

# BARG NEWS



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

**VOLUME 30 ISSUE 5 May 2007**



President: Bob Pitcher VK3NBV  
Secretary: Ian McDonald VK3AXH  
Treasurer: Gordon Cornell VK3FGC

**NEXT MEETING - FRIDAY 25, 2007**  
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	VK3CFB
Norm D'Angri	VK3LBA
Phil Seddon	
Stan Widgery	SK

## CLUB INFORMATION

### REPEATERS and BEACON

VK3RBA	(Voice)	146.750 Mhz	Mt Buninyong
VK3RWA	(Voice)	147.100 Mhz	Mt Ben Nevis
VK3RPC	(Packet)	144.750 Mhz	Mt Warrenheip
VK3RBU	(Voice)	438.475 Mhz	Mt Hollowback
VK3RMB	(Beacon)	435.535 Mhz	Mt Buninyong
VK3RBU-1	(APRS)	145.175 Mhz	Mt Hollowback

**IRLP** Node 6310 using VK3RRWA

**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

### Broadcast Times and Dates on VK3RWA Repeater

Every Sunday at 10.30 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

## MOWING ROSTER



It is that time again when we publish the mowing roster for the Club rooms. The mower and fuel are at the rooms, but when the fuel is getting low please contact the committee to get a refill. Any new "mowers" will be fitted in.



## GEORGE FOWLER MEMORIAL AUCTION

Don't forget our annual George Fowler Memorial Auction on Sunday May 27, 2007.

Soup and rolls will be supplies starting at midday.

The Auction will commence at 1 pm by our auctioneer Bob, vk3bnc.

For people wanting to clean out your radio shack, bring in the goods.....

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## VISUAL BASIC COURSE

Presenter Roger, vk3ade

Dates for your diary.....

Course will commence on **Monday May 7, 2007 @ 1930hrs** followed by

**Monday May 28**  
**Monday June 4**  
**Monday June 18**  
**Monday July 16**  
**Monday July 30**

It is anticipated that the course will be completed by last date.

## A LOOP SKYWIRE ANTENNA

In June this year it will be two years since I made my way from Terang to Ballarat to sit for my Novice Exam at the BARG clubroom. Having completed the excellent course offered by the Ron Bertram's Radio & Electronics School I must admit to feeling some anxiety about the exam, however after meeting Charlie VK3 DCS & Doug VK3 VBA I soon felt relaxed and worked my way through the paper and achieved a pass.

My special thanks to Charlie and Doug. ACMA allocated VK3HGA as my call.

Of course like all of us I was keen to get on the air and set up an Off Centre Fed Dipole antenna which with my Kenwood 2000 gave some good results. It wasn't long before I was talking to other amateurs about all the different types of antennas and how they would perform on the various frequencies which I was permitted to use under what was now a Standard licence.

Towers seemed to be the go, but after talking to Charlie at the Club's Christmas function about the wire antennas he had used I thought I should explore the dipoles further. Having talked with Alan VK3HGN about his German Quad it looked like a trip to Dadswell's Bridge was a must, with my son Ian VK3JAP we headed to Alan's QTH.

After a lot of discussion and looking at his antennas we were convinced that a large wire antenna was worth while looking into especially as we live on a small farm and have plenty of room. These thoughts were firmed up after many more discussions and emails with Andy VK5LA. Next we set about getting the poles needed (ex SEC) to enable the antenna to be constructed as a Loop Skywire from the ARRL plan.

The four poles are set out in a rectangle 160 ft apart with an orientation of NW to SE, these directions were suggested as being desirable considering our geographic location. The wire is a continuous length 559ft or 170.18 metres of copper running through china electric fence insulators at each pole. The insulators are attached to a Dacron rope halyard which in turn is fed through a stainless steel block and sheave which are fixed to the pole approximately 36ft above ground level. This arrangement enables the complete antenna to be lowered to the ground for maintenance or adjustment without the need for a cherry picker.

The feed point is about 8ft from one corner where it then runs to the fascia on our house and becomes a 600ohm open wire feed for 50 metres then into a 4 to1 balun and RG213 coax through the roof to the shack.

Andy VK5LA made the following comment which I must say got me going on the project as something for nothing always has great appeal to me "If I tune up the 160m wire on 80M I will get gain (something for nothing) the 160 m antenna becomes "2 half waves in-phase on 80M....tune up on 40M and Whoa...lots of gain."

Neither my son or I could believe how many stations we were hearing when we first changed over from the OCF dipole to the Loop Skywire, just amazing.

I have worked over 30 countries to date with many QSO's giving me a report of 5 X7 and often 5X9. 20,40 and 80 have all given encouraging results however to date 20M has been the best for DX

At 74, I am thrilled to have found a new hobby with such a great bunch of friendly and helpful people to ask for advice or just have a yarn with.

73's Alan Gilchrist, Terang

## Loop Skywire Cont.



Up path way we set up the feed line to the house.



The antenna set up in the paddock next to the house

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**DON'T FORGET GEORGE FOWLER MEMORIAL AUCTION, May 25 IN CLUBROOMS**



VK3AXH

## The Secretary's Page

### Minutes of BARG General Meeting April 2007

Meeting opened by VK3NBV 7:38

Visitors: Stuart Lee and Scott Hamilton

Apologies: VK3CFH, VK3CAZ, VK3ADE, VK3SE, VK3DET, VK3WL, VK3HHJ, VK3HHK, VK3HRZ, VK3CMC

Minutes of the previous General Meeting as circulated.

Business Arising – No Action re gas pipe and Silent Key Board

Moved VK3GND/VK3KQB Carried

Secretary :

Correspondence: Acknowledgement from Rotary re raffle tickets, Ack from Uniting Care re donation, Account Les Rodd for club room key, Note that Ted VK3NIZ had passed away.

Motion: Letter of thanks to Norm VK3LBA for his work on the Silent Key Board.

Letter to family of Ted VK3NIZ

Moved VK3BNC/VK3BEB Carried

Treasurer: Current balance is \$7230.28

Moved VK3FGC/VK3KGL Carried

### Reports:

#### Radio Modernization Project

VK3UR reports that VK3ADE/VK3TJW currently organizing computer facilities in the Radio Operating room. Assembly of the new rotatable dipole and 3 element beam still be done.

Education: 9 candidates will undertake training and exams on May 5/6 at the club rooms.

#### Technical Group:

VK3ADE has the 70cm beacon and is planning a rebuild. An inspection of the antenna indicates all is ok but some tests need to be done. Vk3TJW to look into the new for the VK3RWA repeater.

#### Computer Course:

Vk3ADE now has approx 9 starters for the visual basic course that will commence on May 28 and run for around 5 sessions.

#### Construction Group:

We now have around 15 building the HF dummy load project with a few already completed

#### Geelong Trip:

The trip to the Geelong Radio and Electronics Society was well attended. There were 10 BARG members that were shown a great range of radio equipment from the past together with an excellent workshop and classroom facilities. All reported a great evening and excellent supper was provided.

Amenities: VK3VBA purchased a keyboard lock holder to allow members to come and use club facilities removing the need to have more keys cut. This device will be installed shortly and the code distributed to members.

Wicen: VK3FGC reported the Mars Challenge went well with good support five BARG members. VK3FGC/VK3CMC/VK3NBV/VK3CFH and VK3DMK.

### **General Business**

Damascus College: BARG members VK3FGC, VK3AIG/ VK3VBA and VK3AXH will give talks to students on Amateur Radio.

George Fowler auction to be held on Sunday 27<sup>th</sup> May. Bob VK3BNC will be auctioneer and Harry VK3KGL the collector of monies

Equipment disposal: A tent, TH3 beam both no longer required by the club Is referred to the committee to determine method of disposal.

The issue of membership badges was raised. Brian VK3KQB is yet to receive A badge along with a few other members. There was a suggestion to change the style of badge which has been referred to the committee for decision.

Membership list to be made available. The method of distribution is to be determined by the committee.

Kevin VK3WN reported on the Kyneton Hamfest run by AR Victoria. About 600 attended at it was felt the event went well. Kevin also came away with the major door prize and Dean VK3HHJ also received a nice antenna.

Bus to Moorabbin Hamfest on May 12. So far VK3TJW, VK3ADX, VK3DCS VK3AIG, VK3BVI, VK3VBA, VK3NBV and possibly VK3AXH have indicated They will be attending. Numbers need to increase to make the bus viable

Meeting closed 8:40pm

## QST Review 2007 May.

This months magazine has :

- P28 Simple beam for Power line noise hunting using flexible tape measure elements.
- P32 Using Hydrogen to Fuel up for the future.
- P34 Five band rotary dipole for the HF bands while portable. Simple “do it yourself”.
- P37 PIC prototype boarding Part 1. A series.
- P43 Dayton 2007. 500 exhibit booths, 2000 flea market spaces. Wow that’s a beauty.
- P 44 Amateurs towers – Should it be a right or privilege. See what USA has empowered in their “Covenants, Conditions & Restrictions” Legislation. PRB-1. What about us.
- P 51 The “Doctor” discusses various topics: How to tune an older transceiver with “Plate tune and Load “ controls. Also where do I put the SWR meter on a G5RV antenna with an ATU in the line.
- P53 Short Takes looks at USB Interface to tie log program to radio band changing systems.
- P54 Explore USB to CI-V Interfaces. IC 706 users and others may care to read this one.
- P56 CW no longer mandatory but many are still using and want to use it. Why?
- P57 Hands on Radio looks at Exp 52 SWR Meters. Perhaps we all should read this one.
- P59 Grid Squares, the importance of being “SQUARE”.
- P61 Hints & Kinks. Shift ant resonance using a coax stub.
- P63 Computer Sound Cards for Amateur Radio.

Of course there are the other pages full with ARRL and club news, competitions, emergency services and those many pages of advertisements and reviews.

73 for this months review.  
Craig VK3CMC

### New Foundation licences

I am pleased to announce that the BARG conducted a weekend course for the Foundation licence and had seven people attending from an original group of ten names. Short presentations were carried out on the Saturday with some practical hands on with equipment and voice procedures. The second saw two more presentations and then more practical activities with the radios. After a lunch break the group sat the paper and proceeded to attempt the practical assessment tasks. I wish to thank two other WIA examiners for assisting and make the day run smoothly. John Weir VK3ZRV came from the Melbourne NERGS and John Collins VK3JCC up from the Geelong GRES to assist on the Sunday. Other club members who gave their support to present the training sessions were Ian VK3AXH, Kevin VK3WN, John VK3AIG and David VK3UR. Doug VK3VBA Bob VK3NBV and Bob VK3BNC helped to conduct the practical sessions as well. A special thanks to Bob Terrill also for helping to clean up the rooms afterwards and sort out the documentation.

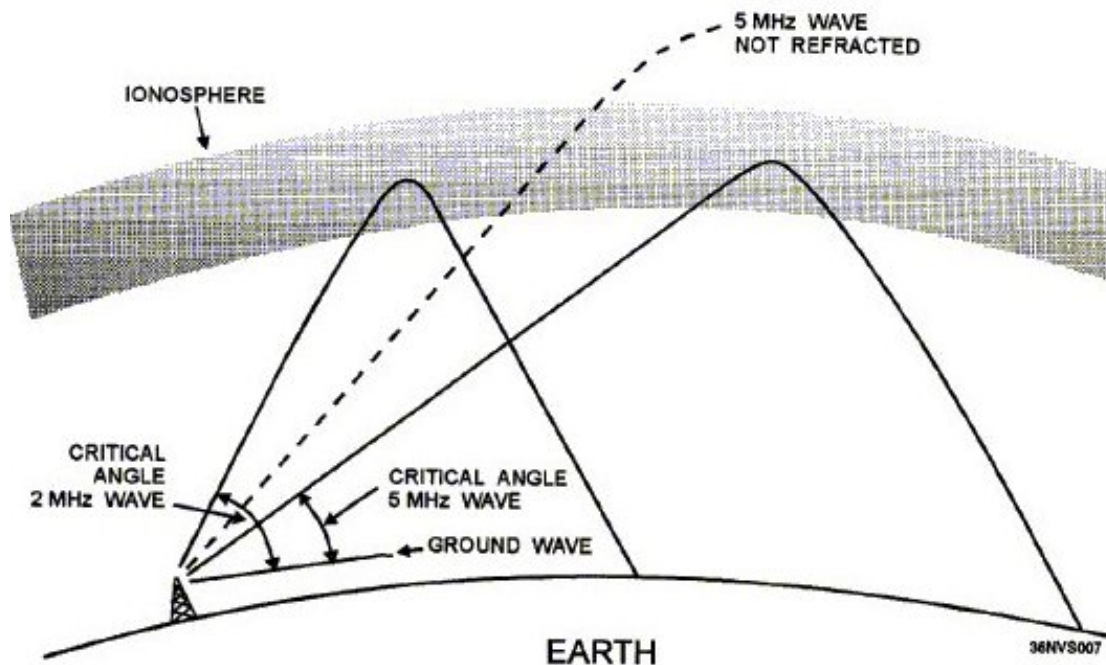
I would like to welcome seven new members into the amateur radio fraternity as a result of this weekends activity and look forward to hearing their new call signs on the air in the very near future. Look out for their faces at the next meeting and make them welcome. The successful people are Scott Hamilton, Ivan McCallum, Rick Taylor, James Lutjohn, Peter Pollard, Douglas McRae and Stuart Lee.

The club will conduct another Foundation course on 4/5 August and there are already three names down on the list so if you know of someone who wants to sit for their Foundation licence then contact me.

73 Craig Cook  
VK3CMC

03 5342 2448      [VK3CMC@BARG.org.au](mailto:VK3CMC@BARG.org.au)





## Propagation Report for May 2007

### HF Bands

Although I have not received any written info from a club member I am aware that Neil Vk3GND has been pruning his 160 metre dipole to get the SWR down so he can work all that DX. Neil has indicated so far working several stations in VK and across the Tasman to ZL.

Brian Vk3KQB is also working towards completing his 160 metre vertical and has to dig a trench to get the feed coax back to his shack so it won't be too long before a sharp increase in activity on the band.

Another regular on 160m is John Vk3AIG and with his new linear about to be commissioned signals will be loud around Ballarat.

### VHF Bands

Most of the month has been quiet except for about 4 days when there was excellent opening on 2 metres, 70cm and 1296MHz with local stations getting amongst the DX within VK3, VK2, VK5 and VK7. Stations known to be active were Vk3WN, VK3GND, VK3CMC and VK3AXH.

Kevin Vk3WN also reports an opening on 6 metres to Vk4 and VK2 but has been fairly poor overall.

### Construction Group

Its been great to see the numbers attending this activity and several bringing along projects under construction. The main project of building the HF dummy load is progressing well. Brian Vk3KQB kindly made up around 15 kits to make up a constant current battery charger for use in car which will be very useful for those with hand held radio's. Roger VK3ADE suggested we look at a site on the web call "fox delta" where there a many relatively low priced kits available that may be suitable for our group so have a look at let us know what your interest is.

Till next time 73 de Vk3AXH



Bob, VK3NBV

## A few words from the President.....

Welcome to the end of May, (nearly anyhow).

Things seem to have been quite busy in the Ham world over the past month or so. We've been to 3 hamfests, EMDRC, Central Vic and Moorabbin and they were all great. Thanks to Doug VK3VBA for organizing the bus for these trips. The social part of these trips is great, not to mention the food stop so we don't all die of starvation!!!

Of course we all find the odd bargain as well, and some of us even pay for things and then leave them behind. Bet that hurt just a little "Doug".

We also made our annual visit to GRES in Geelong who put on a great evening and even more food.

Also a couple of weekends ago, Craig VK3CMC and his merry band of examiners and helpers ran training for the Foundation License.

The pass rate was a 100%. There are now 7 new Fcalls in the Amateur ranks.

Special thanks to John Collins and John Weir who came up to assist Craig with the assessments, This an area we need an extra one or two examiners in the club. Thanks to all that helped out over the weekend.

The Construction Group is going along well with most finished their "Dummy Loads".

By the time you read this the Dining Night should have taken place and enjoyed by all. I believe the previous one at the Buninyong Golf Club was one of the best.

Hey, if anybody is wondering about how nice and tidy the grounds look at the clubrooms, Bob 3BNC got a rush of blood to the head, and that's the result, Great Job..

A new locking system has been installed at the clubrooms that will enable all members' access, this will be explained at the next meeting on Friday 25<sup>th</sup> of May at 7.30pm. Once this system is understood we will be asking for all keys to be returned.

Tower Mods are nearing completion, galvanized and all, as soon as that's ready to go up,. We have 2 new antennas to sit on top and our radio modernization project will be closer to reality.

Also going ahead at the moment is the new 70cm beacon and possibly an even higher frequency one may also be added. More at the meeting.....

Ben Nevis Repeater hasn't been forgotten either!!!

I'd like to take this opportunity to wish Ted 3HHK our wishes for a quick recovery in Bendigo...

Our next major function is The George Fowler Memorial Auction to be held next Sunday the 27<sup>th</sup>.

Now we want you to bring along some preloved gear to be auctioned by Bob, BNC, and some money with you to buy some more requirements. This of course helps BARGS funds and keeps our subs reasonable.

Now this is a function that you bring the Missus, Wife, Girlfriend, Boyfriend, Husband etc, but Do Not Let Them Meet, or you are in trouble !!!

We also ask those that can, Bring along a pot of soup to be shared by all. The club will be supplying Bread Rolls, tea, coffee etc.

Eating takes place at 12.00Midday. Auction from 1.00pm.

Well, that's it from me this month, may we all enjoy the coming winter, and hope it rains,

73's Bob Pitcher. Vk3NBV

## BARG 70 cm Beacon (VK3RMB)

Hi folks

I have taken the cover off the beacon and photographed the internals.

The exciter is the old ATV exciter from the 70's, the board was laid out by Les Jenkins.

The FSK is generated by a varactor across a 56pf to GND at the base of the crystal. The switching voltage is directly from a CMOS keyer adjacent to the exciter.

Output is around 10 Watts via a Motorola hybrid, there is a token filter on the output, we could probably do with a cavity filter on the output.

The unit was built in 1978 so it is coming up to 29 or 30 years old, not too bad an effort. I am sure it would have many years left but we may struggle to get it stable and free of chirp.

I am thinking it may time to upgrade the exciter with one from Hamtronics in US, synthesised, very stable and extremely clean. You can have a look at them on [www.hamtronics.com](http://www.hamtronics.com) This unit will work pretty much out of the box as an AFSK exciter and would probably cost around \$280AUD landed.

I am happy to supply a new controller, and repack the beacon with a little more isolation between the modules but would require the club to supply the exciter, given it is nearly 30 years old it may be a good time to start afresh. Failing that, with a little/lot of effort we can probably get a few more years out of the current unit.

Please let me know what you think we should do, fresh start (almost fresh, we would reuse the amplifier with and external cavity) or restore the current one.

FYI, the unit was built in 1978 by David Burger VK3BID, Les Jenkins VK3ZBJ, Lachlan Mc Donald VK3YHA/NIU, the original call sign was VK3RPX, the location was at the Electrical Engineering Department of the Ballarat CAE.

Regards

Roger VK3ADE

