

BARG News



Official Newsletter of the Ballarat Amateur Radio Group Inc. # 6953T

ABN 44 247 200 143

VOLUME 32 ISSUE 5 May 2009



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

NEXT MEETING - FRIDAY May 29, 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



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

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) (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

* **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 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 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

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I was having trouble with my computer. So I called Eric, the 11 year old next door, whose bedroom looks like Mission Control and asked him to come over. Eric clicked a couple of buttons and solved the problem. As he was walking away, I called after him, 'So, what was wrong? He replied, 'It was an ID ten T error.' I didn't want to appear stupid, but nonetheless inquired, 'An, ID ten T error? What's that? In case I need to fix it again.' Eric grinned.... 'Haven't you ever heard of an ID ten T error before? 'No,' I replied. 'Write it down,' he said, 'and I think you'll figure it out.' So I wrote down: I D 1 0 T
I used to like Eric, the little bastard ...
Craig, vk3cmc

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Anything FOR SALE or WANTED???

Why not send it to the Editor to be included in the next Newsletter.

Send to: Newsletter, BOX 1261, Mail Centre, Ballarat, 3354.

or

vk3kgl@barg.org.au

Next DEADLINE for articles is the 20th of June!!!



QST Report with Craig, VK3CMC

Content review of current QST in library

QST Review 2009 – 5 May



May

- P30 Troubleshooting Radios. Learn to check for faults yourself.
- P33 New Products.
 - 1. Digital SWR/Wattmeter from MFJ.
 - 2. Call sign display in stained glass.
 - 3. G9PUT Logbook Project.
 - 4. MFJ Dual channel speech enhancer.
- P34 See your mobile controls at night using Super bright LED's.
- P37 Install the shack in a SUV and fix the noise.
- P40 A Cell Phone Headset adapter for Amateur Radio.
- P43 What's the best Height for my HF Beam?
- P45 Build a Docking station for your handheld.
- P49 Product Review: Kenwood RC-D710 Control Head/TNC.
- P52 Review: Portable Dual Lever Keyer Paddles.
- P55 QEX Magazine contents for Mar/Apr 2009 issue.
- P55 Feedback articles in Apr 2009 and Oct 2008 editions.
- P56 Technical Correspondence. Over clocking or Burning out the transmitter finals.
- P58 The Doctor. Answers Q about antennas, Tropo propagation, Baluns and balanced ladder lines.
- P60 Short Takes. Ham Station Ultra.
 - www.griffintechology.com/products/powermates**
- P61 Getting on Air. Quick look at Radio Frequency Interference.
- P63 Hands on Radio Exp #76. Diode Junctions.
- P65 Hints & Kinks. PSK31 for Audio monitoring.
 - Ground mounted Lightning arrestor. CQ Ringtone.
 - Increase Relay voltage handling capacity.
 - PVC Antenna support and Rubber "gripper" pads to prevent equipment slide.
- P67 Another Garriott is in the ISS again.
- P69 Bicycle Mobile Radio.
- P72 Repeaters and the Conversation Carousel. Listen before jumping in.
- P73 Happenings. FCC Counsel visits the ARRL.
- P76 Emergency Communication. Message form handling.
- P87 How's DX? DX Cluster use.
- P89 World above 50Mhz. Distance scoring.
- P92 Eclectic Technology. Market place of Digital Modes.
- P93 Vintage Radio. Everet Sutton 7DJ, Port Angeles, Washington.
- P95 Micro wavelengths. Microwave Transverters- System Design.
- P100 QST Content Reviews, May 1934. May 1959, May 1984.
- P101 Ham speak. Glossary of terms in this months magazine.
- P128 Web site of Dealers at Dayton Hamvention. Useful list.
- P162 Ham ads.
- P164 QST List of Advertisers. A new feature.

That's all for May 2009.



QST Report with Craig, VK3CMC

Content review of current QST in library

QST Review 2009 – 2 Feb



Feb.

- P30 Design & Building a Transistor linear power amplifier. PART 1. Design.
- P34 Keeping Current with Antenna Performance. SWR and RF ammeters.
- P 37 The BEAST. An easy assembly SMD table.
- P41 Better way Low Earth Orbit {LEO} FM Satellites.
- P44 Review: Telepost LP-PAN Software Defined IQ Pan adaptor.
- P47 Review: DV Dongle D-STAR Adapter.
- P49 Review: Three more battery powered soldering tools.
- P51 Homeowners Insurance and your Antenna System.
- P53 Correction. Hands on Radio [Jan 2009, pp76-77] See correct table 3.
- P54 Amateur Radio and Public Education.
- P56 Log It. Good reasons to keep a log book.
- P58 A Lost DIT of Vibroplex History.
- P64 In Brief: [1] FCC calls on Amateur radio service for Assistance
With Digital TV Conversion.
[2] Canadian Amateurs receive 500kHz Privileges.
- P67 The DOCTOR is in. Answers about antenna, Neutralising in valve PA's
Station grounds and remote control sites for Repeaters.
- P69 Short Takes. Weather Direct units. www.lacrossetechnology.com
- P70 Automatic Fan Control for HF Amplifiers.
- P73 Hands on Radio. Exp #73. Choosing an Op Amp.
- P76 Build a Battery in Box. Portable go-kit station system.
- P78 Hints and Kinks. Collection of peoples ideas.
- P83 Worked all states: Single Rover. USA
- P86 New Products.
- P90 How's DX. Around the Globe.
- P92 World above 50Mhz.
- P95 Eclectic Technology. Rethinking on APRS. Cold Solder joints.
- P96 Vintage Radio. Homebrewed HBR Receiver by Ted Crosby W6TC.
- P102 QST Review from Feb 1934, Feb 1959, Feb 1984.
- P103. Ham speak. Glossary of terms used in this edition.

That's all for Feb 2009.

- P100 QST Reviews for January of 1934, 1959 and 1984.
- P101 Ham speak. Glossary of terms used in this edition.

Adds, adds adds and more adds.

Craig.
VK3CMC



George Fowler Memorial Auction



**The Inaugural “George Fowler Memorial Auction”
Will take place on Sunday 30th of May
At the clubrooms.....**

**Come along and enjoy this great day
DON'T FORGET your junk....
Soups and bread rolls supplied for lunch**

Have you heard???

**The BARG Hamvention will be held at a new location...
At the Ballarat Greyhound Racing Club
Located at the corner of Rubicon and Sutton Streets Ballarat.
(next to the Trotting Track)**

A 'NEIGHBOURPROOF' (OR NEARLY) BATTERY CHARGER

Are you 'cheesed off' with lending your 5A battery charger to a neighbour and finding, after its devious return path (or should that be 'long path') via his XYL to your XYL, that it doesn't function due to his having shorted the output leads together whilst it was turned on?

When you rebuild it, modify the circuit to that shown below and even if the leads are shorted the charger will just pass the predetermined current and not 'blow up'. Also if you have to charge a 6V or 8V battery it will limit the current to this set maximum value irrespective of the battery voltage.

One thing though! Mount the 2N3055 on a decent size heatsink and if you feel that the charger is going to be 'abused' fit flag type heat sinks to the BD139's.

The value of 0.12 ohms will give a maximum current of 5A assuming your transformer and rectifier can supply that much. To vary the desired current charge rate then just decide what the maximum current is to be and, using Ohms Law, calculate the value of R2 assuming 0.6 volts across R2.

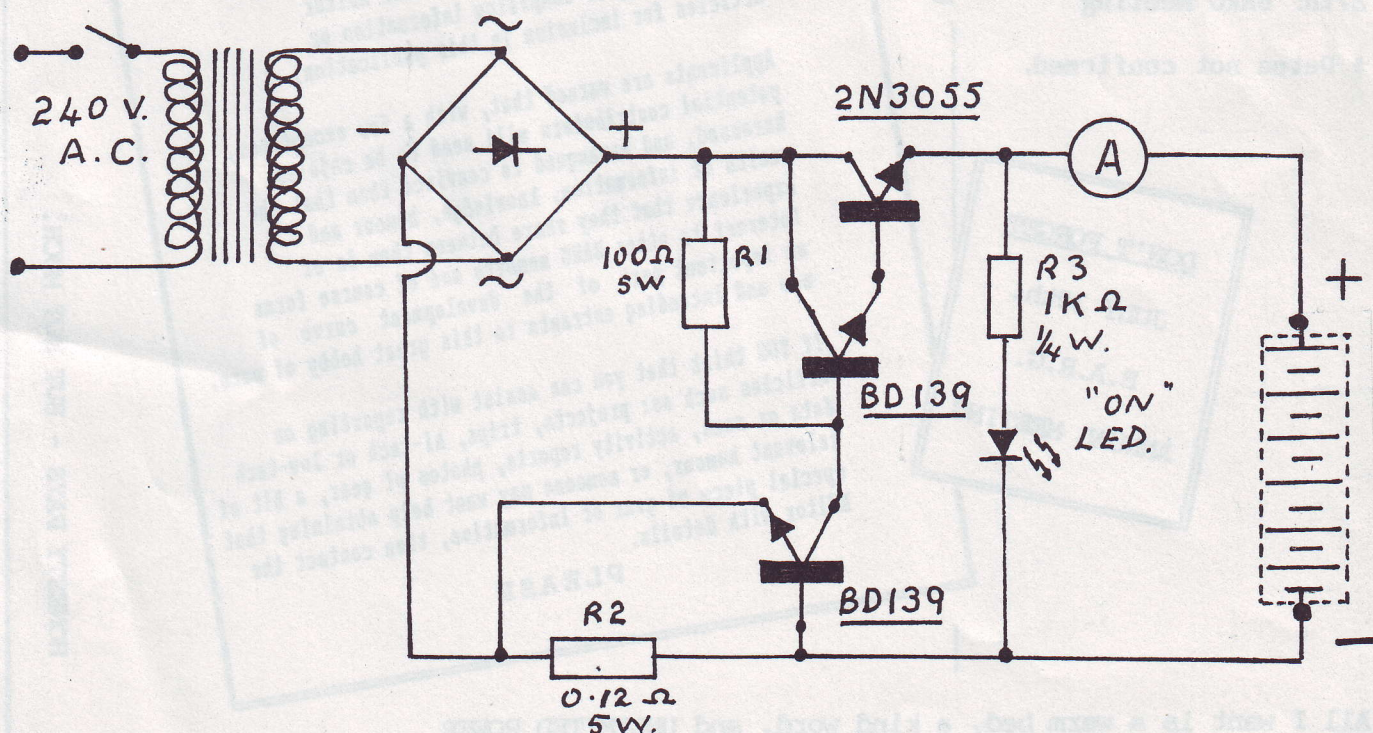
So if you want a maximum current of say 3 Amps then $R2$ becomes $0.6V/3A = 0.2$ ohms. which you can make up from combinations of resistors.

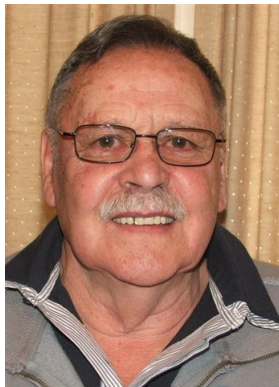
Remember to rate the power dissipation of both $R1$ and $R2$ highly enough to avoid problems. If you use 5 watt values that will be safe enough.

There are so few components that you don't need a PCB. A couple of 'tag strips' are enough and most components can hang in mid-air.

For 5A a value of 0.12 ohm can be obtained by a parallel combination of 0.22 and 0.27 ohms. For 3A the values will be 0.22 and 4.7 ohms. Other combinations can be worked out to suit the junkbox or catalogue.

73 - REG (VK3CAZ)





Doug, VK3VBA

Presidents Report

I said it last month that the year was flying by well like it or not here I am saying it again, the winter chills are creeping upon us.

This means its time to not only think about our AGM but time to do something about it, on my wish list I would love to see more members getting involved in executive positions new members equals new ideas.

As we all realize our committee and other positions in our group are the same old faces those old faces are more than willing to help new members into these positions, I would like to see some of our F call members involved or new members in general ok enough said.

A group of 10 members travelled by bus to the MDRC hamvention a great day was had by all and one member fulfilled a life time ambition and at the same time created a milestone by not only entering a McDonalds store but spending \$1-00 on frys I cannot disclose his name because of privacy laws Ssshhh BVI mmmmm!!

Seeing its dob in time who was the member at the h/vention that purchased a 2 mtr radio to find out when he got home it was a dual bander mmmmm!

A good response for CTSS boards at the construction night last count in excess of 30 boards ordered.

We are still looking for an avenue to hire trestle tables for our h/vention so put your thinking caps on.

Our next meeting we will have a guest speaker who is a registered firearm dealer and his presentation will be based around Browning firearms.

Also don't forget our George Fowler action on the Sunday after our last meeting 31st of May, we are looking for items to be auctioned.

Two old radio hams sitting in the park

One said to the other me missis said what are you doing

He said nuthin

She said that's what you were doing yesterday

He said i haven't finished doing it yet

That's all from me for now travel safely.

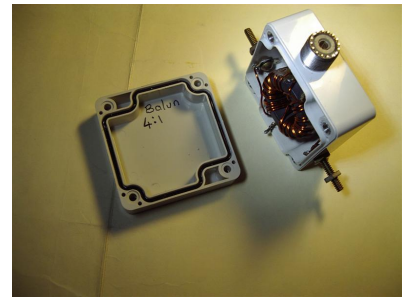
Doug vk3vba

v



Antennas with Craig, VK3CMC

OCD Antenna balun



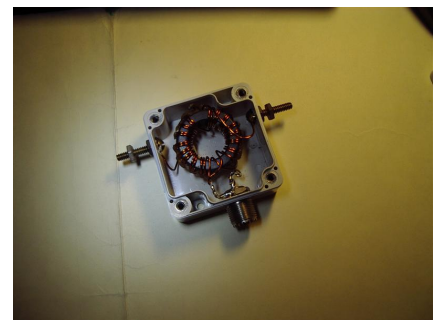
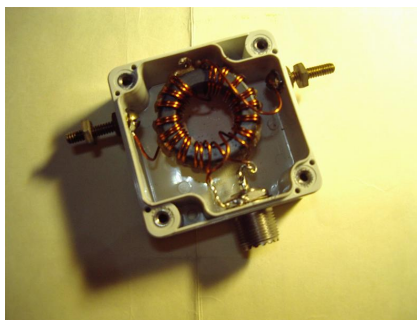
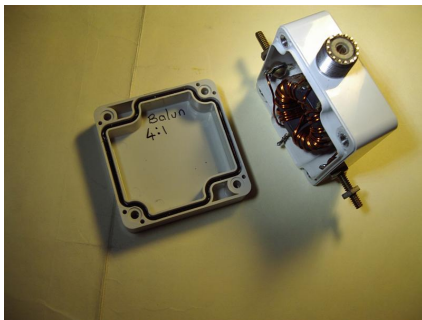
BALUN BOX FOR OCD ANTENNA.

Looking around for a suitable device to mount the Balun into I started to look at one of those black moulded plastic box with a similar lid. Looking at the size of the box compared to the Balun I decided to look around a bit further and found one that is very similar to the original used in the article itself. The box I used came from Wiltronics and was a light gray ABS case with part number is : CA14554BGY. It measures 65x65x40mm and is a tight but gloved fit for the Balun. It costs \$10.95 each. It is almost identical to the box quoted in the article and it has a gasket ring to allow the lid to seal it when complete. I have used a chassis screw type of coaxial socket [SO239] with a good quality anti shake washer and a solderable washer. I chose this type as against the flange type with four bolt holes as it is easier to seal against moisture ingress. The connection to the antenna wire elements is done with two brass [3/16"] M4x25mm bolts with nuts and solid solder lugs and lock nuts. Had to scratch around for suitable sized solder lugs though. Also need to apply shake proof washers under the nuts.

After drilling the three holes as "neat" size insert and tighten the coax socket after applying a bit of solder tinning to the main washer. Likewise insert the two brass bolts with the solder lugs and washers on the inside of the enclosure to ensure good electrical conductivity at all times. Tighten up the nuts and now insert the Balun into the box ensuring the correct wiring has been done before soldering the four connections to relative positions. This particular box also has two mounting holes that will allow the Balun housing to be mounted to a backing plate like the article suggests that can also be used for an insulator. These two holes do not gain access to the sealed unit as they are sealed away. The completed device could be sealed by wax or some other material to ensure the dryness is maintained.

Attached are some photos of the completed device, without a back plane board.

73
Craig
VK3CMC





Doug, VK3FRDE

The Secretary's Page

Minutes of the BARG General Meeting – 24th April 2009

Meeting opened at 1930 by President Doug VK3VBA.

Apologies

VK3FGC, VK3CAZ, VK3HHK, VK3DCS, VK3FHUT, VK3VCI, VK3HRZ.

Attendance

Approximately 25 Members, including new members Doug VK3HLD, and Sally VK3FBND

Minutes of the Previous

(March) general meeting had been previously distributed, they were passed as correct.

Moved Bryan KQB / Peter KP carried

Secretary's Report

Correspondence In: Nil, two magazines AR and QST.

Correspondence Out: Nil

Moved Craig CMC / Roger ADE - Carried

Other Reports

Social – Dining night at Crown Hotel Buninyong had been OK, next night to be at Golf House Hotel.

Repeaters – Roger ADE reported that Ben Nevis was operational and performing well, Mt Buninyong was still only producing low power output.

Construction – Brian KQB - Several members had commenced construction of 4:1 baluns, testing facilities to be available at next construction night. Next project will be building of tone access boards to allow members using sets without this facility to access repeaters, Brian and Ian AXH both have access to a small quantity of commercial boards. There are quite a lot of members interested in this project.

Amenities – Working Bee to perform general maintenance will be on Saturday 2nd May.

Education – Craig CMC, One of the most recent foundation licencees has received his callsign, Chris VK3FPCA from Dunkeld.

General Business

Volunteers for Damascus college activities days were almost organised, a few more would be good, to date FGC, AXH, VBA and FPOL were starters.

George Fowler auction will be last Sunday in May (31st), usual format – Lunch of soup and rolls, followed by the auction, Bob BNC to again be the auctioneer.

The missing VHF / UHF analyser has re-appeared at the club, the new copy of Swainstons Radio Theory is still missing.

Trestles for hamvention still need to be organised, ideally it would be good if we could get them all from the same place at little cost, at the moment this is proving difficult.

Doug VBA had been told by the driver of the garbage truck that our bin wasn't on his round, and that it wouldn't be emptied in the future.

Bus for Moorabbin Hamfest was fully booked, 11 passengers. Hopefully an enjoyable outing for all.

Gordon FGC has contacted the Geelong group (GRES) to organise a visit by some of our members, possibly in June as May is too busy.

Bryan KQB suggested that when we have guest speakers, or information sessions we could film them, and burn them to DVD for the benefit of those unable to attend. While this idea has some merit, it was thought by some that it might be difficult to produce acceptable quality recordings.

Bob BNC had attended a function at one of the other Radio Groups in our region (Midland?). They have produced a flyer and application form to hand out to people who are interested in our hobby, and/or want to obtain their licence, this seems to be an idea worth pursuing by our group.

There being no further business, meeting closed at 2017. Next meeting 29th May at 1930

Following the meeting David VK3UR gave a very informative talk on the principles and practise of the remote operation of the clubs radio equipment. This is a facility that could and should be used by more of our members, particularly those who may be unable to operate a HF station from their own location for some reason. Unfortunately your secretary had to leave mid-talk, however I was sufficiently intrigued to think that I may have an account set up, and perhaps play with this equipment on some of those cold winters nights when going up to the shack (shed) can be a bit of an ordeal.

***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