



# BARG News

*Ballarat Amateur Radio Group*

*Inc. #6953T*

*March*

*Monthly Newsletter*

Next Meeting

Friday 29<sup>th</sup> of March 2019 @ 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.  
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Mail Centre  
Bakery Hill Vic. 3354

Or E-Mail : [vk3bml@barg.org.au](mailto:vk3bml@barg.org.au)

We're on the web  
[www.barg.org.au](http://www.barg.org.au)

## **Presidents Report**

Welcome to the March newsletter. Summer is over and the days are now shorter than the nights, though the weather is still really quite warm, at least for the time of year.

Last weekend was the John Myle field day, which was well represented by many members of the club. Both at the club station, and out in the field. Sadly I managed only one contact on 2m in the last 5 minutes of the contest. I guess there's always next year.

Next meeting we'll have WIA Director, Marcus Berglund, VK5WTF as a guest presenter. It'll be a good opportunity to hear directly about what the WIA is currently doing to support us, the members and the hobby in general. It'd be good to have a good turn out on the evening. As usual, guests are also welcome to attend.

We have a good meeting line up for much of the year, though the May meeting slot is still open. If you have an idea of what we should do that evening please let the committee know.

Till next time,

Malcolm, VK3OAK

## **VHF and Above for March 2019**

This month has seen a bit of activity from some of the locals on VHF and UHF bands. Without the activity of the locals there wouldn't be a lot to report.

Paul VK3TXR has his 2mx setup going along nicely now with his recently setup AM17 linear amp and certainly being heard around the 2mx band. Other active members include VK3BNC, VK3AIG, VK3KG, VK3AXH and VK3 LTL.

Prior to the John Moyle Field Day VK3BNC, VK3AIG and VK3AXH decided to test some of their microwave equipment particularly on 3.4G and 5.76G bands. The locations were Green Hill near Ballarat University and the old tip site in Chisolm St. Ballarat North.

It was good to get positive results from these tests. See pictures below of Bob, John and Ian at these sites.



VK3BNC





VK3AIG



VK3AIG

John Moyle Field Day was attended by some of the club members near the club rooms at the airport. Three stations setup VK3PWG/VK3NRD on HF, VK3EXE setup on 2mx and HF and VK3AXH setup on microwave bands 23cm, 13cm, 9cm and 6cm.

Three of our members VK3KG at Cherry Tree near Linton, VK3BNC/VK3AIG at Mt Hollowback were our micro wave field day stations. Although only a few contacts were made on 1296MHz, 2.4G, 3.4G and 5.76G to VK3AXH and others all signals were good strength.

**Till next time 73, Ian VK3AXH.**

## **QST Review 1/2019 Jan 2019**

- 9 WB2ITX ARRL ACEO looks at the Second Century.  
13 Member spotlight on Phyllis Benton NP2MZ.  
24 Correspondence always has interesting details and questions.  
30 Build a portable DC Power box using military surplus Ammo box.  
32 QSL Card display uses a Raspberry Pi. What will they do next ?  
35 A 2Meter Slot Cube Antenna. Vertical polarisation using copper tubing and an SWR of 1.1 for 146 Mhz and above. .  
37 Matching Antenna polarisation. When does the 3 Db angle become critical?  
39 The Cell Patch, updating the old phone patch system. Build a patch box.  
42 Protecting shack equipment from Electrostatic discharges.  
47 js8Call Builds upon the Popularity of FT8.  
48 Product Review: FT817ND HF, VHF and UHF transceiver. Popular 5W radio. Also has optional SCU-17 USB interface for computer control and the CT39A cable for 6pin mini DIN data jack. A good review given.  
54 SteppIR Urban Beam 40 to 6Meter Antenna A review. <https://youtu.be/8618e3Di6xU> on Utube.  
57 Review: KKmoon 600X Digital Microscope. Digital colourscreen.  
59 Review: Murania Broadcast Receiver kit.  
61 The Doctor looks at radials for ground plane antennas and SDRadios.  
63 Tech Corres Embedding Frequency responses in APRS beacons. [www.aprs.org](http://www.aprs.org)  
65 Stealthy Cable feed thru.s and tips for connectors in tight locations.  
67 Microwaves- 3D Printed Antennas [antennatestlab.com/3Dprinting](http://antennatestlab.com/3Dprinting)  
69 RTTY contesting for Rookies.  
72 FT8 in the ARRL RTTY roundup.  
76 Emily Calandrelli KD8PKR Science & Space explorer. [www.thespacegal.com](http://www.thespacegal.com)  
78 Growing Amateur Radio – One Pilot at a Time.  
86 Hurricane Michael New trial for SEC  
88 Classic Radio: Restoring the Hallicrafters S-\$)B.  
100 Index for Jan 1944, Jan 1969, Jan 1994. And of course we do hold many of these  
Back in our library.  
142 QST index for Advertisers.



## John Moyle Field Day

Hi All,

A big thank you must go out to those that participated or dropped in for a look in the John Moyle on Saturday to list those that I know:

Club Station:

VK3AXH Ian  
VK3EXE Chris  
VK3PWG Peter  
VK3ALM Lachy  
VK3FHSJ Steve  
VK3FSPN Scott  
VK3TXR Paul  
VK3LTL Andrew  
VK3VMM Michael  
VK3NRD Ben  
Jessica

Other club members known to take part on the day that either the club station had contact with or was heard on air at some stage:

VK3BNC Bob  
VK3IDL Ian  
VK3AIG John <= I think I heard his call sign at one stage.  
VK3NBV Bob Heard on HF operating portable  
VK3KG Craig

The Club station ran till about 4:30 PM then it was decided to pack up partly due to the noise we had coming in on HF that started up around 4 PM. A good day was had by all those that were at the club station. A lot was learnt by many from how their radios performed, to it is OK to have a rough and ready home-brew dipole antenna.

Contact numbers for the day:

21 HF contacts on 40 meters and I think 1 or 2 on 20 meters

VHF and above I am not officially sure of but I think it was around 4-6 across multiple bands. VK3AXH may be able to give more info on this.

Things that we should look at for next year and even other Field Days the club takes part in this year:

- Grouping operators closer together. We may have been a bit spread out.
- Linking VKCL to a master log (Yes this can be done for most of the comps that allow multi-op/multi-band)
- Some form of Tent. The wind we had out at the airport may have been a bit much for the club gazebo. I can provide a tent for this next time.
- All operators need to know how to work VKCL - Someone may need to put their hand up to do a talk on the operation of VKCL and the use of the numbering system now used in many of the comps that are now run at one of our meetings
- Do we go further afield and really go portable? like Mount Bute near Linton that the club in the past has done some of the field days/comps from.
- And yes before someone says it Lunch needs to be a little more organised.
- The Club may be build up a set of portable antennas and masts.

- Planning for these club activities needs to start a little earlier.

Once again thank you to all who took part on the day. For those I may have mentioned too that I was going to go back home and take part a little using my own call sign this did not happen in the end, those that may have been listening to VK3RBA 2m would have heard why and by the time I got home I no longer had the energy to even set up things in the shack that I had taken out for the day.

Ben VK3NRD

**VK3BML club station of Ballarat Amateur Radio Group.**

**HF NET:** Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

DATE	OPERATOR	NAME
28-Mar-19	VK3TXR	PAUL
4-Apr-19	VK3GGG	MICK
11-Apr-19	VK3EXE	CHRIS
18-Apr-19	VK3KQT	DAVID
25-Apr-19	VK3DRE	DOUG
2-May-19	VK3AXH	IAN
9-May-19	VK3TXR	PAUL
16-May-19	VK3KQT	DAVID
23-May-19	VK3EXE	CHRIS
30-May-19	VK3KQT	DAVID
6-Jun-19	VK3DRE	DOUG
13-Jun-19	VK3AXH	IAN
20-Jun-19	VK3TXR	PAUL
27-Jun-19	VK3GGG	MICK
4-Jul-19	VK3EXE	CHRIS
11-Jul-19	VK3KQT	DAVID
18-Jul-19	VK3DRE	DOUG
25-Jul-19	VK3AXH	IAN

## **Activity report on the recent John Moyle field day activity**

by Craig VK3KG.

I only participated locally on two UHF bands for the JMFD on Sat 16 March 2019. I had considered running a all band set up but decided that I couldn't do both from my intended site for best microwave setup. I knew that Ian VK3AXH was to set up some of his microwave gear as VK3BML/P on the paddock near the clubrooms and that Bob VK3BNC and John VK3AIG intended to operate from nearby on Mt Hollowback also. Ian VK3IDL was going to operate from his home QTH near Black hill.

The site I chose has been successful for me before when working to others on Mt Buninyong and has a good takeoff to the North, East & South East and offers a smooth working area aside the track just east of the Cherry Tree fire watch tower. The tower sits on a peak at 480M and my chosen site is 475M sitting in grid square QF12sh. Unfortunately the area is covered with growing pine trees that are slowly making the site a little less usable. My immediate views in the 180 degrees mentioned is about 3 metres less due to growth in the pine trees. What happens next ?

.The weather was great for field day operation on the Saturday and I started to set up two tripods for the antennas. One was an 17 element loop yagi on 23 cm [1296.16MHz] and an offset feed dish for 6cm [3.41GHz]. I also compared signals on 23cm with a small home built 1 4 element yagi that also mounted on the same pole as the loop antenna.

My first contact was on 23cm with VK3IDL and I was blown away by the signal strength from Ian who was only 32km away and nearly line of site [LOS]. This was my first contact with Ian on this band and he had been putting the pressure on for me to get the transceiver up and working for the contact. I had my first band contact a couple of weeks earlier from another site near Linton and worked Ian VK3AXH also with good reports.

After this first contact on 23cm I worked VK3BML/p Ian (3AXH) at the clubs field site at 5/9 signals and then Bob VK3BNC/p on Mt Hollowback a distance of 35km. I was then called by a weak station further east wards so swung the antenna and heard and worked VK3ER/p operated by Peter VK3QI from the Wombat state forest a distance of 70km. My report to Peter was only a 5/7 while he gave me a 5/9. I was very pleased with this contact.

At 1457 I decided to change bands to 9cm (3.415GHz) and again worked VK3BML/p with Ian on the mike. We exchanged 5/9 both ways and I confirmed that I was receiving a direct signal from Ian and it wasn't a reflection from nearby objects etc and the dish aligned on the same bearing as the as the loop yagi did earlier. Following this contact with the club station I also worked VK3BNC/p and this time John VK3Aaig/p still on Hollowback. All sig reports were again 5/9.

Later on I heard a very weak signal calling on the frequency but was unable to resolve it and didn't hear anyone else reply so decided to close down for the day. Unfortunately that wasn't going to prove a simple and quick return to home although that was only about 20km away.

Through the day I operated both radios and transverter from just one battery and had a 20W portable solar panel out floating the battery. I also carried a second battery as back up along with an emergency vehicle start pack. The Emergency pack can also be used for radio if desired so in total I had a quite reasonable back source of electricity if needed.

Once I was loaded and ready to depart I tried to start the van but it gave a poor imitation of turning over the motor after allowing the glow plug light ready to drop out..... Brr Brr er. Nothing.

Well I was not expecting that, although I had some warnings previously that there was a problem but battery still in warranty, checked OK and if you gave the ignition switch a bit of wiggle while cranking and holding tongue just right then she always turned then fired. But not today. !@##\$%& Well I had to unpack the starter battery and lift the seat to access



the BIG battery in the van and jumper up and try again,! Nothing happened. Tried again still no result. A multimeter showed the batteries in parallel were really dropping down to abt 8-10 volt on cranking. A heavy draw down current. What to do?

Taking my precious radio battery and getting the heavy starter leads out and tried again. Same results as before. I wasn't to move off that feature for some time it looked like.

Fortunately I was still able to access VK3RBA and spoke to David VK3KQT and Bob VK3NBV who were available to make a phone call for RACV and or home to inform I would be late arriving home just when we were due out for tea. !!! Then Ben VK3NRD came on and offered to come up the hill and give some assistance which was gratefully accepted. After a couple of tries to locate me ben and Kim arrived and we jumpered the two vehicles and with his car revving my van finally accepted a charge and turned over the motor. Now I just had to keep the revs up as I drove home and not turn off till arrived.

Many thanks to Ben & Kim and also David and bob who stood by while this closure occurred to my John Moyle field day occurred.

In total I worked 7 QSO and can claim 3 points for the days activity BUT more importantly I have had a chance to finally get up onto 23cm albeit in a field day roll only and not yet at home. This is something that I had originally started to do while living in Melbourne about 20 years ago.

At Least I also made Ian VK3IDL happy now we have worked on that medium. Thanks Ian for the encouragement and a bit of sarcasm in the process. Guess its 2.2GHz and 3cm next.?

Craig VK3KG

For those interested in map spots and calculating distances etc.

- Cherry Tree lookout [near Linton] QF12sh 475m asl.
- Mt Hollowback Nth side of race course. QF12vn ht ?
- Clubrooms precinct QF12 vl ht ?
- Wombat State forrest QF22 dm

## **SILICON CHIP REVIEW. February 2019.**

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Craig VK3KG.

