



Founded 1979 Incorporation No A6677 P.O. Box 692, Shepparton 3632
March 21

VK3RGV repeaters and transmitter operating frequencies Mt Wombat

53.725MHz (-1 MHz offset), **In Service**

146.65MHz (-600 kHz offset), **In Service**

438.2MHz (-7 MHz - offset -D-Star), **In Service**

438.650MHz (-7 MHz offset and 91.5 Hz tone access only), **In Service**

438.900MHz (-7 MHz offset- DMR repeater), **In Service**

439.775MHz (-5 MHz offset), **In Service, IRLP (node #6990)**

476.475 MHz (+750 kHz off set) CB Repeater WBT03 Channels 3- 33, **In Service**

VK3RDS, 438.7625 MHz (-7 MHz offset DMR repeater) **Shepparton on test @ VK3YNV QTH**

Access to most analogue repeaters is by sub-audible 123 Hz tone or noise/carrier mute (less sensitive).

Club informal on air get togethers - Wednesday evenings. All welcome. Club call sign VK3SOL:-

2mx repeater 8.00pm 146.650 MHz,

3.63 MHz SSB ± interference 8.30pm.

The vintage radio club have a sked at 11.00am Sunday on the 2 mx repeater.

Meetings the first Saturday of the month from 10 am for informal chats and technical talks. A BBQ follows (a gold coin donation). Business meeting 1 pm (except January when no meeting occurs) at

Flexible Learning Centre, 18 Channel Road (250 metres from Archer Street), Shepparton.

Variations in these times, days and location are normally notified in the preceding newsletter.

Website – www.sadarc.org or www.sadarc.org.au Face book - www.facebook.com/sadarc.org

Info for the page contact - Denny French on denny3782@gmail.com

Note: Want to get your licence? SADARC has examination assessors, contact the secretary for details.

The following repeaters do not belong to our club but provide good signals for many members.

Mount Major VK3RDU repeaters, TX, 146.850 MHz and 439.875 MHz 25/03/2021

DISCLAIMER: - No guarantee is given as to the accuracy of information in this newsletter.

Warning: - There is a danger of electrocution or injury when working on electrical/radio gear or working at heights doing antenna work. You do so at your own risk.

President: - Peter Rentsch

VK3AXI

peter@rentsch.com.au

Vice-President: - Barrie Halliday

VK3KBY

Secretary: - Andy Ashley

VK3AJA

secretary@sadarc.org

Assistant Secretary: - Geoff Angus

VK3ZNA

Treasurer: - Andy Ashley

VK3AJA

secretary@sadarc.org

Membership Sec: - Andy Ashley

VK3AJA

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Webmaster: - Ray Gardner

VK3YNV

ray@etheira.net

Communications Managers (External Events):- Bruce (VK3PNG) & Darren (VK3HEN) Glasson

Tech. Committee: Geoff VK3ZNA, Ray VK3YNV, Josh Gardner & Rodney VK3UG – with power to co-opt.

Newsletter: - Rodney VK3UG (Editor) rodlynn6@bigpond.com, Andy VK3AJA (Distribution)

Presidents Report March 2021

How good was it to catch up face to face with all those who attended our last meeting? The chatting and discussions that were occurring were back to normal if not more enthusiastic. Thank you to all those who attended and thank you also to those who brought food and healthy things to eat! Our group of radio/electronic enthusiasts are very passionate about their hobby and it is heartening to see their willingness to share the knowledge they have with others. Thank you for making our club a vibrant organisation.

As we are now able to meet face to face and all being well restrictions will be further reduced, we will continue to meet as planned at the Vision Centre. The BBQ issue has been sorted out and will be reported on at the next meeting and the current occupants of the building are happy for us to continue using the facilities.

Ray VK3YNV raised the issue of speakers after the meeting. A short list is as follows:

Dennis – Arduino

Dean – Jaycar, an introduction to Arduino/ Raspberry Pi

Josh – a new design in Breadboards and their use

Peter – DX'ing on FT8 and FT4 and using Fox and Hound

Geoff – Travellers Radio

None of the above is locked in, they are just suggestions. If you have anymore ideas for speakers, please let me know.

With the hope of enthusing someone I present a little self-praise on FT8. My first contact on FT8 was 27th March 2020. Since then, I have made 11,297 contacts on 80m, 40m, 15m and 10m. 6,496 are confirmed through Log Book of the World and I have 151 Countries of which 131 have been confirmed. My latest confirmed countries have been Vietnam, Tanzania and Cocos/Keeling Island. If you don't learn anything from FT8 because you are not actually verbalising with contacts at least you start to learn some geography!

Cheers for now.

Peter Rentsch President

CLUB CALLANDER

3rd April 2021 – Regular Meeting – Vision Centre BBQ – Easter Saturday

1st May 2021 – Regular Meeting – Vision Centre BBQ

5th June 2021 - Regular Meeting – Vision Centre BBQ

12th & 13th June – Steam Rally Echuca (Not on, see in Editor's Ramblings - ask Bruce VK3PNG)

SADARC MARCH 2021 MEETING

Minutes Taken by Andy VK3AJA, at clubrooms.

Apologies: VK3ZE Huntly, VK3TEX Les, VK3EIR Joe, VK3FALN Alan, VK3GEK Graeme, VK3HEN Darren, VK3KUG Ray, VK3BLD Bob.

In Attendance: VK3AJA Andy, VK3AXI Peter, VK3KBY Barrie, Stevo, VK3UI John, VK3GSR Geoff, VK3YYY Ian, Josh, VK3YNV Ray, VK3OV Pat, VK3PNG Bruce, VK3ASK Peter, VK3UG

Rodney, VK3BPH Kevin, VK3TJS Jacek, VK3DP Steve, VK3ZYZ Denys, VK3EB Dallas, Bill C. VK3ZNA Geoff.

Minutes of last meeting: ready by Peter Moved by Robert, second by Geoff. All in favour.

Inward: insurance proposal, enquiries for assessments, QSL enquiries.

Outward: Insurance application to WIA. All in favour.

Financial report: read by Andy, Moved by Andy, Second by Barrie. All in Favour.

Technical Report: Read by Ray, everything is working fine! Ray said the 4g modem had disconnected and had to have power cycle to reconnect. Josh has set it to reboot automatically. Ray would like to test another 2 m antenna already on tower. Rodney mentioned the repeater access is patchy through mountains but is fairly good other directions but has a few null here and there.

Moved by Geoff, second by Bruce. All in favour.

Events: Steam rally may go ahead and Bruce will advise.

Bruce moved that we be involved, second by John , all in favour.

Website: Ray said website all good and forum has 100 subjects and 500 posts!

General Business: Peter has spoken about our clubrooms, no longer have to pay fees for rooms.

Vision Aust. Still own site but is now in use by Flexible Learning Centre.

Peter mentioned as this site is part of education dept. working with Children check is required if we are here during the week.

It was decided that we put a plan together to install some antennas on roof, this was moved Kevin, second by John. All in favour.

Stevo mentioned has found a radio receiver and thanked the Club.

Assessments: Andy mentioned that a commercial Covit safe plan must be submitted before exams are supplied, as we do not have a plan we will wait and see what happens.

ACMA Changes: There was a group discussion about the proposed changes, and it was decided that we make our own decision and vote or send decision themselves.

Robert has a submission document that can downloaded from our forum.

John moved we submit a proposal as a club using Roberts single page document for option A signed by President and Secretary, Second by Kevin. All in favour of option A.

QSL Cards: Ray mentioned we have some card available if anyone wants to send some out (VI3RA) and that the process of filing these out and that anyone the prepaid for return will not have to go to WIA to be sent. Dallas has offered to assist.

Rodney mentioned that we should as individuals submit to council for a "radio Museum" perhaps at the old RA site?

Meeting concluded 2:19 pm

SADARC AGM MARCH 2021

In attendance: same as Monthly meeting.

Minutes: read by Andy moved by Geoff, second by John

Reports: Presidents report Moved by Peter, Second by Geoff

Financial: no change. Same as monthly.

Tech: no change. Same as monthly.

Membership: no change. Same as monthly.

General Business: none.

Positions vacated:

Nominations for President, Peter was nominated, no other nominations Peter accepted.

Nominations for Secretary, Andy was nominated, no other nominations, Andy accepted.

Geoff VK3ZNA has been nominated as assistant Secretary and accepted.

Nominations for Tech committee were Ray, Josh, Geoff and Rodney, all accepted.

Newsletter editor Rodney was nominated and moved by Stevo, second by Geoff. Rodney accepted.

Website, Ray was nominated, second by Bruce, all in favour.

Event manager, Bruce and Darren were nominated, Moved by Jacek, second by Peter.

Facebook page: no one looks at it, perhaps we should cancel it?

Newsletter header needs to be changed? To reflect 10 am start as BBQ is new norm for meetings.

BBQ: we will see if we can get a key for the outdoor storeroom and see if our BBQ is still there.

Ray mentioned we should go back to having technical talks each meeting. Guest speakers?

Man behind the microphone and quiz should be done again as usual.

Bottle Shop Net get together March 17th to March the 22nd

Those attending this event started arriving at the Mt. Franklin camp ground from Tuesday prior; by Thursday 16 March most had set up camp of the weekend.

A great time was held by all for the next few days. Steve VK3DP set up a HF portable base station on arrival; Gavin VK7VTX arrived on the Friday and soon had a portable station up and running. Barry VK3NBW coordinated the Bottle Shop net on the Friday evening at around 8pm using Steve's Collins radio; most of us took part in this net using Steve's radio. Gavin VK7VTX coordinated the Tasmania sewing club net also on the Friday at 6pm. from Mt. Franklin.

Most of the time was spent around the camp fire chatting about many various subjects including of course our rigs, travelling and many other subjects.

Present were the Following.

.VK3NBW.Barry,VK7VTX,GavinVK3DEP.Steve,VK3KLB.Albert,VK3DAE.Dean,VK3FJAE.Doug,VK3FLMJ.Lorraine,VK3DNQ.Ian,VK3NKC.Kevin,VK7ADQAlvin,VK3PNG.Bruce,VK3ZIP.Zorra,VK3KY.Dave,VK3LTA.Trevor,.VK3KCQ.Richard.,VK3NMK.Mike.

Some visitors arrived for the day on Saturday; they were Kevin VK3CKC Jim, VK3VBC, John VK2MOP, Barry VK3TDX and Monica VK3FMON.

The ladies who accompanied their partners were Sandra, Kay, Helen, Leann and Myrle.



Editor's Ramblings

- This was the first face to face meeting of the year and also included the deferred AGM. Gee haven't people changed over the year of no meetings (except on air)!!
- A number of members got a bit lost on the way to the meeting as the name of the location of our meetings has changed and no sign was evident. It appears some of the lively lads in the area didn't like any signs. The newsletter header has the address correct now.
- VK3YNV, VK3AFD and VK3EB are now dealing with the distribution of the QSL cards from last year's communications weekend at the old Radio Australia site.
- The clubs intention is to hold the Ham fest in September providing Covid 19 doesn't cause us problems. Start getting your surplus items ready for sale or working out what items you need..
- It appears we may be allowed to put up some small antenna systems on the club rooms (2mx at least) and Peter VK3ASK will negotiate in regard to this. Let's not put antennas up unless we intend to use them.
- A couple of our members literally bit the dust recently, one whilst walking fell on his face and the other fell off his bike on a treacherous bit of road. Both are looking less scarred than they had been.

- Exams were discussed and at the moment Andy said that it is impractical to conduct exams due to the Covid 19 conditions placed on how the exams are to be conducted as set by the AMC. Hopefully this will soon be resolved as there are around 4 people who have contacted Andy wishing to sit the exams.
- All the members of the committee were re-elected to the positions they occupied before the AGM. A number of members have indicated they will assist on committees if need be. The committee always needs assistance in one way or the other.
- Members agreed that the next meeting would proceed on the normal first Saturday of the month even though it is in the middle of Easter holidays.
- A query was made in the meeting whether we need the face book page as few if any are using it. Some felt that the forum may well have replaced the face book page. What do members think about this? Let the Secretary know your thoughts. His email address is on the first page of the newsletter.
- Bruce VK3PNG is investigating each of the functions we attend promoting Amateur Radio, such as the Echuca Steam Rally, to see what the go is this year. Bruce reported on 10/3/2021 that the Steam Rally will not occur this year.
- Recently a brochure was received in the letter boxes of residents within the City of Greater Shepparton. Among things asked were resident's ideas on "How can we make Greater Shepparton even greater?" It came to mind that we have SAM (love it loath it), the new MOVE museum of transport and what else. Here is a proposal. It came to mind that we should alert the council that there is an opportunity to push the idea of a communications museum at the old Radio Australia site. It would be unique in Australia and probably in the Southern Hemisphere. It would be a one of a kind and we need to grab the chance that this could occur. However, we (the residents of Greater Shepparton) need to contact the council by 24th March. Hopefully you will have this before that date but the time will be tight.
- The addresses are -- shaping.greatershepparton.com.au , -- phone 03 5832 9700, email council@shepparton.vic.gov.au , -- drop into the council offices at 90 Wellsford Street, Shepparton or write to the -- Shepparton Council, Locked bag 1000, Shepparton, Vic, 3632 Your input may be the one we need to get something like this in the area.
- Another changed call sign. Graeme VK3PGK is now VK3GEK. Not sure why so many are changing call signs some have been able to get their initials which is handy.

MFJ Magnetic loop test and report

By Andy VK3AJA

Greetings all,

I have always wanted to test a magnetic loop antenna but do not really have the workshop required to make one.

So, I decided to purchase one from MFJ. Yes, it was expensive!!!! (about \$1000) and this is what I found.....

I unboxed the device and the controller, the first thing I noticed is how small the loop is. It is the one that tunes from 7MHz to 21 MHz see pics....



It is less than a meter across. And has a bracket to mount horizontal if required.

I (as all good experimenters do) removed the black plastic cover and had a look inside. See above.

It has a large air Capacitor and stepper motor assy. The build quality is acceptable but I did notice the plates on the capacitor actually touched when fully meshed (Quality control, MFJ) anyway after bending the plates to make sure they don't touch, I tested controller and was happy with the function. I reassembled it and put it up on a temporary mast only about 3 meters up!

I plugged in controller and as it uses the coax to feed DC to the motor no other wiring is required. This made for a quite easy install.

The controller box below has cross needle forward/reflected power meter and slow and fast tune buttons.



It has a simple algorithm programmed into it to stop and beep when a “dip” in reflected power is recorded.

It then tells you the direction required to fine tune. Pretty easy to master after a few minutes.

It has its own isolated plug pack power supply as if you use the shack 12 volt supply it would be a dead short to ground in one direction. This is pointed out very clearly in manual and I bet a few people have skipped this and damaged controller!

Testing.....

I found a quiet frequency on 40 meters, and set about tuning the device (after I called and asked if freq. was in use naturally) The controller indeed stopped and beeped as suggested and indicated the direction to “fine tune” via the LED indication either up or down. After a bit of up and downing with the fine tune I was able to get the loop to show a VSWR of around 1.3 to 1. It also has a very hi Q so also an exceedingly small bandwidth. Needs to be retuned even if you move a small amount up or down band.

I set about calling CQ, after a few calls I was answered by a fellow in Tasmania. I was surprised at the very strong signal received and set about telling him about the new antenna. He said I was 5-9 plus at times and this was his signal report also from me.

I switched over to my end fed half wave wire and he could not really notice any change. I was a bit surprised how well this loop worked, and mind you so was He!

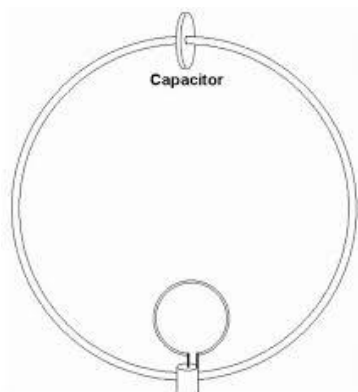
I made several other contacts including Aubrey VK5QD and the loop antenna actually worked very well. I made a contact on 30 meters to a guy in QLD, same result.

Noise....

It is suggested that loop antennas receive less QRM than “regular” ones and I found this in my test not to be true. I however found that if the loop is mounted vertical, which mine is, it does have several Nulls at about 30 deg both sides of centre line. I guess you could turn antenna to reduce QRM in that case. I also found the “nulls” were very strong on local signals but not really noticeable to the stations I worked some 600 or more km. away. To give you an example I spoke to Huntly VK3ZE last week and could only just hear him, I turned antenna a bit, now 9 plus 20 dB! Huntly confirmed the same for my signal. This loop could be used to “null” out local noise, I guess.

In conclusion I have found that it indeed works as suggested, better than I thought to be honest. It was very easy to put up and does not need to be very high if installed vertical. It can actually be installed at ground level according to the manual. Horizontal installation would make it also more directional I would say as the bottom point (or back in horizontal) is attached to mast or ground. I guess it would be radiating from the other end. It would be radiating with a combination of vertical horizontal due to its shape and I guess that would mean close contacts and DX ones would be possible, probably has some radiation straight up I would say.

It has a smaller coupling loop that is connected to the coax and ground and this as air coupled to the outer loop. See below for diagram, I adjusted this coupling loop (by bending) and was able to get the VSWR down to nearly 1:1 on all bands that it covers.



I have yet to make any real DX contacts with it but I would suggest if conditions are good enough this would be possible.

For those that live in location that does not allow antenna farms on properties, this would be a great compromise as it really is no bigger than a modern TV antenna and could easily be mounted on a TV style mast.

I have found it easily tunes on the frequencies suggested in manual, 7-21 MHz and does indeed work.

I am feeding it with 100 watts (it's rated at 120 watts) and would imagine extremely high voltage at top of loop!

It would be a very inefficient radiator but as Aubrey VK5QD said "1 watt delivered in the right spot is all you need" I think that would be correct.

If you drive past my house, you can just see it above my roof! All in all a surprising device.

Would also be great for portable use as quite easy to carry and the controller has provision for internal AA batteries.

Cheers VK3AJA Andy.



