



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

Repeaters VK3RGV Freq: 53.725MHz (1 meg offset),

146.65MHz (IRLP Node #6992 withdrawn from service. Technical upgrade in process, see later in newsletter) (Echolink active.) (600 kHz offset),

439.775MHz (5 MHz offset), 438.2MHz (D-Star) [D-Star not operational at this time on Mt Wombat]

Access to the analogue 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 evening -

3.62 MHz  $\pm$  interference 7.00pm,

2mx repeater 8.00pm

The WIA Sunday morning broadcast is often re-broadcast in the evening on the 2 mx repeater.

The local vintage radio club has a get together at 11.00am of a Sunday on the 2 metre repeater. Many of their club members are members of SADARC too, so join in for a chat.

Meetings are held at 1 pm 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](http://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:- Peter Rentsch

VK3FPSR

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Secretary:- Andy Ashley

VK3AJA

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Vice-President:- Barrie Halliday

VK3KBY

Treasurer: - Ron Burns

VK3COP

Membership Sec: - Pat O'Shannessy

VK3OV

Webmaster: - Steven Hamer

VK3DP

Station Manager: - Vacant

Publicity Officer: - Vacant

Technical Committee: - Phil VK3ELV, Ray VK3RW, Geoff VK3ZNA, Kevin VK3BPH & Rodney VK3UG

Newsletter:- Rodney VK3UG (Editor) [rodlynn6@bigpond.com](mailto:rodlynn6@bigpond.com) & Andy VK3AJA (Printing/ Distribution)

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#### OTHER CLUB'S NEWS

Bendigo Amateur Radio & Electronics Club nets – Tuesdays 8pm 147.15MHz VK3RCV with club callsign VK3CMZ and Thursday 8pm 3.655MHz  $\pm$  interference. All welcome to participate. Many SADARC members are able to access their 2mx repeater.

Ballarat Amateur Radio Group – email [vk3bml@barg.org.au](mailto:vk3bml@barg.org.au) and [www.barg.org.au](http://www.barg.org.au)

## Presidents Report August 2016

I know this sounds repetitive but it was good to see such a good attendance at our last meeting. The Club is really starting to become active with lots of things to be dealt with at each meeting. Many more members are contributing to the success of the Club and that is great to see. An active Club will naturally attract more members and that's part of what Amateur Radio is all about. Spread the word about this great hobby of ours with its unlimited opportunities to learn.

To all those members who brought along something for the Show n Tell, thank you very much. I am sorry I missed it but family 1<sup>st</sup> birthday celebrations sometimes have to come first.

As this is our last meeting prior to the Hamfest we need to finalise who is taking responsibility for all the different jobs that need to be done. There is much work to do but with your help and assistance on the day we can get the work done but still have time to peruse the items for sale.

I emphasised at the last meeting that in the past we have had issues with traders taking tables and bringing along a couple of mates to help. These "mates" have got into our Hamfest at no charge and that is not fair on the paying public. As a result of this it was decided at our last meeting that for each table taken by a trader that that entitles them to a free pass per table. So, if you take one table you get one free entry, two tables, and two free entries and so on. There are couple of traders that bring their XYL along for the day; we may need to be a little lenient on these!

The other issue that is not fair on those that are there at 10.00 am when the doors open is trading to those inside the hall prior to the event being open to the public. So, we ask that there is no trading prior to the general punters being allowed in at 10.00am.

I am looking forward to a very successful Hamfest with lots of bargains being collected and a great social event as an adjunct to the day.

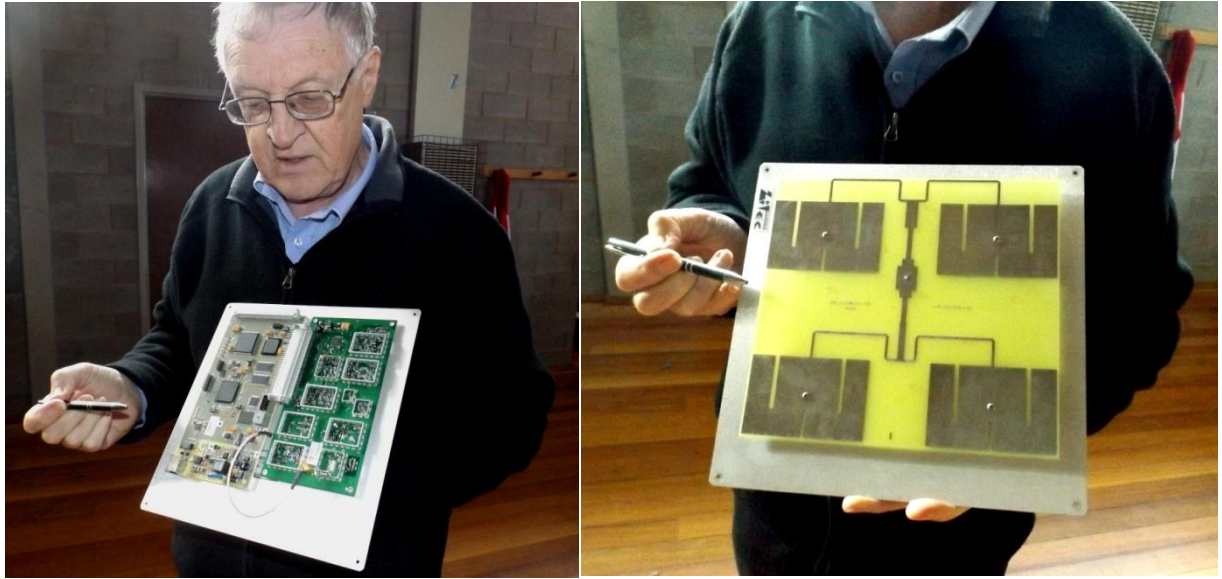
After the Hamfest is over we meet again in October. What's scary about October? Well, it's the AGM and all positions are declared vacant. Some of us are prepared to continue but others may not be available, so please think about possibly taking a role in the Club if asked. (You can also volunteer. Editor)

That's it for me this month and I look forward to seeing as many of you as possible for the next meeting.

Cheers & 73 Peter – VK3FPSR President – SADARC

## SADARC Calendar of Events

September 3 <sup>rd</sup>	Club Meeting – <b>Hamfest final organising</b> <b>Guest Speaker – Yaesu DMR (Digital Mobile Radio) presented by Peter Brennan VK3TE</b>
September 11 <sup>th</sup>	SADARC Hamfest
October 1 <sup>st</sup>	Club Meeting – AGM – BBQ to start at 11.00 am
October 16 <sup>th</sup>	JOTA
November 5 <sup>th</sup>	Club Meeting with Guest Speaker
November 19 <sup>th</sup>	Murray QUAD
December 3 <sup>rd</sup>	Combined Christmas Lunch with Vintage Radio Club



#### Geoff VK3ZNA with a Panel Transceiver

This Panel Transceiver operated in the 1785 to 2025 MHz band for the local ISP. It is a direct conversion full duplex transceiver with inbuilt phased array antenna. It is powered via a power injector into the RJ45 cable that allows data exchange between the computer and Network.

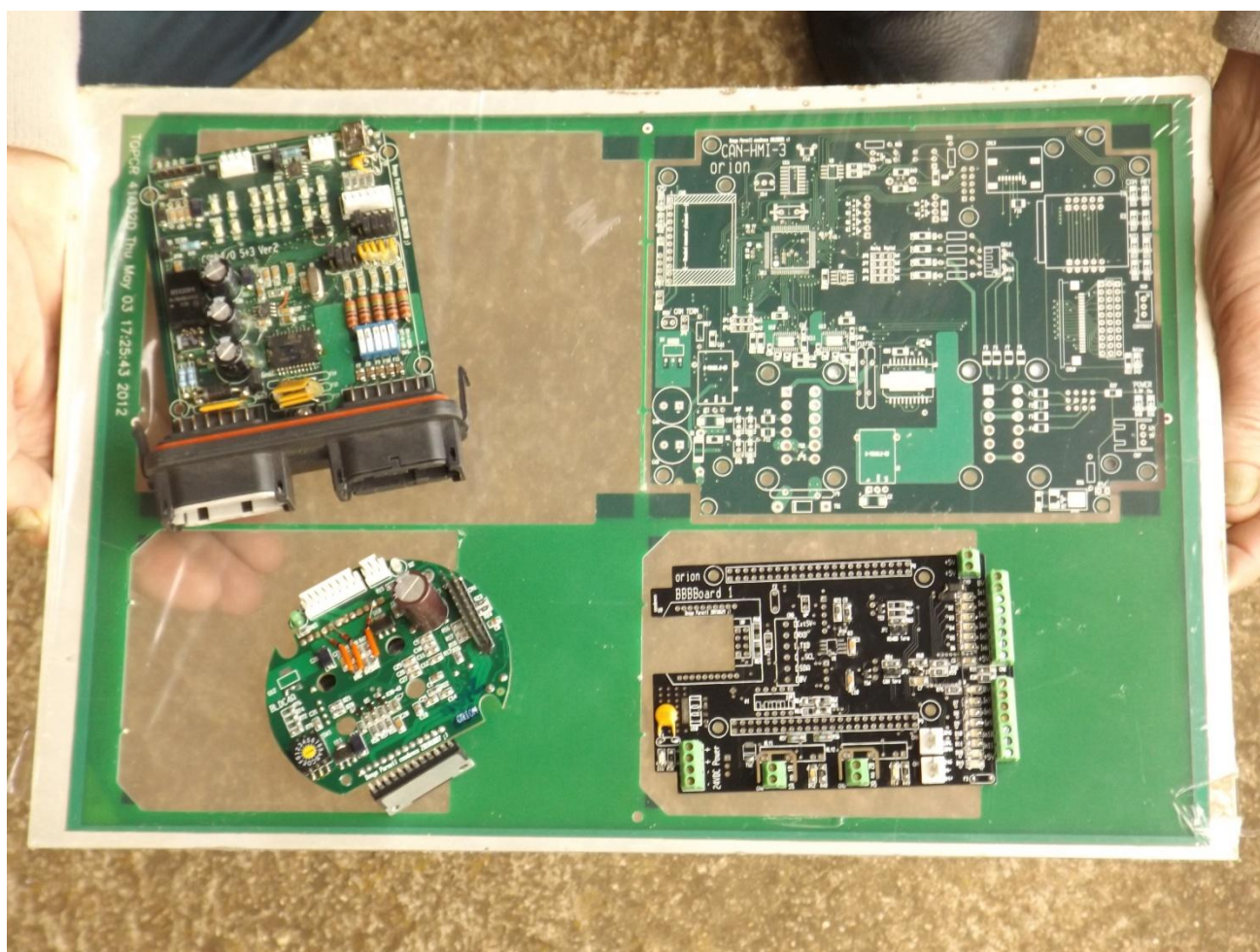
Investigations to date on the semiconductor data have indicated that the PA IC is capable of operating from 700MHz to 2400MHz. Further tests are to be carried out to establish if these panels can be converted to Amateur Bands of 23cm (1200MHz) and 13 cm (2400MHz). The receiver front end uses the same transistors and mixer IC that is used in the very successful 3.5GHz panels.

There are limited numbers of the 3.5GHz panels left and if no further orders come forward, the balance will be sold to VK7's who have requested at least 10 units. **Do you want one? Contact Geoff.**



## Microscope

USB2 digital microscope with 8 inbuilt LED lamps, the lamp brightness is adjustable. Focus wheel varies the range from 10mm to 500mm, the Focus wheel is calibrated in magnification from 20x to 200x. Still and Video resolution is 2Mb but with interpolation to 5Mb. It comes with the small stand and software. It is compatible with Windows2000, Vista, XP, 7 and 10; it has a calibration feature that allows measuring of a straight line, circle radius or angle. It was purchased from Altronics.



Denys VK3ZYZ designs and makes niche market electronic circuits for various groups and above we see a small display of a few of his projects over the years.

On the next page we have a project Kevin VK3BPH was involved with several years ago when valves were still king. It is a partly constructed six metre SSB transverter. By the time the project was put aside the receiver was functioning well but the transmitter hadn't been finished.

As can be seen the majority of the transverter was constructed on removable panels so that up dates in the circuit could be easily accommodated without a major alteration to all the chassis wiring. The output appears to have been either a QQEO3/20 or a QQEO6/40 twin tetrode which could give upwards of 100 watts of RF output.



Phil VK3ELV showed us a power supply that he has modified for amateur use. His little project at the show and tell was an old computer power supply converted to a 13.8v supply to run a transceiver.

There are many different models and circuits. A simple generic method was used, that works with most models, and still keeps all the safety features functioning (i.e. overvoltage, short circuit, over current, etc).



Rodney VK3UG showed his prototype power supply used to power vintage battery powered radios. It has a capability of supplying 20 different voltages of which 14 are available at any one time. It has a number of active and passive voltage and current regulators to achieve the required voltages at different current capabilities.

Just to fill in the space VK0CR (VK3UG) is shown tuning the ANARE Redifon G423A 500 to 2,000 watts AM/CW/LSB/USB/ISB HF 1.5 to 30 MHz transmitter on Macquarie Island in 1967. The slides have deteriorated over the years unfortunately - so has his waist line!.



Contact Geoff VK3ZNA if you are interested in the Hills Telomasts.

The Hills 'Telomasts' are available in diminished quantities, about a dozen each of 9m, 12m and 15m. Also tripod mounts used for TV antenna installations are also available with mast lengths up to 3 metres.

# Shepparton and District Amateur Radio Club Meeting - Minutes

1:00 pm 6 Aug. 2016

\*In Attendance were:

VK3ZE Huntly, VK3AFD Arthur, VK3FBNG Bruce, VK3KJB John, VK3KBY Barrie, VK3FDV Dave, VK3NQS Jason, VK3TEX Les, VK3GMV Wayne, Jan Watters, VK3UG Rodney, VK3COP Ron, VK3ZNA Geoff, VK3FPSR Peter, VK3AJA Andy, VK3DSF Max, VK3OV Pat, VK3HEN Darren, Peter Glasson, VK3TJS Jack, VK3POP Greg, VK3BPH Kevin. **(Note there were 25 in attendance; please make sure you sign the attendance book. Ed)**

\*Apologies:

VK3DP Steve, VK3FALN Alan, VK3PXJ John, VK3ANP David, VK3EY Rob, VK3GEB Bob, VK3FNQS Jason, VK3AO Alan.

\*Confirmation of Minutes of previous Meeting  
Read by Peter, Moved by John, Second by Barrie

\*Matters arising from the Minutes  
None.

\*Inward and Outward Correspondence

Emails from 2 people to join/get assessments

Email from Peter Brennan re- Digital radio repeater.

Membership forms.

Quote for banners.

\*Reports

Financial: Read by Ron Moved by Rod, Second by Geoff.

Technical: Read by Rodney, nothing really changed at Mt Wombat due to weather.  
Geoff will sort out our station before JOTA as agreed.

Geoff also read a report from his visit to GippsTech, Very interesting by the sound of it. And a great summary report from Geoff.

\*General Business

Catering was discussed for hamfest and all agreed to use Azim's Food truck

Andy will confirm that it can happen and also that venue provider (Church hall) are ok with Azim being there.

Andy will contact Dallas re- PA system for Hamfest.

We will still provide tea/coffee and some biscuits inside hall.

Banners quote has been accepted by club and will be ordered by Andy.

Wrist band ordered

Club Happy to pay for new gazebo.

The club has agreed to provide prizes for HAMFEST,  
1 x \$75, 1 x \$50, 1 x \$25 Jaycar voucher. Andy will get during the week.

1 x Baofeng UV82 handheld radio for door prize. Andy will get one ordered.

Andy will also call Slim (Ross) from Strictly Ham as he has not replied to a number of emails regarding attending HAMFEST. Will we also offer to help him setup his gear if required.

We may have a BBQ and a 10:30 am ish. presentation on surface mount components next meeting.....we will see

Meeting Closure 3:28 After some interesting "show and tells" thanks.

A great turnout thank you all for attending.

Secretary Andy VKL3AJA

### **Editor's Ramblings**

- In the last newsletter I asked if members were getting their posted newsletter well in advance of the meeting day. One member replied and he received his newsletter on the Monday following the meeting. Let me know when you receive your newsletters as we want them to arrive before the meetings. This newsletter completed on 24<sup>th</sup>, then to be sent.
- There have been no requests for help either to do with antenna work or assistance to overcome interference problems.
- The repeaters are performing as normal. The IRLP has been closed down for the time being until we are able to get a control board for the repeater, so that it will operate as it should. Andy I believe is researching where we can get a suitable board, obtain one and the board is then to be fitted either to the 2 metre or 70cm repeater.
- The banners mentioned in the minutes are to cost \$132, plus other signs totals \$322.
- A Gazebo is also being bought for around \$300. This and the banners will be used to publicise the club more effectively at any displays we may do.
- Most Sunday nights the WIA broadcast is re-broadcast on VK3RGV two metres.
- Bookings for the Hamfest tables are going well John VK3XPJ reports. There will be a 7am set up on Sunday 11<sup>th</sup> September. The doors will be opened to traders at 8am and to the general public 10am. This year all entrants will be issued an arm band which is to be worn.

No arm band no entry as too many have been slipping in without paying. The supply of food has been outsourced to Azim the Kebab man and his van will be at the side of the hall. The club will still provide tea and coffee in the hall. **More helpers are required on the day.**

- The club will have two tables at the Hamfest so that members can sell items. Items must be tagged with your callsign and asking price of the items. Any power leads are to be tested and tagged.

Thank you for all those members who have submitted information for this issue of the newsletter.

## **GippsTech Report**

On Friday 8<sup>th</sup> July 2016, Barrie VK3KBY and Geoff VK3ZNA travelled to Morwell for the GippsTech Lectures on Saturday 9<sup>th</sup> and Sunday morning 10<sup>th</sup>. The trip took around 4.5 hours each way, allowing for a comfort stop. The route taken was the Hume Freeway to Greensborough, then through Rosanna to enter the Eastern Freeway and East Link and turning onto the Princes Highway at Dandenong. There were 2 towns that have not been bypassed between Dandenong and Morwell.

Upon arriving we were shown to our room and introduced ourselves to Joe, VK7JG, as he had been to GippsTech previously, we were able to transport him to and from Federation University at Churchill; approx 10 Km. Friday evening saw us at a dinner with many of the attendees.

## **Lectures:-**

### **Saturday**

Upon arriving at the University, we registered and were handed our Identification tag that hug around our necks and a GippsTech drink mug with our call sign on it.

0915 Welcome, followed by the first lecture.

0930 David Minchin VK5KK gave a talk on VHF SDR (Software Defined Radio)

1020 Alan Devlin VK3XPD presented the Microwave Achievement Award; this Award was financed by Alan for the advancement of microwave experimentation by Amateurs.

1030 Coffee Break

1115 Julie VK3FOWL and Joe VK3YSP spoke of the SARC1 High Altitude Balloon Payload for the 2106 Global Space Balloon Challenge and also on AIS Saves Lives.

1210 Glen English VK1XX Spoke on semiconductors, Goodbye Silicon, hello GaN (Gallium Nitride)

1225 Roger Harrison VK2ZRH had a Q & A Session on the WIA LCD Proposals & Proposed New Radio Communications Act.

1300 Lunch, a roast and other hot meals.

1415 David Rowe VK5DGR spoke of the SM2000 Open Source VHF Radio.

1530 Coffee Break

1615 Glen English VK1XX spoke of 'Near effects of ground and your field day setup'.

1700 Tim Dixon VK5ZT gave an alternative method to modify the 3.5 GHz panels to 3.4GHz amateur band. He is to place these on the VK Logger site.

1755 The lectures closed for the day.

1900 We had Dinner at the Morwell Club. It was a 5 minute walk from the Coal Valley Motor Inn.

### **Sunday**

0815 Coffee/tea

0900 Rex Moncur VK7MO spoke of QRP EME on 10 GHz using a 700mm dish

0940 Julie VK3FOWL and Joe VK3YSP, A mini Satellite-Antenna Rotator and A Speech Synthesizer for the Yaesu FT-817.

1015 Roger Harrison VK2ZRH spoke of the Norfolk Island microwave jaunt using 3.4 GHz panels.

1030 Dale Hughes VK1DSH spoke on Slow Scan TV using the Arduino hardware.

1050 Coffee/Tea break.

1135 Rex Moncur VK7MO gave an update on the digital mode WSJT-X

1225 David Hardy VK2JDH, Using your Android phone or tablet as a GUI for your Arduino home brew projects.

1300 Raffle Draw and Lunch for those who stayed.

We left and arrive in Shepparton at 1700.

Submitted by Geoff Angus VK3ZNA