the pole usually does not need to be guyed and can free stand in most installations. You do need some mounting plate or a ground stake for the bottom section only. This can be attached to a cars bumper bar. This allows for an easy deployment in portable operations. The squid pole is also favoured by those out doing mountain topping activities as it collapses down to a convenient sized pole.

The other use of the squid pole antenna is as a support for a vertical radiator antenna. There is a popular version about now that many have built and can be used on multiple bands with use of simple loading coil construction. The BARG members did build some of these recently and its worthy of consideration now.

Another point worth noting about simple antenna usage is that good propagation has been obtained even by laying an antenna wire across the top of low shrubs and trees and will even work when laid on the ground. This is a technique used by the military and Emergency services when supporting structures are not available and alternate methods can be tried.

There are some who will reject this method but it's the same as saying a half wave dipole should be fed using a Balun. Technically that's true if you want symmetrical feed and no reflections along the feeder BUT provided the dipole is cut to resonance within the desired band it will load up and work well and quite effectively so without a balun out in the field.

OPERATIONAL COMFORT: If you are not able to set up a tent etc. for cover during a field day you could still operate from a car. Just set your radio on the front or back seat and operate from the car seat or open a door and leave the gear on the seat. Many Years ago I remember seeing an operator using a very large AR7 valve communications receiver and home built transmitter with all gear sitting in the boot of a Morris Major or Oxford car. The lid was up and the station jammed in the boot. The lid gave some form of shade to the operator. He sat on a camp stool at the bumper bar. Rough comport but we can do better today.

You need to decide on how to power your rig. If an older set that only allows mains voltage of 240V AC then you do need to have a generator system but there were and still are smaller 800-900W petrol units easily purchased from larger retailers You DO NOT need to run high power apart from ego seeking that you received a large 5/9+ report back while in the field. Modern sets now have a 12Volt access and even desk sets can be operated in a portable and even mobile sense. Check out what yours is and plan ahead. Ideally if you are going to pull current you shouldn't use the convenience of the cigarette lighter for the transmitter. Better still is a direct wired lead to the vehicle battery terminals and DO NOT rely on using the vehicles earthling for the negative lead. If not done properly its possible you could have MANY amps being drawn through your radio when the motor is being cranked over. Should you decide to just use the cars battery and connect with Alligator clamps to the battery DO NOT operate so long that you flatten the car battery and cannot start the car without assistance at end of day. It pays to carry a separate battery for radio use and leave the vehicle one alone. A very simple solution is the radio battery sitting on the ground and the radio in the front seat and you sitting on a camp stool using the seat as a desk.

LOGGING CONTACTS: Keep a good clock. I use an old bedside travel alarm although if you wish to log in 24hr mode a large digital clock would be better to use as the brain doesn't have to convert the numbers. Keep the log sheet down on a clipboard with some spare blanks underneath. Number pages consecutively. The BARG web site has an excellent sample and can be used for a number of activities. To keep records use should use a sharp medium lead pencil and keep a small sharpener or pocket knife to maintain the lead point. It is advisable to have a couple of pens handy along with a rubber eraser. Never use a biro as it's too hard to erase especially when in a hurry to record all information on the log.

I also believe a small note pad is handy in the shack at all times and you can write down other handy material that perhaps will not fit into a contest logbook but you may wish to retain for later use.

It's also handy to have the pen and pad when conducting a normal QSO for the same reason. I am amazed at the number of operators who say they can't remember the other stations name, or other vital information because they didn't write it down when they heard it mentioned. It also saves the many "say against" that you hear asked.

Once over the notes may be discarded or appropriate matters can be logged on. I know that amateurs are no longer required to keep a log book but what a pity it is historically that a station may not remember or be able to confirm a contact at a later time. Anyone chasing awards etc. would always use the log book as confirmation, especially when a QSL card comes along some years after the contact.

Well back to simplicity of field day operations. The last thing that we need to consider is refreshments and food for the operator.

If only running for few hours like the BARG field day activity you only need a small lunch or nibbles and a thermos with a hot drink or soup for the day. Should the weather be warm to very hot you should carry a small jerry can [food grade] of water and keep your hydration up during the day even if sitting all the time under the shade cover.

For anything longer than a day such as an overnight or two then a small stove and canned food should be stocked up. On our day activity I brewed up water for a hot drink and also carry sufficient water for me and any guests that may drop in. Usually a sandwich and cake or biscuits provides the meal and fillers for the day.

In closing I hope that this may encourage more people to attempt a portable deployment and participate in the next club activity or even one of the many other ones that do get aired in various magazines from time to time. While we have only considered a specific one band activity most competitions involve multi bands and the setup gets a bit more involved for VHF/UHF field days due to the types of antennas and the support masts that are used.

I hope this may generate some correspondence in the magazine or at the meetings and lead other members into "going field next time".

It would be good to see the club banner hanging from a camp site for a weekend activity like we used to some years back. An overnight camp out isn't that hard to do. Is it??

73, Craig
VK3KG

DON'T FORGET OUR BBQ DINNER - FRIDAY DECEMBER 14 - AT CLUBROOMS



DON'T MIS OUT ON A GOOD NIGHT!



QST Report with Craig, VK3KG

Content review of current QST in library

QST Review



Here are the **Technical articles** in this months copy.

QST Review 2012- 12 December.

- P4/5 Index this month.
- P9 Permanent Exam credit ?? FCC views.
- P12 In Brief small comments.
- P24 Letters from the ARRL members.
- P32 Delta Loop Colinears Antennas, If one loop is good then more is better.
- P35 Simple Digital Voice Keyer. Use your PC's sound card and save the voice.
- P37 PSK31 Operation on 2MetresFM.
- P39 REVIEW: Elecraft KX3 HF and 6Meter QRP transceiver.
- P45 Vert or Horizontal HF Antennas- What is best for you.? If to have only one antenna what do you choose.?
- P46 The Doctor What happens if you Twist and bend your Yagi.? Does the Polar response stay the same as predicted?
- P48 Short Takes, look at the Glowbug Kits AC-1 Junior Transmitter.
- P49 Hands on Radio Exp 119. The Q3Q Balun Redux.
- P51 New Books: Tubes and Circuits. For the "audiophile"
- P51 Feedback with a number of errata's from previous articles.
- P52 Eclectic Radio: Introduces new bits and pieces, ie
 - 1.Universal Digital radio UDR56K working on 70Cm.
 - 2.Droopy LEDS. The concept of failing output light with overvoltage.
 - 3.Tiny Vacuum tubes. Who said valves are dead?
- P53 Hints & Kinks. Taming Bugs[keyers], Make own air spaced coils with hair comb support. Use Ferrite choke to tune an 80M ant on 160Metres.
- P55 T32C Dxpediton to Kiritimati in 2011 nearly cancelled. www.T32C.com
- P90 Hows DX. Republic of Kosovo, Z6. Some history and revival.
- P92 World above 50Mhz. Acknowledges the passing of Ray VK3ATN, first VK to use EME on 2M back in 1967. Is Solar cycle24 finished ? Yes-No.
- P96 Gearing up for WARC-15. Will amateurs gain space in 5Mhz area?.
- P97 Vintage Radio, remembering the 1950's and kitset transmitters.
- P100 Index of QST 75,50 and 25 years ago.
- P164 QST Index of Advertisers.

Well that's the end for the years readings in QST. Remember that you can borrow copies them or make a copy of an article from them at the club meetings.

73, and have a Merry Christmas.

Craig VK3KG.

BARG ANNUAL CALENDAR 2013.

~ January 2013 ~						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 VHF Net 8pm	2	3 Club HF Net 8pm	4	5
6	7 Construction Night. What do we need for 10Ghz?	8 VHF Net 8pm	9	10 Club HF Net 8pm	11	12 WIA Summer VHF/UHF Field Days.
13 WIA Summer VHF/UHF Field Days!	14	15 VHF Net 8pm	16 Committee Meeting!	17 Club HF Net 8pm	18 BARG Dinner Night at the " Flying Horse "	19
20	21	22 VHF Net 8pm	23	24 Club HF Net 8pm	25 BARG General Meeting!	26
27	28	29 VHF Net 8pm	30	31 Club HF Net 8pm	Notes: Additions and corrections to Bob, VK3BNC please.	

More Calendars: [February](#), [March](#), [April](#)

Ross Hull Contest 1st – 31st January.

WANTED

Working VCR player for Club use.

MUST be in working condition.....

See or Email Craig, VK3KG