



## **BARG** News

# Ballarat Amateur Radio Group Inc. #6953T February Monthly Newsletter

## Saturday 27<sup>th</sup> January 2018 @ 11.30am

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**

2018 has kicked off with a Saturday meeting and BBQ out at the club house. About 25 members and guests came along to enjoy the afternoon. Reg, VK3CAZ, showed us he "Gennie", a morse code trainer based on a z80 CPU. Mick, VK3GGG, made the journey from Stawell, and did a fine job manning the BBQ and Roger, VK3ADE, shared the planning work that the committee had done for the meeting this year.

The day meeting is a good chance for members who struggle with the Friday night meetings, for various reasons. I suggest we consider having the May and September meetings on a weekend, which would be every forth meeting. Something to discuss.

Next meeting Ian, VK3AXH, will present on FT8 and other digital modes. These suit the current poor band conditions, and getting lots of use. They are easy, once you've got it worked out.

Finally, the newsletter is a bit late this month. I'm afraid work commitments have got in the way. Work is truly the curse of the person with a hobby.

Mal vk3oak







#### Club Technical Talks – 2018

At our January Committee meeting we listed a possible number of topics we could include in our general meeting schedule for 2018. Some we have adopted and allocated, and others are still open as is the list. If you have any suggestions or requests, please let a committee member know.

- 1: SDR receivers (Suggested we allocate to VK3BNC).
- 2: Introduction to the ARDUINO development environment. (allocated to VK3ALM)
- 3: The Teensy alternative to the Arduino devices. (unallocated)
- 4: Basic satellite access with the simplest equipment. (allocated to VK3AXH)
- 5: Automating satellite access. (allocate to VK3ADE)
- 6: Magnetic loop antennas. (allocated to VK3CMC)
- 7: SWR and Power meter construction. (allocated to VK3ADE)
- 8: Automatic antenna tuner design. (unallocated)
- 9: A 250 Watt linear for HF. (unallocated)
- 10: WSJT and similar digital; protocols for HF. (allocated to VK3AXH)
- 11: Virtual audio cables for Windows. (allocated to VK3OAK)
- 12: Designing a digital local oscillator and BFO for older analog HF equipment. (unallocated)
- 13: Using the SI1351 and other DDS chips with Arduino and Teensy. (unallocated)
- 14: Decoding digital protocols in conjunction with an SDR receiver. (unallocated)
- 15: How to GPS lock your test equipment. (unallocated)
- 16: Using the club's spectrum analyser and sweep generator. (unallocated)
- 17: Designing filters for HF and VHF (Chebyshev and Butterworth) and testing with the spectrum analyser. (unallocated)
- 18: Methods to handle 3.3Volt microprocessors and how to interface to 5V devices. (allocated to VK3ALM)
- 19: Designing and building a shack clock (allocated to VK3KQT)
- 20: The BITX40 project (unallocated)

#### As we currently stand the following meeting schedule has been decided.

- February: FT8 and other digital protocols Ian VK3AXH.
- March: A HF power an SWR meter from mw to 1KW, Roger VK3ADE
- April: Magnetic Loop Antennas Craig VK3KG
- May: A shack clock David VK3KQT.
- June: Virtual Audio cables, Mal VK3OAK

In addition, the construction nights will run 2 major themes this year, firstly Lachy VK3ALM will be working through the Arduino environment from a starting point of a zero-knowledge assumption to an appropriate level of competence. Secondly, we will work our way through the mechanics of satellite reception and access using a hand-held antenna and hope to finish up with a working station.

After June nothing is yet in concrete, this will the function of the new committee. Again, if you have a topic you would like to see please let us know.

BARG Committee, 2017-2018

#### **BARG** Weekly net report:

The first HF net for 2018 was on 4 January on 3608KHz and a total of 16 stations came up to report to VK3BML. This would be a good sized return and possibly due to the barmy weather conditions on the evening. Although only five were BARG club members we attracted a good following and also prompted a couple of "listeners" to call in with some comments about some on air subject discussions. It was good to hear callers come in. Stations logged were. 3GGG Mick, 3BVI Ron, 3DET Ernie, 3CAZ Reg, 3AXH Ian, 3DRE Doug, 3MET Craig in Melb, 7BEE Nick [ex 3COW member], 7ALB Peter, 3HMV Andy, 3FCEV Kelvin up on the Murray, 3LTA Trevor, 7ALH Ross, 3VC Kevin from Melb, 3MBW Barry and 3VIN Ian both at Geelong.

The net ran for over an hour with all stations having good signal reports passed around. Ian VK3AXH reported some good VHF band conditions recently and he worked across to VK6VOX that morning on 2Meteres ssb 0800 net. Maybe this will draw some more interest in the VHF portions of our band allocations now.?

We now have a number of club members assisting to run the HF net so don't be surprised to hear different voices behind the VK3BML callsign next time you come up on air. !

73 and good operating Craig VK3KG

**HF Net Controller Roster - 2018** 

DATE	OPERATOR	NAME	ALT	OPERATOR	NAME
This Roster Devised 29 December 2017 New Roster for New Year.					
1-Feb-18	VK3YFD	Ian F		VK3KQT	David
8-Feb-18	VK3KQT	David		VK3KG	Craig
15-Feb-18	VK3KG	Craig		VK3GGG	Mick
22-Feb-18	VK3GGG	Mick		VK3DRE	Doug
1-Mar-18	VK3DRE	Doug		VK3AXH	Ian
8-Mar-18	VK3AXH	Ian		VK3YFD	Ian
15-Mar-18	VK3YFD	Ian		VK3KQT	David
22-Mar-18	VK3KQT	David		VK3KG	Craig
29-Mar-18	VK3KG	Craig		VK3GGG	Mick
5-Apr-18	VK3GGG	Mick		VK3DRE	Doug
12-Apr-18	VK3DRE	Doug		VK3AXH	Ian
19-Apr	VK3AXH	Ian		VK3YFD	Ian
26-Apr-18	VK3YFD	Ian		VK3KQT	David
3-May-18	VK3KQT	David		VK3KG	Craig
10-May-18	VK3KG	Craig		VK3GGG	Mick
17-May-18	VK3GGG	Mick		VK3DRE	Doug
24-May-18	VK3DRE	Doug		VK3AXH	Ian
31-May-18	VK3AXH	Ian		VK3YFD	Ian
7-Jun-18	VK3YFD	ian		VK3KQT	David
14-Jun-18	VK3KQT	David		VK3KG	Craig
21-Jun-18	VK3KG	Craig		VK3GGG	Mick

#### QST 1/2018 January edition

Well a new year has started and there are changes in the air and also on paper in QST magazine.

On opening this copy I detected a change but what was it? Typically I may open to the index of a magazine and try looking at the index then flit over to page xx for an article then back to look for another however generally I open the magazine and read backwards to see what interesting articles are in the current edition. Doesn't matter what the magazine is that's how I initially start perusing a magazine. When I am ready I then check the index properly and note again the articles I really want to follow up with. Well today I started the same way and noted that something is different in this edition. The Font style appears new. The headings to regular columns are formatted differently and then on p30 I found the editor Steve WB8IMY has changed a number of things based upon readers suggestions. See for your self how different layout looks from the Jan 1968 copy of p21 shown.

Well moving on we now go back as the article on P31 is a retro transmitter construction using valve and large open displayed components to make a return to yesteryear with a 5W AM transmitter.

Also it doesn't use a PCB but what was being used in Australia in the 1950/60's all mounted up ona "breadboard" construction. Anyone who attended the RMIT and used the 40W transmitters will remember this as a valid type of construction which allowed hands and fingers to pass closely to high valve DC voltages as they were tuned and adjusted. Maybe some would like to try building one of these radios from days of the ark. They do work well. On P35 A low Distortion Digital Audio Oscillator

- P37 Advert for BITX40 SSB Transceiver kit. Now with a 20M version available.
- P38 Web Hosted SDR. Some approaches to it and a number of web sites to further read. Sdr.hu, websdr.org dxzone.com etal.
- P41 Join the FT8 Revolution.
- P45 Double Duty Mobile Scfrewdriver Antenna.
- P48 Trouble shooting 101. Sky High SWR.
- P49 Review: Breadboard Radio Splinter 2 QRP Rx/Tx Kit. See breadboardradio.com.
- P51 Reviews new INRAD M268 and M269 Desk microphones. www.vibroflex.com
- P54 Review: Practical soldering kits.
- P55 Review Pacific Antenna Easy Field strength indicator. www.qrpkits.com
- P56 Review: Rexwood 1000W Receiver kit.
- P58 Review: Hayseed Hamfest Re-Cap Kit. Quick replace caps in older sets.
- P60 Review: Adjustable PCB Holder.
- P61 The Doctor is still here! RIT, XIT, What's IT? Vector analyser and vertical antennas.
- P63 Hints & Kinks Improving SR and Battery Isolators.
- P65 Microwaves. Best Antennas to get on air with.
- P67 Technical correspondence looks at a VNA/HF SDR Transceiver uses a Red Pitaya.
- P69 Ecletic Technology "Is FT8 a Killer App.
- P70 Repurpose your station for Satelite operation.
- P73 Amateur licensing revived in Costa Rica.
- P75 WSPR beacons helped opening on 80M during the daytime.
- P77 HamHacks group tackles Maker Faire and More.
- P87 Classic Radio. DAVCO DR-30 solid state Receiver.
- P93 World above 50MHz-- VK9XGJ Christmas island 6M EME DXpedition.
- P100 75, 50 and 25 years ago in QST.

Well there's the start for the new year,

Craig VK3KG



#### 12 Dec 2017 OST Review.

- P13 Member Spotlight Mike N2MG
- P24 Letters Page.
- P30 Upper Level Lows & 6Metre Sporadic E.
- P36 Computer Controlled Antenna Rotator.
- P39 Solar Eclipse QSO Party update.
- P41 Review: Icom ID-4100A VHF/UHF Dual band FM/D STAR Transceiver.
- P46 Review: YaesuFT-25R 2 Meter Handheld Transceiver.
- P50 Review: Sawdust Regenerative Receiver. Better read article to see what that means. !!
- P52 Review: Wolphi-Link & Interface DroidPSK App for Android Devices.
- P54 Review: Four state QRP Group Cricket Transceiver kit.
- P57 The Doctor: Discussess the BALUN with antennas.
- P59 Hands on Radio. Ex179. Maxwell's Equations- The Wave Emerges.
- P61 Hints & Hacks: Power Pole conversions, Crossover Crimper and more.
- P63 Eclectic Technology. When audio cables go Vitual.
- P64 Great American Solar Eclipse at 70 centimeters.
- P66 Hurricane Maria makes Puerto Rica tremble. 20Sept 2017
- P68 Happenings. New Ham bands spring to Life at 630 & 2200 meters.
- P71 Amateurs step up for disasters.
- P97 2018 DX St Brandon Islands 3B7.
- P99 World above 50MHz. Major Geomagnetic storm and Aurora.
- P103 Restoring a 1950's Rig Halicrafter's.
- P106 Index QST 75, 50 and 25years ago.
- P156 QST Index of Advertisers. There are quite a few.!



### Craig VK3KG

Report from BIGEARS who heard that VK3AXH, VK3KG and VK3BNC were in attendance setting up their microwave stations for the Summer ?? field day week end. Later in day during a heavy down pour Peter VK3PWG arrived to have a look around followed by John VK3AIG who decided not to set up as it looked like settling in for the day [Good call John] Just when the boys were packing up David VK3KQT arrived and departed soon afterwards. It seems there were a number of portable stations out in the field today BUT they mainly worked in the VHF region and not the upper UHF area. Pity the weather changed so much and caused the group to depart after only a few hours setting up.

The pics here and on the last page show Ian VK3AXH working under the cover of a tarp, Bob VK3BNC and his 2M/6M and 70 cm antennas being over seen by John VK3AIG and the twin 3.4GHz set up of Craig VK3KG.

Not long after the boys packed up a large and very heavy rain burst occurred causing a heavy running of water down the roadsides. Great fun this amateur radio ain't it.

Cheers for now BIGEARS.





An opinion on Bitcoin that resonates alarm bells. Get out before all the Monkeys have gone.

#### \*BITCOIN\*

A lot of monkeys lived near a village. இது இது இது இது இது

One day a merchant came to the village to buy these monkeys!

He announced that he will buy the monkeys @ \$100 each. 🕲 🗈

The villagers thought that this man is mad.

They thought how can somebody buy stray monkeys at \$100 each?

Still, some people caught some monkeys and gave it to this merchant and he gave \$100 for each monkey. ⓐ

This news spread like wildfire and people caught monkeys and sold it to the merchant.

After a few days, the merchant announced that he will buy monkeys @ 200 each. @ 100

The lazy villagers also ran around to catch the remaining monkeys! இது இது இது

They sold the remaining monkeys @ 200 each. ©

Then the merchant announced that he will buy monkeys @ 500 each!

The villagers were waiting anxiously for the next announcement.

Then the merchant announced that he is going home for a week. And when he returns, he will buy monkeys @ 1000 each! •

The merchant went home.

The villagers were very sad as there were no more monkeys left for them to sell it at \$1000 each. ② ③ ⑤

Then the employee told them that he will sell some monkeys @ 700 each secretly. ••

This news spread like fire. Since the merchant buys monkey @ 1000 each, there is a 300 profit for each monkey.

The employee sold all the monkeys at 700 each. The rich bought monkeys in big lots. The poor borrowed money from money lenders and also bought monkeys!

The villagers took care of their monkeys & waited for the merchant to return. ②

But nobody came! ... Then they ran to the employee...

But he has already left too! ③

The villagers then realised that they have bought the useless stray monkeys @ 700 each and unable to sell them! ②②②②④④④④

The Bitcoin will be the next monkey business

(+)

It will make a lot of people bankrupt and a few people filthy rich in this monkey business.

That's how it will work

#### VHF and Above for February 2018

At last I can report there has been some good propagation on the bands that attract VHF and above enthusiasts.

It's still the old story that even though it's happening you have to be there when it happens which is not always the case.

There have been some good openings on 6mx, 2mx up to 23cm. I'm aware that contacts have made using voice and digital mode FT-8.

Known club stations to have been heard are VK3DET, VK3WN, VK3BNC, VK3AIG, VK3KG, VK3AXH. There maybe others that I don't know about as well.

This month Kevin VK3WN had 2m contacts into ZL, VK3BNC 2m contacts into VK4, VK3AXH a 2m contact into VK6....all using SSB with good signal reports

In addition to SSB there is still a big surge in the use of digital mode FT-8 on both 6m and the 2m band. Given the nature and sensitivity of this mode contacts are much easier when conditions don't suit SSB.

Extended propagation has enable some good contacts to be had on 6m through to 23cm across VK3 and into VK5.

The VHF Summer Field Day has come and gone and was a disaster for local members who ventured up to Mt Buninyong on the Saturday afternoon. Setup took place amid a little rain but in the end the weather deteriorated causing our mission to be abandoned. Stations that tried were VK3BNC, VK3AIG, VK3KG, VK3AXH, VK3KQT and visitor VK3PWG. I was advised that Anthony VK3CAP had setup his 3.4GHz equipment in his garage as he has a great view of Mt Buninyong but unfortunately we were unaware so no contact was made on this band.

A handful of contacts were made on 2m but some of the team so let's hope things fall into place better on our next outing.





