



REPEATERS VK3RGRV 2m & 70cm

VK3RGRV 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. January 2014

### Vintage Radio Club of North East Victoria and SADARC Combined Annual Dinner.



### Presidents Report January 2014.

Well, 2014 is upon us and a new year is underway. I hope you all had a very Happy Christmas and an enjoyable New Year. It's time now to put into action some of the projects that the Club wishes to undertake. There is tidying up to be done at the shack at Mt Wombat, cables need to be checked and labelled and the second 6m antenna needs to be installed. I know the Technical Committee have not stopped investigating the best way to install the new 6m antenna as there has been many emails circulating about this project. Well done gents on investigating every possibility to ensure this project is a success.

The other project that we need to keep working on is the facilities at Mooroopna. We need to get the beam back up and we need to attend to the dipoles that are attached to the trees. These wires are cutting into the trees and the Guides have asked that we place some poly pipe or

hose over the wires where they wrap around the tress. Not a big job but it is something that needs to be done.

To all those that attended the Christmas gathering at the Bowls Club in Benalla thankyou very much for you attendance. This was the first time that we had combined our Christmas meeting with that of the Vintage Radio Club of North East Victoria. By all the feedback that I received it was very well accepted and thought to be a good idea. I personally feel that we should combine again this coming Christmas but hold the meeting in Shepparton, and if it is successful continue along this path of alternating cities. A special thankyou to Ron VK3COP who did all the liaising with the Benalla Bowls Club.

Just as a reminder, the Murray QUAD at which we are doing the Comms for the day, is on Saturday May 10. Please keep this date free to help on the day. They are having a practice run on Sunday 9<sup>th</sup> February if anybody is available for that day they would appreciate some radio support on the day and it could be a good opportunity for us to have a practice run as well.

Our next meeting will be on Saturday 1<sup>st</sup> February. It was suggested that we have a BBQ on that day. Can I suggest that if the forecast temperature is above 35c or it is a total fire ban day that the BBQ be cancelled. If the weather is OK then we will have a BBQ commencing at 11.30am, then followed by our meeting at 1.00pm. For those members on the Executive we will have an Executive meeting at 10.30am at the Guide Hall.

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 a BBQ and then 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

After my last plea for ideas for guest speakers I am no further advanced ( I have one from Rod and one from Trevor.) Please if you have any thoughts on who would make a good guest speaker then can you please let me know and I will contact them and see what I can arrange. If possible please give me in writing their name, their topic and a phone number or email address and I will do the rest.

That's it for this newsletter and I look forward to seeing as many of you as possible on the 1<sup>st</sup> February.

Peter – VK3FPSR  
President – SADARC

# TECHNICAL COMMITTEE REPORT – January 2014

(15/1/2014)

## 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. Negotiations are under way with Icom so that it can be repaired, replaced or whatever. Toby will be contacting Icom again now that the Christmas and New Year holidays are over. The repeater has been out of service nearly 15 months.

## Analogue Repeaters

All the analogue repeaters are working and working well.

## The good oil on antenna supports

It has been spoken of on several occasions that placing an antenna onto a mast is not just a simple matter of putting an antenna in some spare position and expect it to work properly. Whilst we have done this in the past the placement of the six metre phased array (the two antennas) has required considerable calculation to find the optimum locations of the antennas keeping in mind the locations of guys and other antennas. The various calculations have shown that in some instances one guy wire needs to be cut into short insulated sections so that a good radiation pattern is obtained. Another set of calculations shows that if we position the antennas further out from the mast it isn't necessary to insulate the guy wires. However, this brings to our attention what is the twisting moment on the tower in a strong wind with the antennas placed further from the mast. We hope to have the final calculations done shortly so that the best installation practical can be undertaken.

Very likely we will be able to give a talk at a future meeting to show members what they need to take into consideration when erecting antennas so that they remain erected and don't fall down or get blown down. Phil has done most of this computation work with input from time to time from other members of the committee.

## 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. A working bee will be planned as soon as the work of deciding on the best method of mounting the 6 metre antennas is complete and the mounting hardware is constructed.

- 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)
- Install another folded dipole to use with the current six metre antenna on the main mast. (See above)
- 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 has 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 balun was faulty. A coaxial balun may now be made up to replace the faulty balun. The beam is yet to be reinstalled.)

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

## Books & Magazines For Sale

A cardboard carton of Microbee computer books. If anyone is into Microbees this is quite a selection of information on these early computers. Particularly of interest if you are into vintage computers.

Books.

Valve, transistor and IC data books. Circuit design books, some old radio magazines and pull outs from others.

RSGB Radio Communications Handbook.

Admiralty Handbooks volumes 1 & 2.

Contact Rodney VK3UG [rodlynn6@bigpond.com](mailto:rodlynn6@bigpond.com) or phone 03 5825 1354

## VK3DP Go's Retro with a Collins S Line:

Here is the Collins 32s-3 transmitter and 75s-3 receiver that I acquired lately. It was made around the early 1960's.

It is all still all original and in good working condition.

They use all valves from start to finish.

And it sounds a treat from that single ended valve audio amp.



The Microphone is a high impedance crystal Astatic D-104 on a G stand.

I have built a power supply to run the 32s-3 transmitter.

As I didn't get a power supply with the rig.

I will get one in the future, but for now I go with the home brew.

I had to wind the transformers as well as make a chassis, rectifier board and the umbilical cord myself.

Basically had to construct the whole power supply unit from scratch.

It runs +800VDC, +275VDC, -90VDC to -40VDC and 6.3VAC.

Here is a image of the bottom of the power supply that I made.



I am in the process of getting a 30L-1 valve linear amplifier to go with Collins S-Line line up. One is coming from Hal at landaircomm at the moment. They run four 811 tubes.

Hal website is <http://www.landaircom.com/> and he is in New York City.

He has heaps of old boat anchors. Worth a check for a collector and don't let his web page put you off. He is good to talk over the phone.

Cheers Steven,

VK3DP.

## TRANSISTOR LIST

AC126	BFY10	2N2222	2N5088
AC127	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	

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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.