



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 ± interference 7.00pm (try also 8.30pm), 2mx repeater 8.00pm

Meetings are held on the first Saturday of the month (except January when no meeting occurs) at 1pm 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.

President:- Greg Keegan	VK3POP	gregkgn@gmail.com	
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 - March 2015

NEXT MEETING WILL BE ONE WEEK LATER THAN USUAL DUE TO EASTER, so it will be held on 11TH APRIL. The meeting will be a **Show and Tell. So bring your latest project or something you think is great that enhances your enjoyment of amateur radio and tell others about it. It may be just the thing that they need to know about. **PLEASE NOTE- This meeting will be a BBQ, so be there about 11.00 am for a chin wag and a bite to eat.****

Many members get their newsletter by email which means they get it much sooner than those who get it via Australia Post. It also means that members can be advised quickly of things that members are told of between meetings that are interesting and important but will be out of date by the next meeting. Things like a member's death and funeral or a rare DX callsign being active are a couple of examples. So if you have email facilities and don't get your newsletter that way why not change as it will ultimately be to your advantage. Just let me know your email address if you would like to take advantage of this method of receiving newsletters and other information. Rodney VK3UG

The Presidents report for March 2015

There has been a lot of work going on over the past 3 weeks in regards to Southern Cross Austereo putting up a new tower and antenna systems on Mt Wombat.

Southern Cross Austereo will replace our existing tower and they will be installing 4 x 600mm dish antenna's on the tower.

Our current antenna system will be reinstalled on the new tower, which will include the new 6m array, as opposed to being on the hut as originally planned.

Phil VK3 ELV has been working on the best way to install the guy wires to give the best radiation pattern for the 6m antennas.

Rodney VK3UG will talk more about this in his technical report at the next meeting.

I will explain in more detail what has been happening regarding the tower at the meeting.

I attended a D Star information day at Woodend on Saturday 21st March. It was a very informative day and I left with a better understanding of D Star and what it has to offers us as radio enthusiasts.

I am going to organise the D Star Group to run an information day at our club in the next couple of months.

At the March meeting I showed the members present an article on a magnetic loop antenna. This antenna used a home brew tuning capacitor.

It was made using copper tubing and a small 12v geared motor.

I ordered and received a 12v geared motor and speed controller from china last week for the total cost of \$28.58.

All I need now is the copper pipe for the antenna and capacitor and I will start putting it together.

Hopefully I will have a working antenna at the next meeting.

If anyone has done the same or has an ongoing project to share then bring it along.

Don't forget the next meeting is more of a social get-together than a meeting. A BBQ for all those interested.

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

Meeting held 7/3/2015 - Minutes

- Meeting opened at 1,05pm
- Members and visitors attending,:- Greg VK3POP, Ron VK3COP, John VK3PXJ, Barry VK3KBY ,Andy Ashley, Huntley VK3ZE, Ian VK3CHV, Max VK3DSF, Pat VK3OV, Kevin VK3BPH, Geoff VK3ZNA, Jack VK3TJS with apologies from Steve VK3DP, Allan VK3FALN, Ian VK3JNC, John VK3FJHM, Peter VK3FPSR, Ray VK3RW, Phil VK3ELV.
- Inward Mail:- A receipt from the scout group for the rent on the hall, and a letter from the Department of Justice re our returns for the year.
- Ron VK3COP presented the financial report. Our finances are in a healthy condition.
- Greg VK3POP spoke about showing amateur radio to 4 wheel drive clubs, such as having a day at their show days later on. He also spoke about the possibility of having an Amateur Radio open day. He asked members to think about these possibilities and make some suggestions of their own and bring to a meeting.
- Greg VK3POP spoke about attending the D STAR users group meeting at Woodend 21st march,9,30 am to 4,30pm. He will be attending with a couple of other people.
- April meeting is on 11th April

- The meeting closed at 2.30pm, and was followed after afternoon tea with discussions with Andrew Meachen VK2ANM of Southern Cross Austereo re a proposal to share space within our Mt Wombat building.

John Waters - Secretary. VK3PXJ

- The number at the meeting was down on usual due to the long weekend. A number of ideas were discussed about how we can make meetings more attractive to members and the general public. For example an open day showing people what amateur radio is about. There is a possibility this may also suit our sister club the Vintage Radio Club.
- There was discussion on altering the meeting format that one meeting does have meeting activity and the following will be more of a social and show me, help me type of meeting.
- A notice of motion was made to increase the membership fees by \$2 for non-members of the WIA to cover the extra cost the club pays for insurance for non-members. This will be voted on at the AGM.
- There will be a get together with the Midland Amateur Radio Group at Goulburn Weir near Nagambie on 19th April. We are giving you this advance notice just in case you don't get to the next meeting.
- Discussion etc on the SC10 network proposal.

Rodney – Newsletter Editor VK3UG

CLUB TRANSISTOR LIST (Freebies to Club Members)

The club was given a quantity of transistors last year. Firstly available for the Tech committee to use on club equipment and secondly for use by members. The number we have varies from one or two of each type up to several hundred for some small signal types. Contact Rodney VK3UG if require some.

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

The Johnson Viking Valiant Amateur Transmitter

A little while ago Steven VK3DG's Collins ART13 appeared in the Newsletter. A few years back I had hoped to obtain an E.F. Johnson Viking 500 HF amateur band transmitter of around 500 watts capability for my radio museum. It appears that none of this model came into Australia. However, about 10 years ago I was offered its little brother the Johnson Viking Valiant from the 1950s which I accepted. Companies like E. F. Johnson in the USA were producing very nice AM/CW transmitters. Generally they were too expensive for the average Australian amateur to consider buying, so few came into Australia.

The Viking Valiant covers the 160-80-40-20-15-10 metre bands plus the 11 metre band which was a legal band for amateur operators at that time. It will easily reach the power levels that were licensed in Australia. It has an output power maximum of 200 watts on CW and 150 watts on AM and when fed by a SSB exciter 150 watt PEP from three 6146 valves in parallel in the PA. It is a weighty transmitter at 38 Kg. Its high tension voltage is around 660 volts so it can be lethal if fingers are put into the set when it is switched on or even off if the power supply capacitors still have a charge on them. The power supply needed is 117 volts 50/60Hz with power consumption on standby of 185 watts and 560 watts when transmitting. Our modern solid state transceivers use power much more efficiently than does the Johnson. The transmitters and receivers of that era are interesting and are still quite usable on the bands today.

Rodney VK3UG



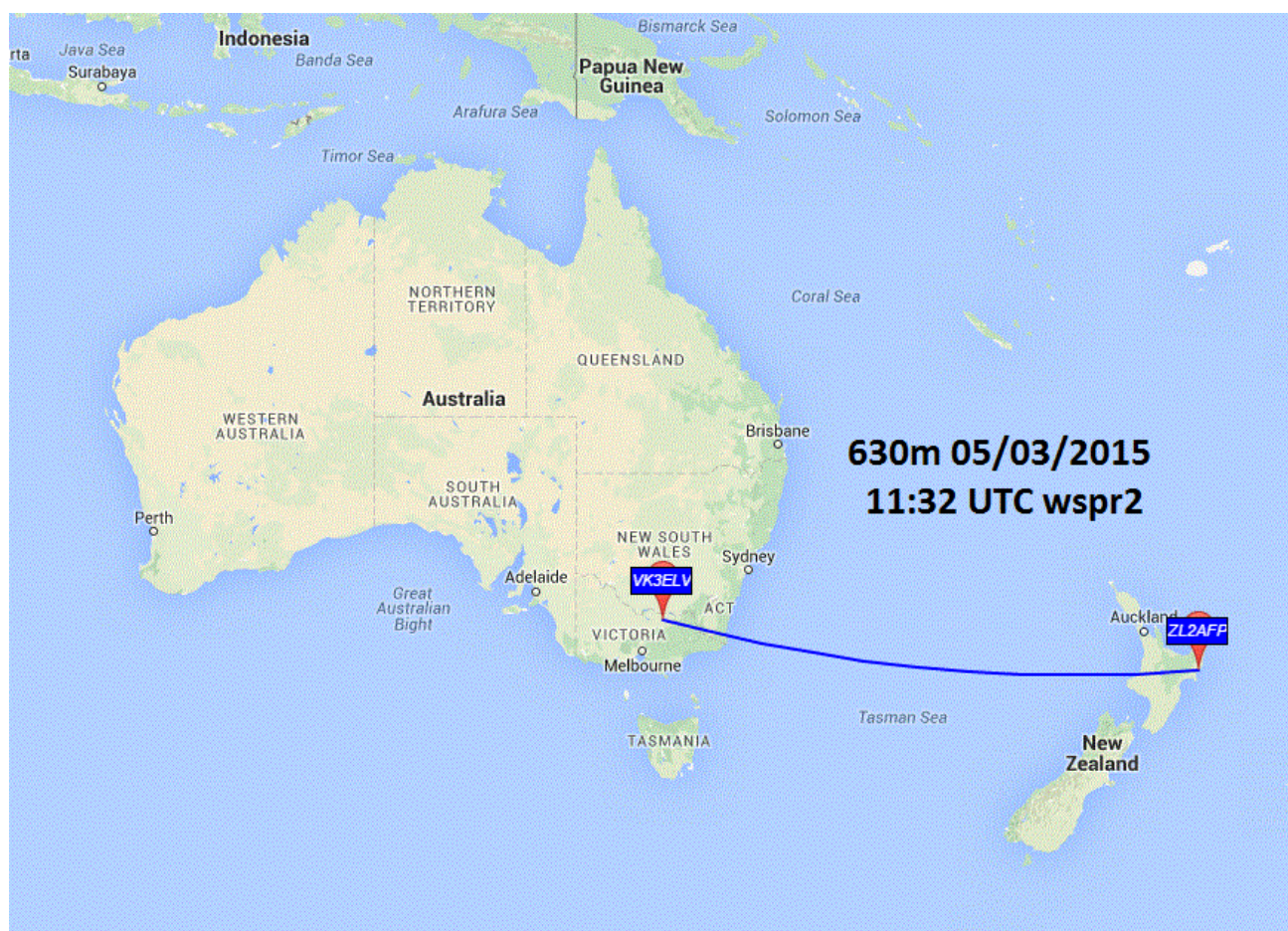
DX on 630 metres 472 kHz by VK3ELV.

In a recent newsletter I wrote about Phil VK3ELV's experimentation on 472 kHz. Well he is into the DX on the 630 metre band and has been heard by ZL2AFP. The method used is a digital mode WSPR with signals at -29dB. This quite an achievement, as these MF frequencies don't always propagate well from inland locations such as Phil's. If Phil lived on the coast he would achieve even better results as MF frequencies such as AM broadcast frequencies rely on ground wave propagation and the conductivity of soil varies wildly. The greater the conductivity of the soil or water the better the propagation, with salt water (ocean) being the best. Rocky areas often have poor soil conductivity.

When I was in the Antarctic at Macquarie Island many years ago we could easily listen in daylight to southern Australian and New Zealand broadcast stations on the 530 to 1650 kHz broadcast band. At night we could hear even more stations. The distance to the stations from Macquarie Island varied from 1500 to 2500 kilometres. Inland stations could not be heard only those located near the sea.

As I understand it Phil's station on this band consists of an Icom IC706 at low power running into a transverter that takes it down to the 630 metre band (472 to 479 kHz). The solid state amplifier boasts an output of around 100 watts. This power at first glance exceeds the effective isotropic radiated power (EIRP) permitted. However, Phil has calculated his EIRP at 1 to 2 watts as antenna systems on this band are far from efficient. Performance at night is enhanced by sky wave propagation.

Keep up the good work Phil. Perhaps you can give us a talk on this soon. What interesting things have other members been doing – let me know.



VASTROC 2015

What is happening: Bendigo to Host Astronomy Convention.

When: Friday April 17th to Sunday April 19th.

Where: Discovery Science & Technology Centre, 7 Railway Place, Bendigo.
(adjacent to Bendigo Railway Station & Bendigo Marketplace).

Cost: Choice of registration options.

Contact: Joy Vinnicombe, 0407 058 279.

Bendigo to Host Astronomy Convention.

The 2015 **Victorian Astronomical Convention** will be hosted by Bendigo District Astronomical Society. The convention will be held from Friday April 17th to Sunday April 19th, at Discovery Science & Technology Centre Bendigo.

A variety of topics will be covered such as Night Sky Photography, Solar Astronomy, Black Holes, Radio Astronomy, the World's First Astronomers, and much more.

The convention will kick off on the Friday evening with Sidewalk Astronomy and Planetarium sessions! Participants will also enjoy a dinner and speaker on the Saturday evening.

Register today at www.vastroc.net. **Early Bird tickets are available until February 15th.**

Bendigo
17-19 April
www.vastroc.net

