

BARG News

Ballarat Amateur Radio Group

Inc. #6953T

June

Monthly Newsletter

Next Meeting

Friday 27th May 2016 @ 7.30pm

At the B.A.R.G. Club House, Ballarat Airport

All Welcome



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

Presidents Report

This year is flying by its May and an important month for BARG yes its our yearly George Fowler auction of quality items, oh well perhaps not all quality but its good rubbish.

Soup at 12-00 noon followed by the auction at 13-00hrs so bring along your pennies and bid and go home happy with your new addition to the shack.

How things can change looking at my certificate the other day telling me that I qualified to allowing me to transmit on the amateur bands, the date on the certificate told me that I obtained my licence in September 1991.

I become a member of BARG in March of that year, the first meeting I went to was chaired by Cliff vk3ccb (now 3cb) we met at rooms in Hopetoun St it was standing room for myself and two other new members on that night like lots of other nights good attendance was the norm approx 50 plus members.

From this venue if my memory served me correct we moved to Urquhart St school and then to the current location, please correct me if I am wrong.

During my time with BARG our H/fest has been held at the Sebastopol football ground rooms and also at the Ballarat show grounds and of course our current location at the Ballarat Greyhound Track.

On the sick parade Bob nbv will be in hospital on 27th of this month for an operation and Kevin is making a good recovery I wish them both all the best

That's all from me for this month see you on the 27th and again on the 29th.

Travel safely .

From President Doug vk3vba

Doug Raper - From the desk of President Doug vk3vba

George Fowler Auction

Don't forget the George Fowler Auction, next Sunday, 29th of May. It's not too late to bring along items to sell, either on commission or as a donation.

There's always a range of stuff, most not going for that much. It's always a bit of fun, and you might just go home with a great new jigger for the shack.



A Word From The Editor

Welcome to the June newsletter. Lots of good material has come through this month. Thank you to all who have contributed. In particular Ian, AXH, who each month takes the time to write a report of both his and club activities. I am sure it's a report appreciated by all.

Last month I reported doing some maintenance on the website and my frustration with the photo's page. It annoyed me enough to do something about it and move the site to WordPress. It'll still be hosted on the same infrastructure at the club. But WordPress has the advantage that it doesn't need any HTML skills to maintain it.

I've got about 60% of the way through the set up of the new site, which I'll complete as work and other tasks, such as this newsletter, allow. I do need some specific help in the form of photos of club activities or members. Small collections of photos with description of what's shown, or individual photo's that can be used in banners would both be helpful.

If nothing gets sent through, then I'll be busy snapping shots to use on future activities and meetings. (You've been warned!)

I'm afraid the news letter is rather late this time. I spent the time I had planned to write this up on Sunday out and about playing radio on some SOTA summits around Ararat. I reckon that playing radio should be an acceptable excuse for the delay of a radio club news letter. :-)

Look forward to seeing you all at the meeting Friday and the auction on Sunday.

Until next month.

Malcolm

VK3MEL



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Round The Web

Elecraft KX2

The big news this month is the announcement of the Elecraft KX2. This is a lighter, smaller version of the KX3. Squarely aimed SOTA use. With only 80 to 10m, it does drop some bands and doesn't come as a kit, though the KX3 kit was really limited to assembly anyway.

Our KX2 “stealth” transceiver can go wherever your imagination takes you. Thanks to state-of-the-art construction techniques, it’s only 5.8 x 2.8 x 1.5” and weighs just 13 ounces—making it the smallest full-featured HF radio on the planet. Yet it puts out up to 10 watts, covers 9 bands, and shares many features with the KX3



The KX2 base radio starts at \$749 US, though throw in some options and shipping and I soon ended up at just shy of \$1300 US, or more than \$1800 Au.

The KX3 base radio starts at \$949 as a kit. With a similar set of options they pan out at about the same price.

It's definitely generating interest, and if your a keen SOTA or portable operator who's not too limited by cost this could be the radio for you. I think the trusty FT-817 at about half the price is going be better value for money though.

<http://www.elecraft.com/KX2/kx2.htm>

Yaesu FT-891

Hot on the heels of the KX2, Yaesu have announce the FT-891. This looks to be a replacement for the FT-857. Both are designed to me mounted in a vehicle. Whilst they can be used for portable operation, the standby current is 2A, so it'd be a bit hard on batteries.

The Yaesu FT-891 is the smallest at lightest 100W HF transceiver ever built, at 155x52x218mm and 1.9Kg.

The radio doesn't seem to be listed on the Yaesu site yet, and no indication of pricing.

With 160 to 6m, it has lost the 2m, 70cm capability that the 857 had. Will that hurt sales of the Yaesu for the car?



<http://www.universal-radio.com/catalog/hamhf/0891.html>

VHF and Above for May/June 2016

Over the past couple of months there is not much to report as I've not been very active. However I did receive a QSL card from Heinrich DJ9YW in Germany confirming our 1296 MHz digital qso via EME over a distance of 300,000+ Km on 14th March 2016.

He was using 4.5m mesh dish with 360 watts at the feed resulting in 438kW EIRP which is a lot of radiated power.

My installation uses a 3.7m mesh dish with 250 watts at the feed resulting in 250kW EIRP which is also a substantial amount of power.

At these frequencies the moon only reflects at best 15% of the energy however his signal was clearly audible in my speaker. Below is a screen shot of what Heinrich saw from my transmissions and giving a best report of -11dB which is quite respectable.



Mode used is WSJT JT65C

Bob VK3BNC is also attempting to see a signal on this band from ON0EME. This station runs a beacon on 1296.0 MHz and is activated when their moon view is + 10 degs above their horizon for safety reasons.

Bob is using a 2.4M dish with Septum Feed and when conditions are good should be able to receive the beacon signal ok so watch this space.

BARG's 3.4GHz panel project is gathering momentum with the following stations having the capability of operating in this band. VK3KG, VK3AIG, VK3BNC, VK3AXH having completed their panels and VK3KQT and VK3CAP coming along and soon to be completed. Lachie VK3ALM also has some panels but not sure of his progress at the time of writing this report.

There was a test day on the morning of 25th April between 10am and 12 noon. David VK3KQT managed to take part from Mt Buninyong and had a good time working a number of the field stations that participated. It's hoped that other local stations will get the opportunity to test there systems in the coming weeks. Longest distance was with VK3MQ around 134km. Well done David.

Since the above 3.4G activity there has been three occasions where further tests have been conducted. Locations such as Cherry Tree near Linton where Craig VK3KG setup and both Bob VK3BNC and John VK3AIG at Mt Hollowback with Ian VK3AXH at Green Hill were all were able to contact each other at good signal strength. Distances in excess of 30km were achieved during this exercise.

The most recent activation was Friday 21st May with VK3KQT and VK3AXH at Mt Buninyong, VK3AIG near Clarke's Hill on the Daylesford Rd, Bob VK3BNC near the Waubra Wind Farm and non member Ian VK3IDL near the water tanks in Norman St. After initially setting up and liaising on 2m FM we were able to have great contacts on this interesting band. We have found that where 2 stations are co-sited on occasions one station gets much better results than the other. By moving several metres away signals were found to jump considerably indicating that even with a small antenna and low power there are influences that affect the signal the most likely being height and/or anti phase reflections.

The conclusion is to be at least 1.5m above ground with a clear path between any two stations. There is a lot to learn about microwave operation. Next exercise will be to increase the distance up to around 100km and see what results can be achieved.

Till next time 73, *VK3AXH*

Paolo, IK4HAL Visit



Last meeting we we're lucky enough to be visited by Paolo, IK4HAL. Paolo told us a little of his radio club, which had around 75 members, in a town of about 200,000 people.

Whilst English was his second language, it was far superior to the Italian of any of our members.

He was accompanied by his wife and family. It was great that he took the time to drop in.

		QSL by:		ITALY	
		IK4HAL			
CQ zone 15 ITU zone 28				WW Locator JN 54 DW	
OP PAOLO PERSIANI					
Via Don G. Parma, 7 - 43010 TRECASALI (PR)					
TO RADIO		C O N F I R M I N G O U R Q S O			
	Day	Month	Year	UTC	2 - Way
Rig:			Ant		
RMKS			TNX <input type="checkbox"/> FB <input type="checkbox"/> QSO <input type="checkbox"/> PSE <input type="checkbox"/> QSL <input type="checkbox"/> TNX <input type="checkbox"/>		

QST April 2016

- 30 PICAXE-Based Timer
- 33 Can home solar power and HAM radio co-exist?
- 38 The Propkeyer IV – A multimode CW keyer
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- 92 The April 2016 Frequency Measuring Test



Plus various contest results, the usual columns and advertisements.

Certificates Of Appreciation Awarded

In the March meeting certificates of appreciation were awarded to four members for their contribution to the set up of the club radio equipment and remote base.

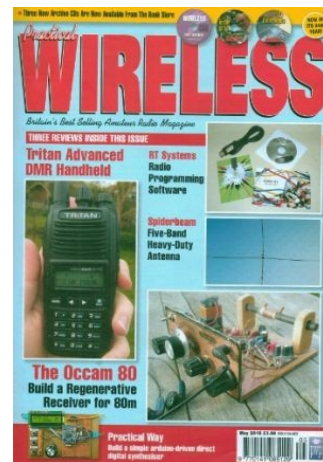


Roger, ADE, Bob, BNC, Ian, AXH and Jeff, PAP are pictured here with their certificates. They've all put in significant amount of time into club projects.

REVIEW OF PRACTICAL WIRELESS.

May 2016 By Craig VK3KG

- P6 Keylines
- P10 Review Tritan Advanced DMR Handheld. UHF 1000 channels.
- P14 Five Band Hvy Duty Spider Beam.
- P18 The RT Systems Radio Programming Software.
- P23 Multiband Receiver Part 2.
- P28 Simple ARDUINO driven Direct Digital Synthesiser Project.
- P30 144Mhz activity periods, TV from ISS and More.
- P34 The Occam 80 Regenerative Receiver for 80 m.
- P45 Emerging Technologies
- P48 DOK's, Oblasts and EPC's. Read about Awards for Foundation licences.
- P52 Another Helping of Pi. The latest Version Pi 3.
- P56 HF Highlights.
- P59 Making Waves Pt 2. The D layer in focus.
- P62 TheR1082. Museum piece history. Earlier than the R1155 Rx. See the Australian photograph from AWM.
- P66 Letters. Some interesting subjects. See my comments below.
- P71 Traders table. Shows prices in the UK of disposal equipment and pre loved.
- P72 Radio Book store.



I was interested to read a letter from Steve Mahoney VK5AIM concerning the use of WW1 Sound Ranging microphone technology. My involvement in the Army Reserve was in the same type of unit that deployed this equipment and it highlights a forgotten technology that was used by the major combatants to ascertain the location of hostile guns in the battle field. A very well known Australian (born in Adelaide) who served in the infancy of the science was a Lieutenant [Later Professor Sir] William Bragg. CH, OBE, MC, FRS. He commanded Sound Ranging sections in Ypres on 18 Oct 1915 and made their first Location on 2nd November. The principle of Sound Ranging uses a heated filament wire exposed to the air [and sound waves from explosive reports] which are measured in a whetstone bridge affair. With a number of these sensors across a wide front the sound wave from the same source arrive at different time placements. This time allows a plotting on a map for the accurate location of the source. Although very crude in its infancy it evolved rapidly with technology advancements.

This topic will be followed up in a further article I feel.

Craig VK3KG

Wanted

Hi Members, I am still seeking a male JONES plug to mate with the attached socket. It is an 18 pin variety with three rows of 6 pins and two rows are in the vertical mode while the third row is the opposite orientation. I am not worried if the plug doesn't have the metal hood on it as I have one from another spare female. I wish to recommission an old 6M transmitter linear and rather than rewire the existing socket it would be easier to find one of these older style units.



Any one can contact me on bombard170@gmail.com or by telephone on 03 5342 2448

Thanks Craig VK3KG

THE HARLEY

The inventor of the Harley-Davidson motorcycle, Arthur Davidson, died and went to heaven. At the gates, St. Peter told Arthur. 'Since you've been such a good man and your motorcycles have changed the world, your reward is, you can hang out with anyone you want to in heaven.'

Arthur thought about it for a minute and then said, 'I want to hang out with God.' St. Peter took Arthur to the Throne Room, and introduced him to God.

God recognised Arthur and commented, 'Okay, so you were the one who invented the Harley-Davidson motorcycle? Arthur said, 'Yeah, that's me...'

God commented: 'Well, what's the big deal in inventing something that's pretty unstable, makes noise and pollution and can't run without a road?'

Arthur was a bit embarrassed, but he finally spoke, 'Excuse me, but aren't you the inventor of woman?'

God said, 'Ah, yes.'

Well,' said Arthur, 'professional to professional, you have some major design flaws in your invention.

1. There's too much inconsistency in the front-end suspension
2. It chatters constantly at high speeds
3. Most rear ends are too soft and wobble about too much
4. The intake is placed way too close to the exhaust
5. The maintenance costs are outrageous!!!!

'Hmmmmmm, you may have some good points there,' replied God, 'hold on.'

God went to his Celestial supercomputer, typed in a few words and waited for the results.

The computer printed out a slip of paper and God read it.

'Well, it may be true that my invention is flawed,' God said to Arthur, 'but according to these numbers, more men are riding my invention than yours'

Salgoud

Gin Pole

The gin pole built by Jeff, PAP, has been tested out as can be seen in the attached photo. By all reports it worked a treat, making the work of setting up the mast in the picture very straight forward.



Radio Word Search

L A L D E D O G E S R O M S P
H A T I M S N A R T A S T T B
E T I L L E T A S R H E N A A
T U Y R E T T A B O S C O T R
A O B R E A K E R E I U I I E
R E L A Y A R T R T C R T C I
E S B U L C W P I C E I A I F
P N S H A A N Z L C A T L N I
O E L E V N E E E U R Y U O L
Y C E E L N N P U N G G D R P
R I N L S E T E E Q D U O T M
A E A R O T S I S N A R T E D
C N H N D I S H W E A D F L L
D T C A L L A S E G A S S E M

- | | | | |
|------------------|-----------------|---------------|---------------|
| a) Operate | i) Call | q) Earplugs | y) PoliceBand |
| b) Reception | j) Carry | r) Electronic | z) Preset |
| c) SecurityGuard | k) Channel | s) Frequency | aa) Relay |
| d) Transistor | l) CitizensBand | t) License | ab) Satellite |
| e) Amplifier | m) Clubs | u) Listen | ac) Shotwave |
| f) Antenna | n) Coded | v) Messages | ad) Static |
| g) Battery | o) Dash | w) Modulation | ae) Transmit |
| h) Breaker | p) Dish | x) MorseCode | af) Wireless |

Salgoud