



BARG News

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

Next Meeting
Saturday 20th March @ 11:30am

Face to Face! Out at the clubhouse at the 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 1218
Mail Centre
Bakery Hill Vic. 3354

Or E-Mail : vk3bml@barg.org.au

We're on the web
www.barg.org.au

Presidents March Report

Welcome to the March newsletter. Last meeting was another Saturday meeting with a sausage to keep everyone sustained. Craig, VK3KG, gave an excellent talk on portable antennas with a follow up from Chris, VK3Qy and myself.

Next meeting is going to be a week earlier than usual, to line up with the John Moyle Field Day, which is this coming Saturday. Set will start from 11am (or earlier). The meeting will be super quick one at 11:30 and the field day will start at midday local time.

Peter Gamble is helping with co-ordination this year. Sadly I won't be able to make it.

In the meetings we have a tradition of running a small raffle for a door prize. Entry is \$1 / ticket, which helps cover the cost of supper. We're asking members to donate a prize. If we can get 10 members to donate one that'll get us through 2021. Ideally something radio related. If it can be wrapped and stored in the cupboard next to the fridge.

We've agreed to purchase a larger rotator for the Log Array, as the one we have is really a bit small. Once purchased it'll need to be installed, so we're looking for a volunteer to act as lead co-coordinator to make sure it gets installed promptly. The second, follow up task is to install removed rotator on the VHF/UFH tower.

The role isn't to do all the work alone, rather co-ordinate the club to get the work done safely.

Please let the committee know if you can take this on.

We're also looking for an amenities coordinator. This role is to co-ordinate cleaning and maintenance of the club house. Again, this is looking for someone to do all the work alone. Again, let the committee know if you're willing to take this on,

That's enough for now. Look forward to seeing you on Saturday or on the construction night on the first Monday in April, or perhaps catching you on air.

Malcolm. VK3OAK.

VK3BML HF NET OPERATORS.				
DATE	OPERATOR	NAME	BACK UP	NAME
18-Mar-21	VK3MCL	Scott	VK3AXH	Ian
25-Mar-21	VK3AXH	Ian	VK3KG	Craig
1-Apr-21	VK3KG	Craig	VK3TXR	Paul
8-Apr-21	VK3TXR	Paul	VK3QY	Chris
15-Apr-21	VK3QY	Chris	VK3ALM	Lachlan
22-Apr-21	VK3ALM	Lachlan	VK3DRE	Doug
29-Apr-21	VK3DRE	Doug	VK3MCL	Scott
6-May-21	VK3MCL	Scott	VK3AXH	Ian
13-May-21	VK3AXH	Ian	VK3KG	Craig
20-May-21	VK3KG	Craig	VK3TXR	Paul
27-May-21	VK3TXR	Paul	VK3QY	Chris

Review of non-assigned amateur and outpost regulatory arrangements consultation 01/2021

From the ACMA site:

The issue

As part of the ACMA's Five-year spectrum outlook 2020–24, we have reviewed the regulatory arrangements for operating non-assigned amateur and outpost stations.

Our aim was to find the best licensing mechanism to reduce regulatory burden and minimise costs for licensees, while also keeping the current benefits and uses.

We have identified a set of options. We could either:

keep the existing apparatus licensing arrangements and conditions

simplify the existing licensing arrangements and conditions

transition non-assigned stations to class licensing arrangements, while keeping apparatus licensing arrangements for assigned stations.

Our preferred approach is to authorise the operation of non-assigned amateur and outpost stations under a class licence. We have prepared for consultation a draft class licence for each type of station that would be part of our approach.

Have your say

We invite comments on the issues and options set out in the consultation papers and draft class licences by 2 April 2021.

<https://www.acma.gov.au/consultations/2021-01/review-non-assigned-amateur-and-outpost-regulatory-arrangements-consultation-012021>

WIA Survey Links:

<https://www.wia.org.au/newsevents/news/2021/20210219-1/index.php>

This is a significant review, so check it out and have your say.

Band Report

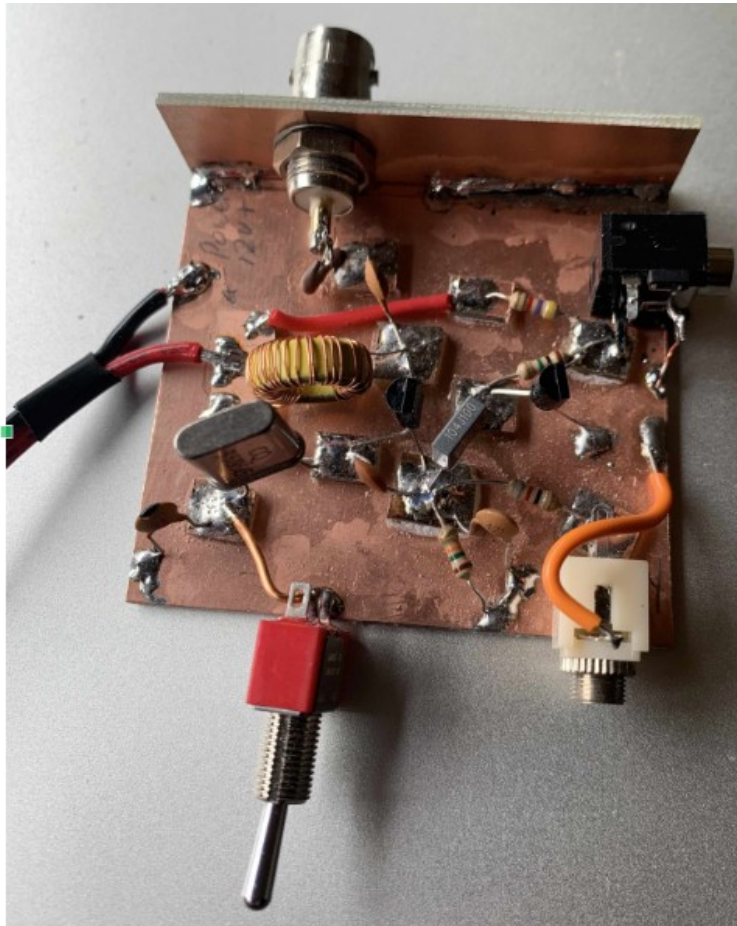
Last Thursday evening after the BARG clubs HF net where Doug VK3DRE was in the chair with 12 stations joining in. A late arrival was Kevin VK7KEV who will drop in again in future nets.

After I went scanning on VHF 2Metres and heard faint signal on 144.120 around 2045hrs. Swinging the beam it peaked down south on Tasmania and I heard the end of a net with three stations all in Burney on the north coast. I had also heard some VK7s coming through on 3RGL earlier in the night. After listening for a few minutes I called and initially worked Dave VK7DC with a very good SSB signal. The other two stations were Mike VK7MD and John VK7JON and they are all in Burnie. The group then decided to conduct some local tests on 70cm so I followed them up to 432.100 SSB and could just exchange reports with David 7DC using my 20Watts from the FT857. I certainly need to better my reception capabilities and should speed up the assembly of the high gain 70cm preamp which is being built into a large enclosure with my 250W [ex TV transmitter exciter] I look forward to working more across Bass strait on 70cm ssb.

Craig VK3KG

people to be active in this hobby and newcomers, such as myself, to learn and we have a wealth of knowledge at our disposal.

In summary, I could lash out and spend a small fortune on radios and antennas and sit here chatting to all and sundry. Yes, I do own a couple of fairly decent rigs, but the challenge and the learning comes from building and testing, with the real excitement coming from the achievement and contacts.



Where's this leading? Well, to my next experimental rig and to further construction and hopefully encourage some others to join in, who knows we could finish up with a long list of construction projects for our construction nights.

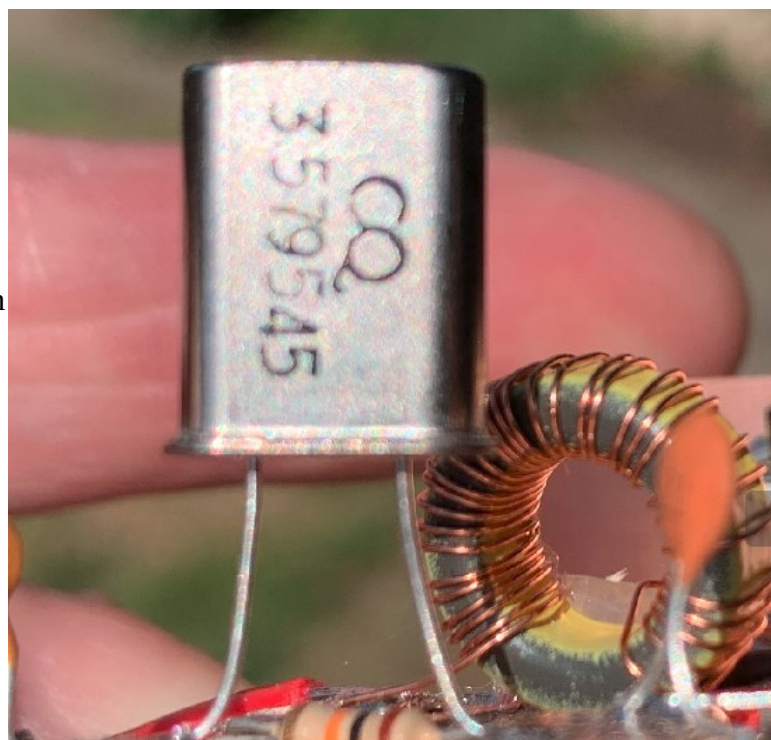
In closing, I must say I do lean a bit towards QRP and I am a big fan of Peter Parker VK3YE and his "junk box" methods.

Interestingly enough, I often recall some old movies of WWII Prisoners building rigs and making contacts with rigs built from what they could scavenge, there may be some poetic licence, but it's great to have a go at building things from what's lying around.

Let's have a go and see if we can get some others interested, and for the ones with the knowledge, let's tap into that for some help.

Acknowledgements - I'd like to thank Bob BNC for handing me this and his encouragement and assistance. The article/circuit is from Lo-Key Magazine No.147, the magazine of the VK QRP Club, article by Nic Chantler VK7BEE.

Peter, VK3PWG



VHF and Above for March 2021

The summer season has come and gone and unfortunately the propagation on 2m and above has been one of the poorest I can recall. Usually there is significant activity between VK and ZL mainly on 2m, 70cm and 23cm across the ditch. I'm only aware

of a handful of contacts taking place. However as we always say it will be better next year !!!

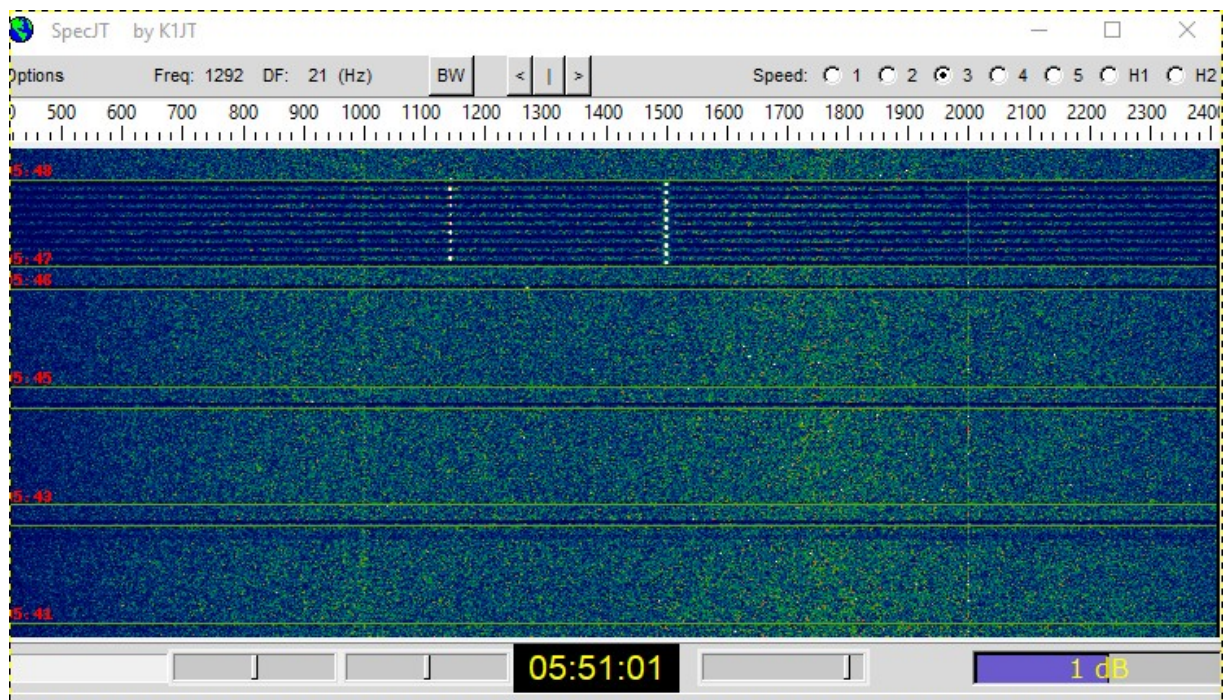
Even within VK there has been very limited openings with some stations in our area managing to be there at the right time. One of our members Andrew VK3TOT was fortunate to be around at the time and had ssb contacts into VK4. Stever VK3ZAZ also had contacts into VK6 on both 2m and 70cm so well done to you guys.

The weather has also not been kind to us particularly on field days and test days for those involved in the microwave bands. However I can report that Bob VK3BNC has got his 2.4G gear working and this week had contacts from his home with VK3AXH at Green Hill and Mt Buninyong then on the next day a contact with VK3IDL at his home station in Ballarat North.

The amount of 2.4G crud experienced by VK3AXH when beaming over central Ballarat was over S9 from both locations however Bob's signal was strong enough to still be heard so well done Bob.

The usual morning activity on 2m and 70cm continues with some changes in distances and signal strengths. A sked is conducted on 2m each week on a Wednesday night and this last week saw some enhanced conditions when several members VK3KG, VK3TXR VK3KQT, VK3TOT and VK3AXH had good reports from Ralph VK3WRE in Gippsland where signals were S9 a lot of the time. This does not normally occur.

Craig VK3KG has also had some success since recently after extending his mast to it's normal height with contacts on 2m and 70cm into northern Tasmania. There are 3 active VK7 stations that come up on air after the BARG 80m net on a Thursday night so if you have the capability to operate on these bands take a listen.



Ian VK3AXH has been active on 2m EME over recent weeks with contacts into both the USA and Europe. As a measure of the difficulty due to polarity and Doppler shift this can be difficult. Below is an image that shows the variation in signal levels of moon reflections which highlights the difficulty when using moon bounce.

The image above shows the transmitted signal on the right hand vertical column and the returned echo on the left. Also on the screen you can see the relative levels of these signals which vary quite a lot. Why do we keep doing these things? I guess it's the challenge and satisfaction. These results at a time when the degradation was around -3.3dB. I've found that when degradation is worse than -4.0dB contacts are very difficult with my setup of 4x18 el yagi's and around 22dB gain.

The screenshot shows the WSJT 10.0 software interface. At the top right, a cyan box displays Moon data: Az: 256.32, El: 16.49, Dop: -357, Dgrd: -3.3. Below this is a table of signal parameters with columns: N, Level, Sig, DF, Width, Az, El, Q. The table contains 15 rows of data. At the bottom, there are control buttons for Log QSO, Stop, Monitor, Decode, Erase, Clear Avg, Include, Exclude, and Tx Stop. A status bar at the very bottom shows '1.0001 1.0000 Echo Freeze DF: 108 Rx noise: 2 dB T/R Period: 6 s Receiving'.

N	Level	Sig	DF	Width	Az	El	Q
8	-24.4	-15.2	-0.3	0.3	256.8	17.2	10
9	-23.8	-14.9	-0.3	0.7	256.8	17.2	10
10	-23.7	-17.9	-0.7	0.7	256.8	17.2	10
11	-23.3	-20.0	-0.3	0.3	256.8	17.1	6
12	-23.0	-19.7	-0.7	0.7	256.8	17.1	9
13	-23.6	-19.3	-0.7	0.7	256.7	17.1	9
14	-22.5	-14.6	-0.7	0.7	256.7	17.1	10
15	-23.9	-19.4	-0.7	0.7	256.7	17.1	10

6 Metre Band

Quite a number of members have been active on this band this year and achieved some great results in terms of SSB and Digital communications. Here is a list of know active stations :-

VK3TXR, VK3TOT, VK3BNC, VK3KQT, VK3AXH, VK3KG (limited) VK3ZAZ and no doubt others I may have missed. Contacts were made mainly within VK and to Japan, ZL, Pacific Islands, USA, South America and other locations as well. One of our members Steve VK3ZAZ has achieved some amazing results on 6m some years ago when using the callsign VK3SIX. Below is a link that will show you some of Steve's achievements which have been outstanding. Steve quietly continues to explore this band and in recent times has been doing some EME on 6m as well. <https://www.qrz.com/db/VK3SIX>

Antenna Project

I can report that construction is now well under way with good progress being made with several members ready to commence installing elements on booms that have now been drilled. It's expected that most of the drilling will be completed at our next gathering. The current method of feeding the antenna is a coaxial choke consisting of 3 turns of RG213 around 75mm in diameter situated as close as possible to the feed point for the 70cm yagis. Other options will be tried as well to determine the most satisfactory method. Tests done so far on the UHF yagi indicate gain is good and the pattern is quite sharp with the first side lobe well down on the main lobe as predicted by the designer.

Till next time 73 VK3AXH

BLAST FROM THE PAST.

- Remembrance Day contest 1996.
- BML 1st Place HF with 252 points
- John Moyle 2008: 7th place portable station
- WIA full membership Stan Widgery vk3SE.25/10/194
- National Field Day Contest (BML).....2nd place Mobile...2898 points October 2004
- Remembrance Day 20/6/2006 HF Phone 3rd place

To my research I believe that they are true and correct.....Doug vk3vba

SMD Trial Project

Hi! I have some of these, and someone was asking about SMD soldering and a suitable small intro project. If you could mention this, they cost \$2.50, so even if a problem in assembling, no major harm done. Thanks, cheers lach



SILICON CHIP. Jan 2021

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- P98 El Cheapo modules: The LCR-T4 Digital Multi tester. Jim Rowe reviews a very handy tester for the workshop.



CONSTRUCTIONAL PROJECTS.

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- P38 Arduino based adjustable power supply
- P61 Electronics Wind chimes
- P80 Raspberry Pi to make a compact virtual Electronics Workbenchmailto:mjw.email@gmail.com

YOUR FAVOURITE COLUMNS

- P46 The Serviceman
- P69 Circuit Notebook. LCD Clock.
 - DIY laser rangefinder.
 - Animal and Pest Controller.
 - WiFi Snooping with Raspberry.
 - Multi frequency sinewave generator.
- P102 Vintage Radio. Looks at a 1952 vintage Phillips BX205 B-01 AM/SW battery valve radio.

EVERYTHING ELSE is still found here.

Happy reading.