



REPEATERS VK3RGV 2m & 70cm

VK3RGV B D-Star

2m IRLP Node # 6992

CLUB CALL SIGN VK3SOL

Repeater Frequencies: 6 meters: ( 53.725Mhz Out, 52.725 In. 123Hz tone)

2 meters ( 146.650Mhz Out, 146.050Mhz In 123Hz tone)

70cm ( 439.775Mhz Out, 434.775Mhz In 123Hz tone)

President:- Peter Rentsch

Vice President:- Trevor Close

Secretary:- Darren Glasson

Treasurer:- Greg Keegan

VK3FPSR

VK3ATX

VK3HEN

VK3POP

## S.A.D.A.R.C. November 2013

### Upcoming Events.

Christmas get together Sunday 1<sup>st</sup> December at 12.00noon at the Benalla Bowls Club.  
Please contact Ron VK3COP to book in.

### Presidents Report November 2013.

After a successful Hamfest and a very successful JOTA the year is continuing along nicely. Things are happening within the Club and it is great to see the enthusiasm for projects. At our last meeting a number of discussions were held about possible future events. It is difficult for a Club like ours to get a project or event off the ground as we are so widely dispersed throughout the area. With members spread all over the region and beyond an extra effort is required to become involved. Thankyou to all those that do get involved and show some enthusiasm about our great hobby. We have some great facilities, we have some very good equipment and we have enthusiastic members, this leads to a Club that is a pleasure and fun to be part of.

One of the issues up for discussion is the 80m net. Numbers of participants and operators has dwindled over the last few months so the Club has asked John VK3PXJ to discuss with those who are involved possible solutions to the issue. Possible solutions could be a time change, a day change or even the possibility of cross banding the 80m net with the 2m net. It is up to those involved to talk about it and John has been asked to come back to the next

meeting with any recommendations. If anybody that is currently not participating in the 80m net has any ideas then they can contact John to discuss them with him.

Our next meeting to be held on Sunday 1<sup>st</sup> December at 12.00noon is our Christmas get together at Benalla Bowls Club. Please contact Ron VK3COP to book in. This lunch is to be combined with the Vintage Radio Club of North East Victoria and will be good fun afternoon.

As per normal there will be no meeting in January, so our next meeting will be on Saturday 1<sup>st</sup> February, 2014. At our February meeting I would like to have an Executive Meeting prior to the normal meeting commencing at 10.30am. We would then have our regular meeting at 1.00pm followed by a guest speaker.

Listed below is a preliminary calendar for the first six months of 2014.

February 1 <sup>st</sup>	Executive Meeting at 10.30am followed by our regular meeting and Guest Speaker
March 1 <sup>st</sup>	Regular meeting with Guest Speaker.
April 5 <sup>th</sup>	Regular Meeting with Guest Speaker
April 20 <sup>th</sup>	Gathering at Goulburn Weir with Bendigo Club
May 3 <sup>rd</sup>	Executive Meeting at 10.30am followed by our regular meeting and Guest Speaker
May 10 <sup>th</sup>	Murray QUAD
June 7 <sup>th</sup>	Regular Meeting with Guest Speaker

As you can see I have a number of guest speakers scheduled in. Some of these have been filled but I am in need of a couple of others to fill some gaps. At the last meeting Trevor VK3ATX handed out a form looking for feedback from members as to what they would like to see in the future. Any contribution of ideas will be greatly appreciated.

As this is the last Newsletter for 2013 Karen and I would like to wish you all a very Happy Christmas and a Safe New Year. Christmas is a time for families so enjoy and relax and appreciate this celebratory time of year.

Peter – VK3FPSR  
President – SADARC

# Minutes of SADARC November 2113

Meeting opened 13.05

## **Apologies,**

Vk3vce,vk3tex,vk3dp,vk3faln,vk3fjhm,vk3alf,vk3fbngvk3geb.

## **Present,**

Vk3dsf,vk3ov,vk3pgk,vk3ug,vk3pxj,vk3eb,vk3chv,vk3elv,vk3xnw,vk3gmw,vk3bph,vk3atx,vk3kby,vk3cop vk3tjs,k3hen.

## **Previous minutes,**

Accepted as correct, 1st vk3gmw 2nd vk3ov.

## **General Business,**

The tri band beam has been taken down from the pole and repairs have done to restore it to usable condition to reinstall at a later date.

Trevor has printed out some forms as an example to use for selling of equipment from deceased estates. It was decided to also include covering any costs incurred.

Barry delivered a donation from Jim Gordon which was very welcome and a letter of will be sent thanking him.

JOTA ,A good day was had by all at the event although it was noisy in the room at times. It was suggested that a deck mike might be useful next year.

More operators are required for the 80meter net, also it was put up for subjections on changing to a later time. Cross banding of the 2meter and 80 meter nets was suggested and will require more research.

Xmas dinner will be on the first Sunday in December see Ron for bookings and the Vintage Radio Club will be attending as well.

P.A system might need to be advertised in vkham or similar.

Greg will look into better banking options to get a better deal.

## **Inward mail, QSL cards and subs.**

## **Tech Report,**

Still looking into the antenna positions on the hut to work out the best placement for all antennas. And it was suggested that a back up 2meter repeater be sort all were in favor.

Meeting Closed.14.30

# **TECHNICAL COMMITTEE REPORT – Nov 2013** (15/11/2013)

## **70cm D-Star Repeater**

We are still waiting to hear what is wrong with the repeater and for it to be repaired by Icom. As members may remember it was brought back and tried at Toby's place VK3PNF and it still didn't work so it was returned to Icom for a more thorough inspection, testing and repair. It was just out of warranty when it failed. The delay in having the repeater repaired is of concern as it has now been out of service nearly a year.

## **Analogue Repeaters**

All the analogue repeaters are working and working well.

## **70cm Analogue Repeater**

Phil has obtained an Imark(?) 50 watt base transceiver that is capable of working on the 70cm band. It is probable that this will replace the existing 25 watt repeater. There has been a concern by some that by increasing the output power of the 70 cm analogue repeater the D-Star repeater receiver could be desensed by the operation of this more powerful transmitter in close proximity. I believe that this is unlikely as the antennas are well separated from each other and the recently installed 70cm analogue antenna has a radiation pattern that would reduce the amount of signal the D-Star antenna would pick up when compared to the previous antenna.

## **Miscellaneous**

There have been no visits necessary to Mt Wombat over the winter period.

Note our repeaters are some of the few which have both a noise mute and a sub-audible mute. The repeater mutes open with a lower level of signal (about 0.25  $\mu$ V) if the sub-audible 123 Hz tone is sent by your transmitter. The noise mutes are set higher (about 1  $\mu$ V) so that interference signals are less likely to operate the repeaters and which causes annoying noise interference to be heard on your receiver.

## **Visit to Mt Wombat 6/11/2013**

A visit to Mt Wombat was made so that Ian VK3CHV and Phil VK3ELV could work out what maintenance was necessary on the lattice mast, do measurements and generally work out the best spots to mount the various antennas mounted off the side of the lattice mast. Of particular concern was the mounting of the second 6 metre antenna to achieve the best results.

Whilst we were up on Mt Wombat I was able to open the Mt William 6 metre repeater (53.650 MHz 91.5 Hz sub-audible tone access) with a usable signal, but I didn't work any station. The repeater

signal disappeared later in the day. I could also work our Mt Wombat 6 metre repeater from the Grampians with similar signal strengths a few weeks ago. The distance between the two sites is around 280 km. The Marysville repeater on 53.675 MHz is very strong when listening on Mt Wombat. It would be useable in some parts of our clubs membership area.

The 6 metre repeater DSP module was adjusted whilst on site.

**Below is a précis of the work projected to be done into the future?** The whole site is gradually being upgraded to provide better service to our members. A lot has been done but more is needed.

- Checking all the lattice mast cables and connections – some are to be shortened. (A general tidy up, plus some rearrangement when the additional 6 metre antenna is installed)
- A computer check on the radiation patterns of the various antennas on the lattice mast to make sure the best practical patterns are achieved. (This has not been done before and will give a better result from antennas mounted off the side of the lattice mast. This is being done by Phil)
- Install another folded dipole to use with the current six metre antenna on the main mast. (This is proving to be a larger project than at first expected and Phil and Ian are looking at the best methods of achieving this.)
- Repair remainder of lightning damage in hut. (Safety, two power points faulty, but not urgent)
- Tidy and label all DC cables and Coaxial Cables in the hut. (Easier to work in the hut)
- Purchase and install DSP modules in both the two metre and 70cm repeaters. (These have been approved and Phil will look into getting the best price possible. The 6 metre repeater already has one installed which works well. It was slightly readjusted on 6/11/2013).
- Obtain two additional repeater controllers. (This was approved at the November meeting. The controllers will be put into any standby repeaters and one kept as a spare should one get “zapped”. One is likely to be put into the projected new 50 watt 70cm repeater. They cost up around \$120 each.)
- Return D-Star to service. [See notes above.](#)
- General tidy up around the site. Check door locks. Complete an inventory of equipment and spares. Remove the remainder of the central hut mast.
- Overhaul of antennas at the club rooms. (The tri band yagi has been removed for maintenance which is largely being done by Greg with assistance from Dallas. The mechanical work has been done and the antenna tuned, however, it was found that the 1:1 balan is faulty. Antenna Analysers are handy for finding nasty faults as was proven in this instance. A coaxial balan may now be made up to replace the faulty balan.)

Rodney Champness VK3UG on behalf of the technical committee, Ray VK3RW, Phil VK3ELV and Geoff VK3ZNA.

## **A Small Mt Wombat Working Bee.**

The images were taken when Rodney, Ian, Phil and myself went up to the repeater site on Wednesday 6<sup>th</sup> November.

Phil and Ian were taking measurements for the correct placement of the 6meter antenna on the tower.

Phil is using an Antenna modelling Program to calculate the best Radiation Pattern.

I went along for the ride, and to have a sticky beak. It was the first time I've been up there.

Here are some images.



From Greg (VK3POP).

## TRANSISTOR LIST

	BFY10	2N2222	2N5088
AC126	BFY51	2N2270	2N5190
AC127	BFY55	2N2646	2N5245
AC132	BLY89C	2N2647	2N5486
ACY17	BSX19	2N2859	2N5589
ACY20	BSX20	2N2966	2N5590
ACY21	BSX59	2N3011	2N5591
AD161	FPN3577	2N3019	2N5770
AD162	FVO9230	2N3020	2N5883
AF139	ITS5656	2N3053	2N5885
AF178	ITS5657	2N3054	2N5961
AS148	JE350	2N3299	2N6179
ASZ16	MFE131	2N3563	2SA509
<b>ASZ18</b>	MJ2955	2N3566	2SB367
AV9139	MJE520	2N3478	2SC32
B12-12	MJE521	2N3553	2SB415
BC107	MJE3055	2N3564	2SC458
BC108	MJE3771/0	2N3565	2SC509
BC109	MPS3564	2N3614	3794
BC149	MPS3702	2N3638	7812
BC177	MPS6513	2N3640	40250
BC178	MPSA12	2N3641	40280
BC179	NTE161	2N3642	40281
BC186	PE1010	2N3645	40468
BC287	PN3568	2N3692	
BC287	PN3643	2N3693	
BC317	PN3644	2N3694	
BC327	PN3646	2N3704	
BC328	PN3690	2N3707	
BC337	PT4537	2N3772	
BC338	PT3164C	2N3773	
BC549	PT4207B	2N3829	
BC558	SE3002	2N3866	
BC559	SE4002	2N3879	
BC577	SE4010	2N3904	
BC637	SF173	2N3906	
BC638	SX18	2N3926	
BC639	TT3638	2N3927	
BD135	TIC45	2N3963	
BD136	TIS60	2N4002	
BD137	TIS61M	2N4033	
BD139	TT4010	2N4036	
BD204	1N28133B	2N4037	
BDX96	2N277	2N4121	
BF166	2N301	2N4231	
BF180	2N706	2N4234	
BF198	2N914	2N4241	
BF173	2N918	2N4250	
BF183	2N1100	2N4289	
BF184	2N1671	2N4292	
BF200	2N1183	2N4342	
BF494	2N2017	2N4360	
BF495	2N2083	2N4427	
BFS22A	2N2102	2N4933	
BFW16A	2N2218	2N5060	
BFX89	2N2219	2N5070	

List compiled by VK3UG and  
assembled in order by VK3ELV.

These transistors were given to  
the club for use firstly by the  
technical committee to use on  
club equipment and then be  
available for members use for  
free.

We only have one or two  
examples of some types but we  
have hundreds of the more  
common small signal types.

They are available from VK3UG if  
you put your order in before a  
meeting. They will become  
available from late October.



Hi Everyone,

Another month has quickly gone by. In the last month I have been fairly busy with lots of things. Mostly with work. I won't bore us with that. In the last month I have been away with two camping trips up into the high country. The first one was with family members and friends. The second was with a group of Amateur Operators organised by Peter VK3NPI.

This trip was a very pleasant camping trip into the Wonnangatta Valley. There were eleven of us that made the trip down into the Wonnangatta Valley via Mt Howitt 1742M. Then the famous steep decent of the Zeka Spur Track. We all took our time and made it to the valley in one piece. Once in the valley Peter(VK3NPI) found a quiet camp site near a creek that made a good camp for three nights. In that time some of the group made an effort to climb up out of the valley up Harts Spur up onto Mt Sarah 1453M. From there they worked some Summits of the Air(SOTA) stations. I was led to believe that no one has worked SOTO from Mt Sarah before. For the most of the time we relaxed around the campfire. Come Monday morning we all packed up and headed home. Below is an image and list of the group.



From left to right

Robbie VK3EK, His wife Didith, Mike VK3NMK, John (no call), Russell VK3VZP, George VK3QP, Peter VK3NPI, Ken VK3VCW, George VK3GWK, Steve VK3DP, Mike VK3XL. Thanks to Mike for the image.

From Steven(VK3DP).