

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

VK3RGV repeaters and transmitter operating frequencies Mt Wombat

 53.725MHz (-1 MHz), In Service
 146.65MHz (-600 kHz), In Service

 438.2MHz (-7 MHz -D-Star), In Service
 438.650MHz (-7 MHz 91.5 Hz tone), In Service

 438.9MHz (-7 MHz - DMR), In Service
 439.775MHz (-5 MHz), In Service, IRLP (node #6990)

476.475 MHz (+750 kHz) CB Repeater WBT03 Channels 3- 33, In Service VK3RDS, 438.7625 MHz (-7 MHz DMR) Shepparton on test @ VK3YNV QTH <u>Mt Major VK3RDU, 146.850 MHz, 439.875MHz. Mt Bruno VK3RWC 147.325 MHz (-1.6 MHz 123Hz)</u> Access to most analogue repeaters is by sub-audible 123 Hz tone or noise/carrier mute (less sensitive). Your TX offset shown in brackets

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. All welcome.

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 – <u>www.sadarc.org</u> or <u>www.sadarc.org.au</u> Face book Page - Shepparton and District Amateur Radio Club Direct Link: <u>https://www.facebook.com/groups/481867453084459</u> Note: Want to get your licence? SADARC has examination assessors, contact the secretary for details.

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. 1/11/2021

President: - Peter Rentsch	VK3AXI	peter@rentsch.com.au
Vice-President: - Barrie Halliday	VK3KBY	
Secretary: - Andy Ashley	VK3AJA	<u>secretary@sadarc.org</u>
Assistant Secretary: - Geoff Angus	VK3ZNA	
Treasurer: -Andy Ashley	VK3AJA	<u>secretary@sadarc.org</u>
Membership Sec: - Andy Ashley	VK3AJA	"
Webmaster: - Ray Gardiner	VK3YNV	ray@etheira.net

Communications Managers (External Events):- Bruce (VK3PNG) & Darren (VK3HEN) Glasson Tech. Committee: Geoff VK3ZNA, Ray VK3YNV, Josh Gardiner & Rodney VK3UG – with power to co-opt. Newsletter: - Rodney VK3UG (Editor) <u>rodlynn6@bigpond.com</u>, Andy VK3AJA (Distribution)

Presidents Report October 2021

Thank you to all those who called in for our last meeting. I am really happy with the number of call in's we receive, and I believe that we have a real advantage being Amateurs and the ability to keep in social contact with one another, especially those who have a common interest.

Due to COVID meeting restrictions we, as you know were unable to meet in October when our AGM is usually held. It was decided to delay the AGM until February 2022 when all life should be a little bit more back to normal. So please keep in mind that positions on the Board will become available for those keen to contribute more to our great hobby.

A great suggestion from Ray VK3YNV was that we each give a brief report on what we have been up to Radio/Electronic wise. I always tended to think that there was not a lot carried out by members of our Club, but I was proved totally wrong. Most members during the month had done something with their hobby which is great to see. Even though we will meet face to face in November I feel it might be a good idea to continue this practice.

At this time, we can meet face to face in November so it will be great to catch up with everyone. For the safety of all members, I would prefer that all those attending be double vaxxed. I can't enforce this, and we won't be checking but there will be a COVID code for you to scan on arrival.

As Restaurants are now allowed to open with reasonable numbers, we will plan to have our usual combined Radio Club/ Vintage Club Lunch on Saturday 4th December. To attend this lunch, you must be double vaxxed as this rule applies to Restaurants.

Hopefully, we can all catch up soon one way or another.

Cheers for now.

Peter Rentsch President

CLUB CALENDAR

6th November 2021 – Regular Meeting – Flexible Learning Centre (old Vision Centre) commencing around 10.30 for a chat, then our famous BBQ, and Meeting at 1.00pm.

4th December 2021 – Christmas Meeting with the Vintage Club. Venue to be decided.

(5th February 2022 – First regular meeting for next year. Editor)

SADARC Oct. 2021 Meeting Minutes

Held on air (VK3RGV 2M repeater) Meeting started 1:00 pm 2/10/2021

Apologies: VK3GSR Geoff, VK3ZE Huntly, Stevo.

In Attendance: VK3AJA Andy, VK3EB Dallas, VK3AXI Peter, VK3AO Alan, VK3KBY Barrie, VK2RK Rob, VK3ZNA Geoff, VK3GEK Graeme, VK3BPH Kevin, VK3EIR Joe, VK3ASK Peter, VK3TJS Jacek, VK3UG Rodney, Josh, VK3YNV Ray, VK3MRO Tbor, VK3YYY Ian, VK3TEX Les, VK3OV Pat, VK3ZYZ Denys, VK3FALN Alan, VK2JCN Chris, VK3BLD Ros,

Minutes last meeting: Moved by Peter VK3ASK, second by Kevin VK3BPH, All in favour.

Inwards: Email for Germany, memberships.

Outward: response to German email re RA and SADARC. Moved by Rob VK2RK, second Graeme VK2GEK, all in favour.

Reports:

Financial, Read by Andy. Moved by Andy VK3AJA, second by Barrie VK3KBY, all in favour.

Technical:

Read by Ray VK3YNV, nothing really changed due to lockdown (again!!) Suspect issue with 2m antenna, hoping the new one has not also cracked, it sometimes has crackle.

Rodney VK3UG agreed with Ray, will look at some time. Geoff VK3ZNA suggested it sound like could be? Will need to look at it. Reports moved by Ray VK3YNV, second by Geoff VK3ZNA, all in favour.

General Business:

VK3UG Rodney has read the email from Germany and suggests he can provide info. On RA and SADARC but will ask for further details from them.

Rodney may have already written some articles that may be suitable, some 30-40 pages! Peter VK3AXI agreed with Rodney.

Peter is happy to assist with any info. They require. The Club are in Favour. Jo VK3EIR was interested in who they are as he once lived there. Ray provided info.

Kevin VK3BPH asked if Joe VK3EIR could perhaps translate the email! Andy has forwarded the email to Joe!

Joe VK3EIR spoke about 70cm repeater access and has thanked Josh for the info. He provided to Joe. Josh said "no problem"

Andy VK3AJA has suggested we postpone AGM to Feb. 2022, moved by Andy VK3AJA, second by VK3YYY Ian, all in favour.

Xmas:

No idea what will happen at this stage but would like to have with Vintage Radio club as normal. Rodney VK3UG has suggested we may not have a venue due to Covit-19.

Peter VK3AXI has suggested we may no more by November meeting? Wait and see.

1 st Saturday in December will be the date. We will see how it all pans out!

Denys VK3ZYZ said you can click and collect from Jaycar if need be, with Club discount card.

Dallas VK3EB spoke about ZOOM meeting possibility and perhaps we will try one just for a get together?

Rodney VK3UG has spoken about Geoff VK3GSR may be able to provide outdoor area for Xmas get together.

Ray VK3YNV suggested with on air meeting we really miss the before and after discussion and should ask for comments and discussion after on air meeting

Meeting now opened for open mic. discussion.!! Was great to catch up with each other.

Meeting ended 2:26 pm

Editor's Ramblings

- Rodney VK3UG has been asked to follow up on the request from a German radio club about what information they want on our club and Radio Australia.
- Remember we get a trade rate on purchases at Jaycar in Shepparton. They do have a minimum purchase for this to occur. Remember to quote that you are a members of SADARC.
- Our meeting for the 4th of December (first Saturday of the month) is a combined meeting with the Vintage Radio club. It is hoped we can have a social get together and meal this year as we have done for several years. Whether it can occur and where it can occur is not known at this stage depends on Covid restrictions. However, things look promising.
- Dallas VK3EB is arranging a Zoom type of meeting to be run either before or after meetings. More of this later.
- As most know Barrie VK3KBY has many restrictions on antennas imposed by the body corporate within the retirement housing community complex he lives in. This is one of the reasons I'm not keen on them. If you have some ideas on a stealth antenna for HF operation he can erect either permanently or in the evening hours only, he would appreciate them. And I'm sure many others cannot understand the draconian restrictions some places place on the enjoyment of a resident's hobbies. This does not mean that ugly unsafe structures should be given carte blanc approval.
- I was involved with a problem in Coinda residential care in Benalla which was handled nastily. A CB operator wanted to use CB, but I was asked to look at how his operation affected other residents. One had interference to TV no fault of the CB operator but the woman in charge of Coinda would not allow the CB operation **AT ALL** even though offers were made to overcome the problems with the TV set.

Repeater Update News

We lost mains power on the hill around 4:00PM Tuesday 19th. Since we couldn't get up there until Thursday the Wednesday 20th club net was moved to Mt Major because the batteries were getting down.

When we arrived on site Thursday we could see an excavator working down near where the power lines go from the pole to partially buried galvanized pipe. Further investigation showed that the circuit breaker on the side of the fire hut had tripped, and no obvious reason as to why it had tripped.

We powered everything back up and the power management system staged the power up sequence correctly, the Netcom modem however failed to reconnect to the Telstra network and that meant that IRLP, DSTAR, DMR repeaters were operating locally but no internet connection.

Back up the hill on Friday to replace the modem and we also took the opportunity to install the repaired Tait power supply on the 7Mhz split system, and swap the 2M receive antenna from the 6dB colinear to the 3dB colinear to see if we get any "crackle" on windy days. Still waiting for a windy day to see if it makes any difference. Also we kept everything off until the batteries were drawing less than 10A from the mains supply. When the batteries are low on charge, the 30A Motorola power supply is not sufficient to power multiple repeaters and charge the batteries. We need to consider a higher capacity power supply. Meantime we limit the services until the batteries are charged. Josh took the opportunity to calculate the battery capacity since this is the first time we had a long power outage. The result is 169AH vs 200AH when new, so the batteries are holding up pretty well, but we could possibly squeeze a couple more in there, although space is tight.

It wasn't until after getting back home that I discovered the DSTAR repeater wasn't connecting to the Icom repeater controller. Back up the hill on Sunday 23rd to cycle power to the ICOM repeater, and it came back online without problems.

Wednesday 27th I was advised by Geoff VK3ZNA that planned maintenance works were scheduled from 8:45AM through till 4:30PM on Thursday 28th. So we remotely shut down everything except 2M, the UHF CB was hammering away with some guys talking on the input frequency so we shut that down as well.

We had sufficient battery capacity to run the 2M club net and the 70cm IRLP net on Wednesday night and then shut everything down overnight. The power should be back on later this afternoon and then we will get the batteries recharged before bringing services back to full capacity.

Ray VK3YNV Thursday 28th October 2021

Due to the storm on 28/29th power went off on Mt Wombat and as I understand it all services on the Mountain were disrupted in some way. We are back on air now. Wasn't the static on HF horrendous during that storm? VK3UG

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Live well, laugh often, & love with all of your heart!

For the wife who says it's toast tonight, because she is home with me.

For the husband who is on the sofa being a couch potato, because he is home with me. For the teenager who is complaining about doing dishes because it means she is at home, not on the streets.

For the taxes I pay because it means I am employed.

For the mess to clean after a party because it means I have been surrounded by friends. For the clothes that fit a little too snug because it means I have enough to eat.

For my shadow that watches me work because it means I am out in the sunshine for a lawn that needs mowing, windows that need cleaning, and gutters that need fixing because it means I have a home.

For all the complaining I hear about the government because it means we have freedom of speech.

For the parking spot I find at the far end of the parking lot because it means I am capable of walking and I have been blessed with transportation.

For my heating bill because it means I am warm.

Old 1974 Amateur Operator's Certificate of Proficiency Examinations

These papers are 30 minutes and two and half hour written examinations not like the current ones which are multi-choice types. It was necessary to achieve 70% to achieve a pass in each section. You could hold any passes for 12 months and if the exams that you failed hadn't been passed in that period you had to start all over again and sit all sections of the exam. If going for the full call you had to pass Regulations, Theory and Morse code (send and receive 14 words per minute) within 12 months except when you were upgrading from a limited (Z call licence) to a full call licence and only Morse code had then to be attempted and passed.

How would you go in these examinations? COMMONWEALTH OF AUSTRALIA POSTMASTER-GENERAL'S DEPARTMENT AMATEUR OPERATOR'S CERTIFICATE OF PROFICIENCY SECTION K (Regulations) AUGUST . 1974. (Time allowed - 30 minutes) NOTE: THREE questions only to be attempted. Credit will not be given for more than THREE answers. All questions carry equal marks. 1. What action should be taken by an amateur station licensee when informed that transmissions from his station are causing interference to the reception of television or broadcast programmes? State the regulatory requirements concerning the recording and 2. re-transmission of another amateur station's transmissions. 3(a). State the maximum power which may be used in an amateur radio station using: (i) amplitude-modulated double-sideband emission (A3):

- (ii) single-sideband suppressed-carrier emission (A3J).
- (b). Briefly describe the method for determining the peak envelope power of a single-sideband suppressed-carrier transmitter.
- 4.
- Give the "Q" code abbreviations for the following:
 - (i) Shall I send faster?
- (ii) The name of my station is
- (iii) Your signals are fading.
- (iv) I have nothing for you.
- (v) When will you call me again?

	the second	SECTION	M (Theory)
Chabite.			(<u>Time allowed - 2¹ hours</u>)
HD: Los		NOTE:	SEVEN questions only to be attempted. Credit will not be given for more than SEVEN answers. All questions carry equal marks.
	0	1(а). 3.(ъ).	With the aid of a <u>block</u> diagram describe the operation of each stage of a single-sideband suppressed-carrier transmitter.
	6	3 (ъ).	Explain how the transmitted sideband may be changed from upper to lower sideband.
		2(a).	Assisted by a circuit diagram describe a variable-frequency-oscillator (V.F.O.) suitable for use in the 7 MHz amateur band.
		(ъ).	With reference to a V.F.O., discuss the factors upon which the stability of the generated frequency depends.
		3.	The antenna coupling network of an amateur transmitter is designed to match an antenna whose impedance lies between 50 and 80 ohms. Assisted by a diagram, describe an antenna which will meet this requirement on at least two amateur bands. Show dimensions and state the frequencies involved.
1	2	4(a).	With reference to a radio-frequency amplifier stage, explain under what circumstances neutralisation is necessary.
	2	(ъ).	Aided by a circuit diagram, explain the theory of one method of neutralising a single-ended output stage.
	2	(c).	Explain why it is unnecessary to neutralise a frequency multiplying stage of a transmitter.
	8	5(a).	Describe the manner by which high-frequency radio waves may be propagated over long distances. Explain why communication between countries such as America and Australia is restricted to certain times in the H.F. bands.
		₹ (ъ).	Explain why communication over long distances as described in (a) is not possible using the V.H.F. and U.H.F. amateur bands.
		6(a).	Discuss features you consider desirable in a microphone which is to be used in a mobile capacity.
		√(b).	With the aid of a sketch describe the construction and theory of operation of a microphone which you consider meets these requirements.
	(ho	² 7(a).	With the aid of a sketch show the construction of a cathode-ray-tube and explain the theory of operation.
	-	Z (b).	Show a method of connecting a cathode-ray-oscilloscope to a telephony transmit to indicate its depth of modulation.
	~	(c).	Sketch the pattern obtained when using the connections shown in (b) if the carrier is modulated to a depth of 100%.
	4	8.	In relation to a communications receiver explain what is meant by the following terms: (i) signal-to-noise ratio; (ii) selectivity; (iii) image rejection; (iv) cross modulation; and (v) automatic gain control.
	C		Find the total capacity when three capacitors of 3, 6, and 9 microfarads respectively are connected: (i) in parallel; and (ii) in series.
			Calculate the capacitive-reactance of the series combination in (a) when connected across a 50 Hertz supply.

DISTRICT BURNS

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Residents shelter in town hall

Strathbogie residents sheltered in the Memorial Hall on Thursday night as the fire burned within a kilometre of the town.

Throughout the night there was a real fear the fire ould threaten the small country centre and force people to flee.

"It was pretty horrific and scary," general store oper-ator Linda Keep said the following morning. "It came to just out the back (of the shop) and around the other side of the town.

"It was a mass of red. "There was a real fear for the town because the wind

kept changing?

kept changing." By late Thursday afternoon the townspeople were aware a fire was heading their way, but it wasn't until nightfall that they realised the danger. "We were told if it looked like getting into town to go to the middle of the recreation reserve," Mrs. Keep mid.

"But in the end they said the memorial hall would be safer?

At 4 a.m., Mrs. Keep went home after the imminent danger had passed, but others stayed in the hall until day-break.

Mrs. Keep's husband, Dennis, hadn't been a volunteer fireman until the family moved to Strathbogie about 12 months ago.

He's been amazed by the dedication and courage of

"Everything they've done has been a credit to them?" He's also been awed by the speed and destruction of the fire.

"It's just unbelievable. We were out in a ute and the fire would have been about half a mile away and coming towards us.

"We just had time to get the ute turned around be-fore it came up to us. If we'd been in a truck or had trouble getting around, it would have been the end." Mr. Keep, like hundreds of other locals, has worked

almost non-stop since Thursday. Most of them didn't get any sleep, just a "lay down"

for a few hours before heading off again. Reprinted with kind permission of Shepparton News.



The stark reality of the destruction of the blaze really hits home at the Mt. Wombat fire lookout

We're into a bit of history this month. The above picture is of the damage done by fire on top of Mt Wombat on the 27th and 28th December 1990. If you look carefully on the skyline to the left of the picture you can see the large telescopic mast and the original hut mast which supported the antennas for our repeaters until a few years ago. The article was originally from the Shepparton News and reprinted here from the Euroa Gazette for 15 January 1991. Before the fire season is upon us clearing of grass around the repeater site may be desirable on the next repeater site visit. Any volunteers with whipper snippers, brush cutters?

TOOLS AS EXPLAINED BY AN ENGINEER

DRILL PRESS: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, denting the freshly-painted vertical stabilizer which you had carefully set in the corner where nothing could get to it.

WIRE WHEEL: Cleans paint off bolts and then throws them somewhere under the workbench at the speed of light. Also removes fingerprints and hard-earned calluses from fingers in about the time it takes you to say, 'Oh ****'

ELECTRIC HAND DRILL: Normally used for spinning pop rivets in their holes until you die of old age.

SKILL SAW: A portable cutting tool used to make studs too short.

PLIERS: Used to round off bolt heads. Sometimes used in the creation of blood-blisters.