



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

VK3RGV repeaters and transmitter operating frequencies

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)**

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 occur on the first Saturday of the month at 1pm. Due to the pandemic temporarily they will be conducted on air via our 2 metre repeater and Peter VK3FPSR will officiate as President.

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

Website – www.sadarc.org 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 operating frequencies, 146.850 MHz and 439.875 MHz

UHF CB Repeater WBT03 Mt Wombat Channels 3- 33, 476.475 MHz, **In service** 26/3/2020

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

VK3FPSR/GV

peter@rentsch.com.au

Secretary: - Andy Ashley

VK3AJA

secretary@sadarc.org

Assistant Secretary:- Geoff Angus

VK3ZNA

Vice-President: - Barrie Halliday

VK3KBY

Treasurer: -Andy Ashley

VK3AJA

secretary@sadarc.org

Membership Sec: - Andy Ashley

VK3AJA

"

Webmaster: - Ray Gardner ray@etheira.net

VK3YNV

Publicity Officer: - Vacant

Communications Managers (External Events):- Bruce (VK3PNG) 0427 715 663 & 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

Peter & Andy (Printing/ Distribution)

VI3RA - Victor India Three Radio Australia

What a weekend. After several weeks of preparation for the special weekend of 14th and 15th March the crew who had been doing the nuts and bolts of the preparation for this once in a lifetime opportunity were starting to relax. However, the final finishing touches had to be made on the afternoon and evening of the 13th so that the event could take place with a 100% likelihood of success. The fine tuning took a little while but the combined efforts of the crew proved we had it ready to go just before midnight on the 13th.

The first activity and one that was really time important was the attempt to bounce a signal off the moon on the 21 MHz band, much the same as occurred in 1947 from the same site. Radio Australia did this with 50 kw of energy on 21.5 MHz and a receiver at Hornsby in NSW. So at about 11:15 pm short bursts of signal were sent to the moon with minimal (or imagined) return echoes – you had to be very good to see it at all on the computer screen and Rex VK3OF wasn't looking all that confident. However, with some experimentation with the set up and using a hearty 400 watts at around 11:30 pm echoes became quite evident to Rex and excitement became more evident. (See the picture of the WSJT-X picture showing the short vertical lines coming down from the top of the screen.) At this stage the moon was at around 10 degrees above the horizon which was optimum for the PX5 antenna we were using. He showed us non-moon bounce folk what to look for as he has been involved in moon-bounce for quite some time on VHF bands where it is a much easier task than on high frequency. An attempt was made to use just carrier transmissions but returned echoes were not detected with normal receiver analogue systems above the inherent noise level. However, the advances made in digital communications methods meant we were successful as these systems can detect signals below the noise level as happens with the many space probes in outer space. To our knowledge moon bounce on high frequency has only been done in the Southern Hemisphere once before back in 1947 from the same site Radio Australia.

On Saturday night moon bounce was again achieved at a slightly later time as the moon rises later each day/night. An attempt was made to send a message via WSJT-X but the returned signal was too weak to decode. All worth a try. At least it was proven we could do it with much lower power than Radio Australia used in 1947 on high frequency. With more power we probably could have done perhaps the first successful digital text communications via the moon on high frequency.

After the moon bounce experiments the DX contester folk hopped onto the bands and made many contacts into the early hours of Saturday morning. They were using all sorts of modes as were many of the non DXers. Morse, SSB and AM transmissions were all used as well as modes such as FT8 and JT65. Not being a weak signal operator I can't tell you how successful these were but from comments heard they were very successful.

If members would like to provide more information on what you did, heard and saw it would be appreciated and I'll endeavour to include it. In later newsletters. (Editor)

Radio Australia HAM Radio Event - March 2020 **A summary by Rex (VK3OF)**

Well I've finally managed to get some sleep after the huge weekend. This is despite being on night shift again all this week and now On-Call for the whole State over the next 7 days. So, I thought it was time to throw some words on electronic paper to provide a basic summary of how I thought

things went. Realistically the summary could say something like ...”it was spectacular”, but I’d like to add a bit more to it than that.

Just for some history, the idea of using the wonderful Large Antenna Arrays for HAM Radio all started when Radio Australia (RA) first closed down back in 2017. My initial thoughts of setting up a station were agreed in principle by lower management, but things never went any further for various reasons. However, when the property was sold recently, the idea of trying an event like this was again discussed by me and my good friend Greg (VK3BRQ). So, I made official applications to senior BAI Management and after many emails, and OH&S paperwork, we were eventually granted permission on the 20th Dec 2019 to stage this awesome event. Obviously, planning for the event had to commence immediately due to short time frame before the property was handed over to the new owners. After discussing this with various online groups I soon figured out this event was going to be huge, and beyond my personal capability to organise. So, I sought help.

Despite the short notice, the crew at the Shepparton and District Amateur Radio Club (SADARC) were willing to take on the major responsibilities and logistics in co-ordinating this event. I was impressed from the very start with the enthusiasm and professionalism that was evident there. With numerous meetings, many phone calls, and lots of emails flying around to get the preparations underway, they managed to co-ordinate everything required to carry out what has become one of ‘the great’ events for Ham Radio in Australia.

I truly appreciate the whole club’s involvement, but a special mention of thanks must go to the following ...

The SADARC club committee, especially Peter VK3GV (ex VK3FPSR) who organised for the call sign VI3RA to be allocated and started the ball rolling, advising the WIA, ARRL and RSGB among others of the event.

Ray (VK3YNV), for taking the technical organisation of the whole project under his wing and running with it, despite the obstacles that he was presented with along the way. Ray constantly kept in touch with me and regularly provided updates as to how things were going and offered solutions to any issues as they arose. He was heavily involved in all aspects of the event, including terminating all the coax and preparing the wonderful lanyards, and I felt very comfortable with Ray at the helm.

Denys (VK3ZYZ), for his amazing development of the high-power BALUNs prepared for the event. I know he spent a lot of time getting these right and carrying out tests to make sure they would be trouble free on the weekend. The finished products were very professional and I’m certain could equal any available on the market. His assistance in fitting the finished BALUNs confirmed to me that this is a real labour of love for him. Some of the Power Supplies used were also from Denys. I particularly liked his enthusiasm in handing out his 3D printed animals, two of which adorn our fridge at home right now.

Josh (VK No Call....yet), our I.T. Wizard, who wrote the custom web server and front end of the web site and helped prepare the computers (amongst many other things) for use on the day. The professional quality of the web design, all the great artwork involved, and completion of the ‘most excellent’ Antenna charts, was outstanding. I’ve had lots of people comment how professional it all was. Josh was also a great support to me during the event and assisted in so many ways.

Rodney (VK3UG), for his overall enthusiasm in the event and ongoing involvement with the event preparations and promotion. His design and construction of the Antenna switches, and controllers, shows that real Amateur Radio spirit is alive and well. And it seems he also has a voice for Broadcast

Radio. Who knew? His deep interest in the moon-bounce experiment was the cornerstone in making these particularly successful tests happen at all. And everyone is so pleased that we did it now. A real achievement and one of the highlights of the overall event.

Others that I must mention for their outstanding assistance are Peter (VK3GV), Karen, and Dallas (VK3EB) who were the wonderful crew that worked at the club rooms. It was great to have the support of these volunteers who held the fort there and prepared all the operators so well. It made things so much easier for me as each new batch of operators arrived. A sincere thank you.

I must also thank Paul Watters (VK3YLS) and Terry Fahey. Without these guys, and their rapid impromptu last-minute antenna repairs, we wouldn't have had the large range of antennas to choose from, and we wouldn't have had all the slewing advantages available to us. Present during a large part of the event, these two helped ensure everything was running OK and provided operators with answers to the many questions about the site.

Also, our DXpeditioners Lee (VK3GK) and Graham (VK3GL), who provided us with additional equipment such as Transceivers, Linear Amplifiers, Antenna Tuners, and Band Pass Filters. Your assistance both in hardware and event knowledge was invaluable and very welcome.

Geoff (VK3ZNA) who supplied and terminated all the very long runs of LDF coax that ran outside to the BALUNs at the Matrix Switch. Without this large contribution the event would have been so much more difficult.

Thomas (VK3EO) for supplying his equipment for the Moon bounce experiments. Despite being time poor, Thomas made the trek to Shepparton and assisted me throughout the event in so many ways. His knowledge of the radios and amplifiers was most welcome at the very critical time of the Moon bounce experiments.

We must also mention the wonderful support from ICOM, who provided most of the Radios. From the initial sponsorship application, through to getting the gear back to them, they have been great people to deal with. And weren't the radios great. With an awesome front end, great ease of use, and magic filters, my favourite was the IC-7610 and may well be on my shopping list for this year. If you plan on buying from ICOM let them know where you saw it.

I also thank all the many dozens of Operators who took the time to come along and make the event a success. Some covered great distances just to be a part of it, and there were so many excited smiles and happy faces from everyone as they enjoyed this rare opportunity. Everyone was well behaved, and this made my job just that bit easier. Many operators also got to have a small look around Radio Australia and get the feeling of what it was like working at this amazing place.

And to finish off we can't forget Jason (VK3FNQS) who has been flat out busy processing all the manual log entries. This would have been a great challenge as I happen to see some of the handwriting on the logs which was clearly written by Doctors. And of course, we missed Colin (VK3NQS) who decided it was best to stay home and save us all from catching his bug. Thanks Colin, we missed you and I know you desperately wanted to be a part of the event.

I know I haven't covered everyone that helped me make this event such a success, but you know who you are, so please except my thanks for a job well done.

Without having all the logs entered yet it's difficult to know the total number of contacts. But I know it's at least in the many hundreds. It was great to see people willing to experiment and try different Antennas and slewing combinations, using a variety of Bands, and different Modes. There were many operating methods from Rag Chewing through to full on Contest operation. I saw lots of SSB, some CW, a bit of FT8 and other digital modes. During my go at the microphone I even managed to make a few contacts on AM, just like the original Radio Australia. According to Ray we may have even invented a new mode called JT-WM. How cool is that. (JT-Waltzing Matilda)

We seem to have made a hit on YouTube as well with some great audio recordings from all around the world. A favourite for me is the recording of the VI3RA Close Down. It was wonderful to hear it back, static and all, and I believe it was another memorable part of the whole event. If you haven't heard the Close Down message yet jump on the SADARC web page and have a listen. Also make sure everyone keeps tabs on the SADARC web pages as they are updated with all of the photos, videos, and audio recordings taken during the event.

So that's my wrap up of what will be remembered by many as one of the great Australian Ham Radio events. It's a pity RA is closed now, and I know I'm going to miss the place a lot. (I even went upstairs and sat at my desk for a moment, before closing the doors for the final time.)

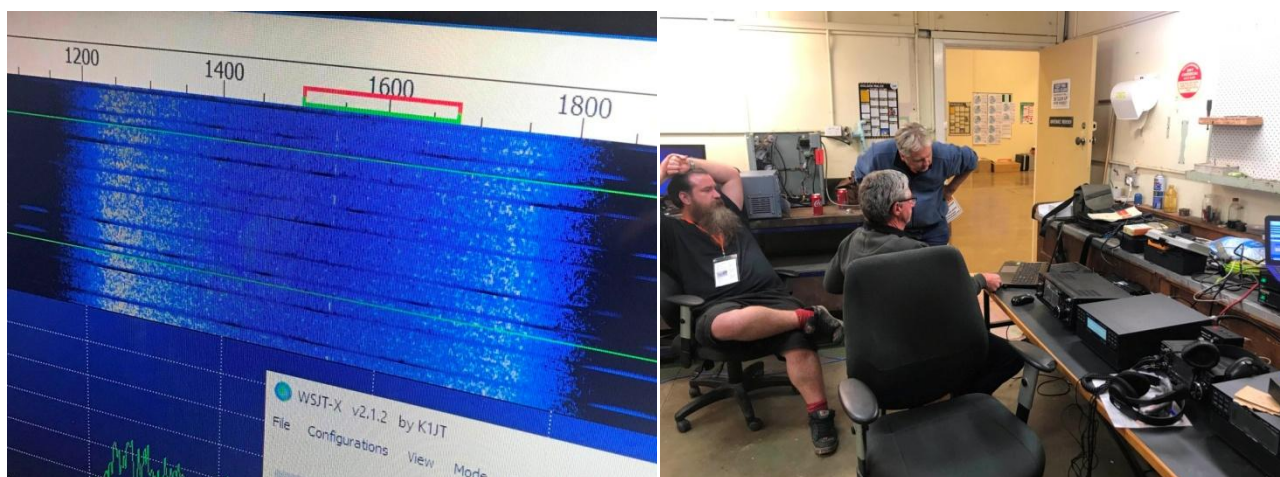
I hope everyone had as much fun operating from (and talking to) Radio Australia as we did in making it all happen.

73

Rex (VK3OF)

Senior Broadcast Technician

BAI Communications (Australia)



The returned moon bounce signals picture a vertical series of dashes near the centre of the screen. Operators observing the signals coming in from the moon.

Presidents Report March 2020

To all those who attended our last meeting, thank you very much for your attendance. It was a very good meeting and most of the meeting was dedicated to the final arrangements for the Radio Australia weekend.

What a great weekend we had with lots of contacts made by many operators. All the feedback I have had has been very positive and as I write this report (3:58pm 24/03/2020) I am actually listening to a discussion about the weekend on 40m.

To all those who helped in way thank you very much. To the Technical Committee a very special thank you for the sterling effort that you put into the weekend. Many hours of work and effort was put in by this Committee and without their help and enthusiasm the weekend would not have been successful as it was.

To our forthcoming meeting to be held on the 4th April.

After due discussion we have decided under the current circumstances to cancel the physical meeting to be held on the 4th. As we are nearly all Radio operators I thought it may be a good idea to actually still hold our meeting but it will be held at 1.00pm on the 4th April on 146.650 - our 2m Mt Wombat repeater. Some of us may have to dust off our radios but it should be a great way for all our members plus others keeping up to date with what is happening. As radio operators there is no reason why we should not meet on air. I will try and control the meeting from home as best I can and I would like to have some reports in regarding to the RA weekend. It should be a bit of fun to actually to use our radios for a meeting.

As I see it this may become the norm for a while so please understand that we have no control over this and are acting on the advice of the authorities. We also normally get together with the Bendigo Region operators in April as well at Goulburn Weir but I feel that this should be cancelled as well for the time being.

That's it for this month and I look forward to hearing you all on the 4th April for our "on air" meeting.

Cheers for now.

Peter Rentsch President

CLUB CALLANDER

4th April – "On air meeting" 2m Repeater Mt Wombat 1.00pm

2nd May – Meeting as usual. Style of meeting to be decided depending on the advice from authorities.

SADARC 7th March 2020 meeting

The rooms opened at around 10 AM for 'show and tell' and a general chat. VK3ZYZ Denys, Ray VK3YNV and Bill C. had their current projects on show.

A barbecue was once again proved a success, especially those that have travelled a distance to be present. It is a time to have a chat and catch up with those members and local members that attend.

Meeting opened at 1.00 PM

Apologies:- VK3JNC Ian, VK3AJA Andy, VK3FTRK Geoff, VK3NQS Colin, VK3ZE Huntly.

In Attendance:- VK2ACR Rob, VK3FNQS Jason, VK3TEX Les, Bob H, VK3EB Dallas, VK3AFD Arthur, John (Stevo), VK3YNV Ray, Josh G, VK3KBY Barrie, VK3UG Rodney, VK3OV Pat, VK3ASK Peter, VK3UI John, VK3ZYZ Denys, VK3FALN Alan, VK3BPH Kevin, VK3AO Alan, VK3ELV Phil, VK3FPSR Peter, VK3ZNA Geoff, Bill C, VK3TJS Jacek, VK3YYY Ian, VK3PR Fred, VK3XNW Neil, (26 members present)

Minutes from Feb meeting, moved, VK3KBY Barrie, seconded VK3BPH Kevin, Carried.

Correspondence In:- Letter for VK3AJA Andy, Letter from Bendigo Bank.

Finance, Accounts In:- Australia Post, Annual rent \$134.00, Material for 300/50 ohm baluns for Radio Australia weekend, \$170.00. Interest rec'd \$0.57 Moved:- VK3FALN Alan, Seconded VK3ASK Peter. Carried.

General Business

With the Vision Australia site to be taken over by the Education Dept. Peter VK3ASK is to negotiate a suitable arrangement for the Club to remain at the site in the interim. Moved, John VK3UI, seconded Rob VK2ACR, and Carried.

Technical

Ray VK3YNV gave an update on the up and coming Radio Australia weekend of 14th and 15th March. He explained that after 3 antennas were repaired, we have 10 out of the 13 antennas to use. The JR rhombic was badly damaged and irreparable without specialised equipment. All the antennas in the Px group were usable and the AR rhombic. These antennas now give operators all bands from 80m to 15m antenna types and allocations to the 3 operating positions. Each of the antennas arrays cover small angles from roughly north to around 100 degrees to the east. Operators have access to 3 antennas each with manual remote switching from each operator position.

He also mentioned the generous loan of transceivers from Icom Australia, IC7610, IC7300 and a VHF transceiver. Thanks to BAI (Broadcast Australia) for allowing access to the RA site. The strict conditions being only 6 operators/partners, plus BAI staff, at any 2 hour sitting across the 48 hours. As requested by SADARC, the ACMA have allocated VI3RA call sign for the event. Others have offered their equipment for the event, including an IC7300 and various power supplies and linear amplifiers.

Ray and Josh have set up 3 networked computers with internet access and software for station logging. This feed to the SADARC website will allow immediate access to see QSO stations logged!

Special lanyard style name tags based upon a Radio Australia QSL card are to be issued to participants as an identification at point of entry at Radio Australia. No tag, no entry. Tags are to be collected from the Vision Australia Club Rooms when open before proceeding to RA.

Talk:- VK3PR Stuart Mair.

Stuart gave an excellent talk. He grew up in Richmond, his father worked in St Kilda Road area, and as a youngster, Stuart fell into a lake? Was rescued by Thomas Blamey, a moment of meeting *fame*. At age 16 he enrolled in the Marconi School of Wireless, he was sent to a snobby private school but soon changed to another school. He then went on to University and after 6 years graduated. At university he engaged in many personal electronics projects and then later, as a CB operator and

finally after being told to get his amateur licence by a *someone* that turned out to be the RI from Sale!

Next Meeting Talk:- VK3FPSR Peter.

The meeting concluded at 2.30PM

Editor's Ramblings

- Due to rapid changes in what is happening around the world and even within our club I am sorry to say that the next portion of Les VK3TEX's article on fitting out your vehicle for mobile activity is being held over until next month.
- The next few meetings have been **cancelled** due to the pandemic, Peter has decided that we can hold our meetings via 2 FM 146.650 MHz (with 123 Hz sub audible tone preferably) in an informal basis on Saturday 4th April commencing 1 pm. This is a way we can keep in touch in addition to our physical meetings.
- Congratulations to Peter VK3FPSR as he is upgrading and looks like being able to shorten his call sign to **VK3GV**. I didn't even know that you had sat the exam. Congratulations from all of us. I gather however that there is a bit of a hiccup with this and there will be some delay with the upgrade.
- Andy has gone on holiday so Geoff VK3ZNA has taken over the task of secretary for the time being. Have a great holiday Andy, you missed out on the great weekend at Radio Australia. You'll probably be stuck in WA for while now.
- Good to see Bob Hose back in our area. Bob was very much involved in SADARC quite a few years ago so hope you'll become active in the club again.
- With 28 hungry members attending, the BBQ at last meeting got off to a bad start with the gas BBQ bottle being empty. The BBQ cooks had been told the gas bottle had plenty of gas in it.
- Stuart VK3PR gave us a run down on his life in radio and a little into his profession as an MD. This monthly talk "Man behind the Microphone" by a selected member gives the members an interesting insight into the lives of our members. We have a wide range of talents both in amateur radio and in our professional lives.
- The Echuca Steam Rally that was scheduled to be held in June has been **cancelled**.

