



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

Repeaters VK3RGV Freq: 53.725MHz (1 meg offset) -146.65MHz(IRLP Node #6992) (600 kHz offset) - 439.775MHz (5 MHz offset) - 438.2MHz (D-Star) [D-Star not operational at this time]
Access to the analog repeaters is by sub-audible 123 Hz tone or noise mute (less sensitive).

Club Network informal on air get togethers. All welcome. Club callsign VK3SOL:-
Wednesday - 3.62 MHz \pm interference 7.00pm, 2mx repeater 8.00pm

Meetings are held at 1pm on the first Saturday of the month (except January when no meeting occurs) at the Mooroopna Scout/Guide Hall off Echuca Road, Mooroopna. Variations in these times and days are normally notified in the preceding newsletter. Website – www.sadarc.org

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. You do so at your own risk.

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Secretary:- John Waters	VK3PXJ	glengordon@bigpond.com	
Vice-President:- Barrie Halliday	VK3KBY	Treasurer:- Ron Burns	VK3COP
Membership Sec :- Pat O'Shannessy	VK3OV	Webmaster:- Dallas James	VK3EB
Station Manager:- Ian Ward	VK3CHV	Publicity Officer:- Peter Rentsch	VK3FPSR
Technical Committee:- Phil VK3ELV, Ray VK3RW, Geoff VK3ZNA & Rodney VK3UG			
Newsletter:- Peter VK3FPSR & Rodney VK3UG		rodlynn6@bigpond.com	

Newsletter - April 2015

Editors Ramblings

Now daylight savings has ended the Wednesday evening 3.62MHz \pm interference on air get togethers will only be at 7 pm. The 2 metre get togethers remain at 8 pm.

Many members get their newsletter by email. This means they get it sooner than those who only get it sent by post, and it does save the club money as well as Peter's (VK3FPSR) time to address and stuff the envelopes. This also means if something of immediate importance occurs members can quickly be advised. It is not practical to phone or write a letter to those who don't have email so they miss out. So if you have email we would like you to take advantage of this quicker method of obtaining the newsletter. You can also store the newsletter on your computer for future reference too – I do. Please let Peter VK3FPSR know your email address, so that you can take advantage of this offer. His address is pages.cobram@bigpond.com .

The Vintage Radio Club of North East Victoria has many members who are also members of SADARC. On a Sunday morning at 11am the Vintage Radio group have a get together on the 2 metre repeater. All are welcome to participate. Max VK3DSF acts as the facilitator. A number of listeners tune in as well.

A while back Ian VK3CHV (station manager) asked for a two drawer filing cabinet to store our club records in. One has now been obtained.

Greg VK3POP arranged that our club barbeque should take a different format this month. Sausages, chicken and salads were arranged and tables were set up in the scout hall and we had a sit down BBQ which meant that all members had a good chat together. It proved an excellent time to sit and talk over a snag or two and a salad. Well done Greg. How do members feel about doing this more often? This would make the trip to the meeting more worthwhile for members who live some distance away.

VK5SRP and his wife are visiting the area and were present at our club barbeque. They weren't able to stay for the whole of the activities planned. A number of members had to leave early too so they missed out on the **SHOW & TELL**

There was considerable discussion about the new tower to be installed on Mt Wombat, what it means to the installation of our antennas, the improved performance of some of our repeaters, and all the negotiations that are going on about this work. It is too extensive to put in the newsletter and as information is confirmed on various aspects of installing the new tower members will be given a précis report of it all.

The second 6 metre antenna has arrived and both 6 metre antennas and the power dividing cable are now located at Phil's (VK3ELV) place. We are now waiting on Austereo for information on the installation dates so we can plan the installation of all antennas on the new mast. This may also entail new LDF4-50 coaxial being required to connect the antennas to the repeaters. We will need some working bees, although how many people will be needed and when exactly they occur is unknown at this stage. The repeaters will not be off air as our standby antennas on the hut can take over the job – not as well maybe but quite satisfactorily in the short term. The 70cm analogue repeater will be unaffected as its antenna is on the hut.

Once all the antenna/mast work is complete it is likely that the D-Star repeater will be reinstalled and an internet connection will be established. IRLP will likely be re-established at the same time.

HAPPY BIRTHDAY MAX (VK3DSF)

We're all getting just that bit older every day, and Max clocked up the grand age of 90 on the 7th April. Max over the last few years has acted as the master of ceremonies on many of the club on air get togethers, mostly on the 2 metre repeater. He has a great memory and can remember the order of the people calling in on these skeds. Many will realise that Max doesn't see all that well and that he is legally blind.

Max was schooled at Euroa and as a trade became a fitter and turner. From 1943 to 1945 he was in the RAAF as a fitter and turner after initially entering as a Flight Mechanic. In 1957 he decided that radio and electronics was what he really wanted to do and he joined Radio Australia at that time. He retired from there in 1989. During the time at R.A, he married Anna 54 years ago.

Max suffers with Macular Degeneration which is a disease of the Macula, the section of the eye that sees fine detail. When that section of the eye dies you are left with a big black patch in the middle of your view and reading becomes virtually impossible. There are others in the club who also suffer this nasty disease, so chaps when you have your eyes checked make sure that the Macula is checked as well as having a check for Glaucoma.

We have another member who will be clocking up 90 in a couple of months time as well.

Meeting minutes

Meeting opened at 1.15 pm, Apologies VK3FALN, VK3FJHM, VK3JNC, VK3VCE, VK3BPH

Attendance VK3COP RON, VK3POP GREG VK3PXJ JOHN, VK3 ZE HUNTLEY ANDY ASHLEY, VK3OV PAT, VK3DSF MAX, SWL BILL CROCKER, VK3UG RODNEY. VK3EB DALLAS, VK3HEN DARREN, VK3FBNG BRUCE, VK3CHV IAN, VK3ELV PHIL, VK3KBY BARRIE, VK3TEX LES, VK3TJS JACK. It was good to have a couple of visitors at our meeting, VK3NMK MIKE, also VK5SRP PHIL and his wife PAT

Inward correspondence, an email from Mike VK3FMAA saying the Merrigum Hall would not be available for our hamfest. An account for our mail box, outward mail nil.

Ron VK3COP presented the treasurers report moved it be accepted moved RON VK3COP seconded by VK3HEN DARREN

Greg VK3POP moved we have a D-Star day at the hall, discuss next meeting.

Ron VK3COP moved we buy a 2 door filing cabinet for our office, seconded by Darren VK3HEN.

Meeting closed at 2,05pm John VK3PXJ

Presidents report for April 2015

A reasonable number were in attendance at our last meeting and I believe a good time was had by all. It was nice to see Bruce VK3FBNG and Darren VK3HEN in attendance as well as Les VK3TEX. It has been awhile since we enjoyed their company.

If you would like to have more of the BBQ and social interaction before the meeting let me know at the next meeting. After all it is your club and the committee cannot provide what you want if you don't tell us.

The BBQ at Nagambie with the Bendigo club was held last Sunday. There were seven or eight members, some with their wife's turned up, it was an enjoyable day with the exception of the wind, and it was freezing. After enjoying the food and some pleasant conversation it was decided to head off home due to the cold conditions. I believe the BBQ needs to be held at an earlier time in the year. This will allow us to enjoy the day with more favourable weather.

The replacement of our tower by Southern Cross Austereo is still in the planning stages. I am not certain at present when the tower will be on site and erected.

I am looking for suggestions on a club project. These are projects that can be built at the monthly meeting. Instead of having boring meetings let's do something interesting and build an item that you can use. It doesn't have to be radio orientated. Some examples - the VK5JST antenna analyser, approximately \$140 would be handy, a 100watt dummy load, a 100w antenna tuner or maybe a 2metre or 70cm Yagi. There must be something that you would like to build. Let me know and if there is enough interest. Let's make it happen.

The club rooms will be open at 10.30am next meeting, so come along and have a coffee and a chat and bring something along for show and tell.

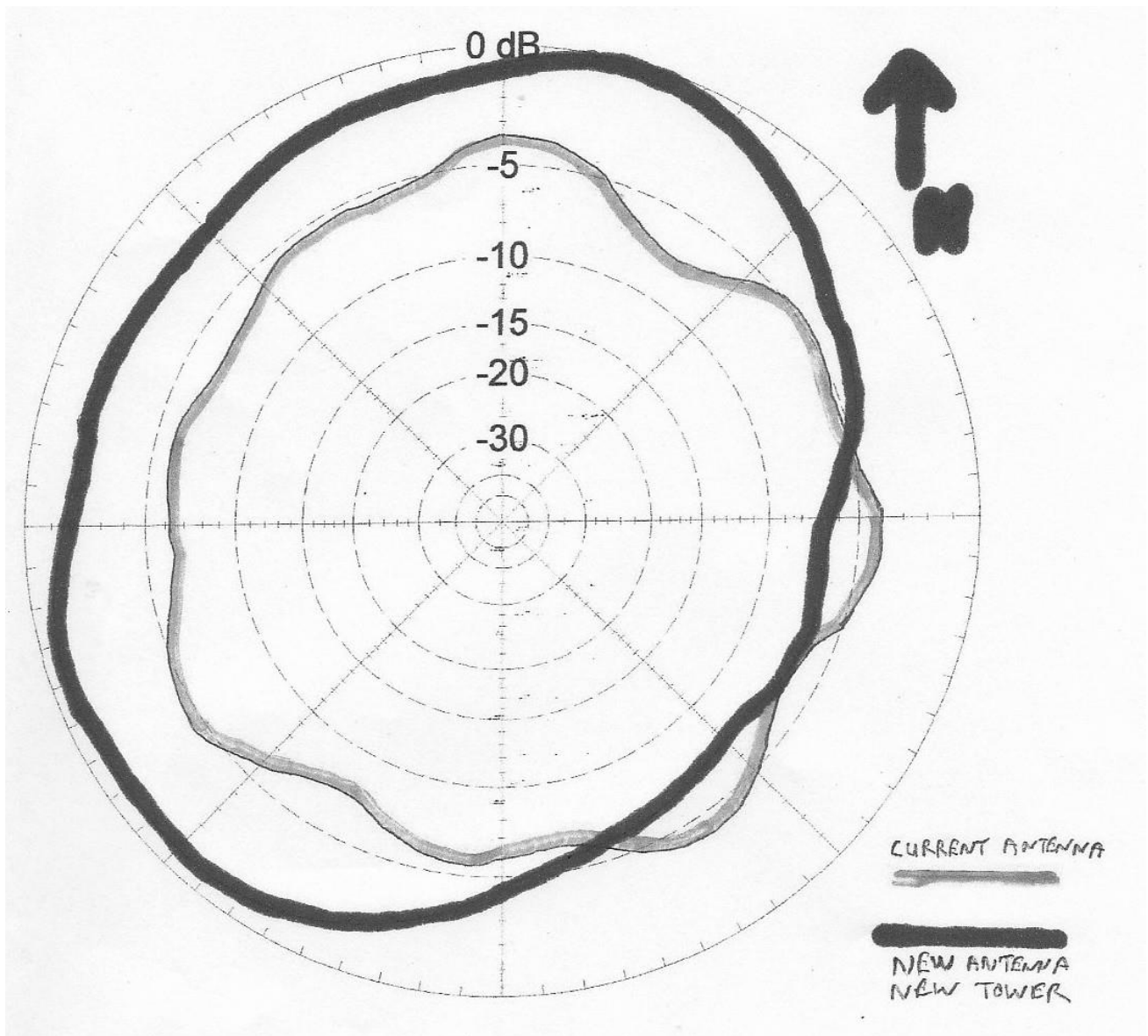
Until then, 73 for now.

Greg - President VK3POP

THE SIX METRE REPEATER IMPROVEMENTS

Over the several years that the six metre repeater has been in operation a number of improvements in output power (25 to 50 watts), receiver sensitivity (about 0.16 μV from about 0.25 μV) and antenna radiation pattern have been achieved. The original antenna had a very good radiation towards Shepparton and to the west but its performance to the south west, easterly and north easterly was poor, which meant stations like David VK3ANP had to use 25 watts to get into the repeater. That antenna was replaced with a second hand commercial antenna which gives a more even radiation pattern around the site. Now David can get into the repeater with one watt as can Phil VK3ELV. In the direction of Shepparton and to the west the signal is not as good so the purchase of a second commercial antenna when installed will improve the performance in all directions with the exception of behind the mast where the performance will remain much the same as it currently is. The improvement in performance will mean that stations from the south west through north west to north east will be better served. Mobile operation into Wangaratta, Bendigo and up and down the Hume highway is expected to be noticeably improved.

The expected radiation pattern and the relative gain in any particular direction from the 2 co-phased folded dipole antennas is shown in the accompanying diagram. The pattern and gain will vary slightly from this computer calculated diagram. The average improvement will be around 3 dB.



SHOW AND TELL

Many of our members are also members of the Vintage Radio Club of NE Victoria Inc and one of the popular meeting formats is a **SHOW & TELL**. It was decided that a show and tell of our members activities would be a good idea and four members brought along their current projects to show and talk about to the members.

Huntly Vroland VK3 ZE brought his newly constructed dual band 2 metre and 70 cm J pole vertical antenna along. It is made of solid aluminium rod with a SO239 insulated socket at the base of the 2metre driven element. The aluminium is available at W. B. Hunters, Florence Street, Shepparton. They have quite an extensive supply.

The dimensions for the antenna did not come up well on the information Huntly sent me so I hope to get a better diagram for next newsletter or feel free to contact Huntly.

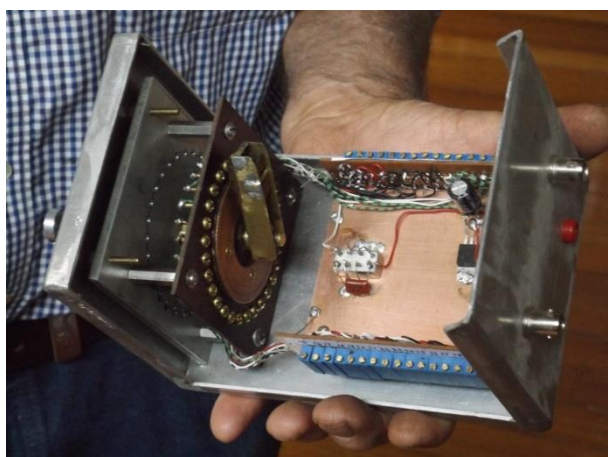
Rodney VK3UG brought along his “demonstration” 160 metre 1.8 to 1.875 MHz 1.5 watt valved transmitter. It is not intended for serious communications but is intended as an experimental transmitter to show vintage radio buffs in our sister club the Vintage Radio Club of NE Vic, what transmitters really consisted of back in the valve era. It is much simpler overall as it doesn’t have all the control and protection mechanisms broadcast transmitters have.

It uses a 6AU6 as a VFO and a 6AQ5 as the PA. The modulator is a 6BM8. It is being written up as an article for the Vintage Radio column in *Silicon Chip*.



Bill Crocker brought his latest design and constructional project along. This is a Wadley loop 30 band solid state receiver with some innovations over the original design. As many are aware Bill is both skilled with electronic circuitry but also with fine mechanical skills. These are of course in addition to his many other talents.

30 position mechanical switches are few and far between so Bill decided that he would have to make one. By making this switch Bill was able to simplify some of the band change circuitry to achieve better results. Bill's description of the switch design and inspection of it showed his skill in both the mechanical and electronics area of the receiver design.



Phil Dwyer VK3ELV has been experimenting with 630 Metres the 472 to 479 KHz band and brought along the loading coil that he uses to tune his antenna. The antenna is approximately 20 metres

high and a total of 100 metres long which means that it is shorter than a $\frac{1}{4}$ wave length long. Some of his results on this band have been published in a previous newsletter. His latest achievement is being heard in Japan. Congratulations Phil.

Phil also brought along a cavity resonator he is refurbishing for a 477 MHz CB repeater down near Cheshunt. The frequency difference between these two projects is a ratio of 1000:1. The techniques used for best performance on these two bands are very different.

