



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

## August 2023 Newsletter

### SADARC committee

President:- Peter Rentsch – VK3AXI Vice-President:- Barrie Halliday - VK3KBY  
Secretary:- Arthur Duke - VK3AFD Treasurer:- Ian Saunders – VK3YYY  
Membership Sec:- Ian Saunders - VK3YYY Assistant Secretary:- Peter Rentsch - VK3AXI  
Webmaster:- Ray Gardiner - VK3YNV Hamfest Co-ordinator:- Peter Rentsch - VK3AXI  
Newsletter (editor):- Peter Simpson – VK3ASK  
Technical Committee: Geoff VK3ZNA, Ray VK3YNV, Denys VK3ZYZ & Josh Gardiner – power to co-opt.

To contact any member of the committee above, email [committee@sadarc.org](mailto:committee@sadarc.org) and specify who you wish to communicate with and the subject. Items for the newsletter [newsletter@sadarc.org](mailto:newsletter@sadarc.org)

Communications Manager (External Events): Darren Glasson (VK3HEN) – subject to confirmation.

Meetings the first Saturday of the month from **10 am** for Arduino training, plus informal chats and technical talks. A BBQ follows (a gold coin donation). Main meeting 1 pm (except January when no meeting occurs) at Flexible Learning Centre, 18 Channel Road (250 metres from Archer Street), Shepparton.

Variations in these times, days and location are normally notified in the preceding newsletter.

**DISCLAIMER:** - No guarantee is given as to the accuracy of information in this newsletter. E. & O.E.

**WARNING:** - There is a danger of electrocution or injury when working on electrical/radio gear or working at heights doing antenna work. You do so at your own risk. 25/08/2022

### VK3RGV repeaters and transmitter operating frequencies Mt Wombat

53.725MHz (-1 MHz), **In Service** 146.65MHz (-600 kHz), **In Service**  
438.2MHz (-7 MHz -D-Star), **In Service** 438.650MHz (-7 MHz 91.5 Hz tone), **In Service**  
438.9MHz (-7 MHz - DMR), **In Service** 439.775MHz (-5 MHz), Now back in service, IRLP  
(node #6990)

476.475 MHz (+750 kHz) CB Repeater WBT03 Channels 3- 33, **In Service**

VK3RDS, 438.7625 MHz (-7 MHz DMR) **Shepparton on test @ VK3YNV QTH**

The three following repeaters are not the clubs but are allied to the club in one way or another.

Mt Major VK3RDU, 146.850 MHz, 439.875MHz. Mt Bruno VK3RWC 147.325 MHz **(-1.6 MHz 123Hz)**

Access to most analogue repeaters is by sub-audible 123 Hz tone or noise/carrier mute (less sensitive).

Your TX offset is shown in brackets

Club informal on air get togethers, all welcome. Club call sign VK3SOL: -

Wednesday- 2mx repeater 146.65 MHz 8.00pm, 3.63 MHz SSB ± interference 8.30pm,

Sunday – 2 mx repeater 146.65 MHz 2 pm & 8 pm & The Vintage Radio Club – 2 mx repeater 11 am

A number of semi-private HF skeds take place either daily or weekly, locally or further afield.

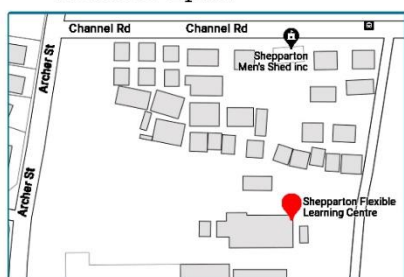
**The next meeting will be held on Saturday September 2nd, at the club House 18-22 Channel Road Shepparton 3630.**



**Shepparton & District Amateur Radio Club  
and Electronics Club**

Are you interested in **Radio, Arduino, Electronics, Communications** and or **Programming?**

We invite you to come and visit us on the first Saturday of every month at the Shepparton Flexible Learning Centre from 10am to 2pm.



**sadarc.org**

Website – [www.sadarc.org](http://www.sadarc.org) or [www.sadarc.org.au](http://www.sadarc.org.au) Face book Page – Shepparton and District Amateur Radio Club Direct Link: <https://www.facebook.com/groups/481867453084459>

Note: Want to get your licence? SADARC has examination assessors, contact the secretary for details.

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- **John Moyle Memorial Field Day Contest.**

The next SADARC meeting will be held on Saturday September 2nd. This is a regular meeting at our club rooms as follows.

- 10am continuation of Arduino training, conducted by Denys VK3ZYZ, Ray VK3YNV and Josh.
- 12pm, our regular BBQ with gold coin.
- 1pm, Club meeting for general business, plans for Hamfest on September 10<sup>th</sup>.
- Demonstration of projects from members
- Man Behind the Mike – VK3KBY – Barrie Halliday

### **Diary Dates**

September 2 <sup>nd</sup>	Regular club meeting
September 10 <sup>th</sup> .	Hamfest.
October 7 <sup>th</sup>	Regular club meeting

### **Presidents Report – August 2023.**

Thanks to all those who attended our last meeting. A good roll up saw some enthusiastic discussion about projects. Thanks to those who brought along their new projects and a special thanks to Bill for bringing along his stringed instruments that he has made and then giving us a recital. Bill's craftsmanship is second to none. Not only can he construct radio equipment, but he can also make and play a violin as well. Thanks Bill.

As a result of our Jaycar Expo we had a couple people attend early to see what we are about. We also had a new member sign up and become involved in Denys's Arduino course. This is what the day was all about. Exposure to the public that we actually exist as a group and what we can offer.

At our next meeting we will need to allocate some time to the upcoming Hamfest and ensure that we have a good workforce in place for the day. Details of the Hamfest are shown below.

Discussion re the Hamfest will be front and centre for this meeting. Final allocation of tasks will need to be confirmed. Please, remember that the Hamfest is our major fundraiser for the year, and we need all hands-on deck to run the day successfully. The more we have there the easier the tasks are for all.

Sunday 10<sup>th</sup> September 2023

St Augustine's Church Hall  
Orr St SHEPPARTON

Doors open at 7.00am for vendor setup.

Tables are \$20.00 for the first table and \$15.00 for each table thereafter. Each vendor is allowed two free entry tickets.

Doors open at 10.00am for the punters.

Entry is \$5.00 per person. Children under 15 free.

That's it for me this time, see you in a couple of weeks.

Peter Rentsch  
VK3AXI President

# SADARC. August 2023 Meeting Minutes.

## Club Rooms, Flexible Learning Centre. Shepparton

**In Attendance:** VK3AXI Peter, VK3KBY Barrie, VK3AFD Arthur, VK3ASK Peter, SWL Bill C., VK3EB Dallas, VK3TJS Jacek, VK3JSD Stevo, VK3ZNA Geoff, SWL Josh, VK3VSM Graeme, VK3BLD Rob. VK3KFM Kevin, VK3FMAA Mike, VK3KUG Ray, VK3UU Adam, VK3JSD Stevo, VK3ZYZ Denys, VK3 YNV Ray, VK3YYY Ian, Mark,

**Visitors :** Baz. Robinson, Adrian Allen, Judith Artridge. (All left before Business Meeting)

**Apologies:** VK3GSR Geoff, VK3ECH Rob, VK3TEX Les, VK3FALN Alan, VK3KBY Barrie, VK32RK Robert, VK3BPH Kevin.

**Minutes of last Meeting:** Moved by Mike VK3FMAA that the minutes as published be accepted. Seconded by Stevo VK3JSD, all in favor.

**Business Arising :** Nil

**Correspondence:** Email from Lyn Champness thanking the club for the work done to date, in clearing out Rod's shack/ workshop.

**Financial:** Ian VK3YYY reported income of \$120.90. Outgoing was for Jaycar Expo. \$367.17. The cost of food for the BBQ was kindly donated by Ray VK3YNV. Ian moved that his report be accepted, it was seconded by Rob. VK3BLD, all in favor.

**Technical :** Ray VK3YNV reported that Kevin VK3KPL has picked up the equipment from Yarra Valley. The L450 repeaters are not working but can be repaired and used. Geoff VK3ZNA reported that progress is being made with the Fusion Repeater. The Technical report was moved by Ray VK3YNV and seconded by Geoff VK3ZNA, all in favor.

**General Business:**

**Soldering Irons.** Josh advised that a miniature USB/DC soldering iron was available for \$25 US. He suggested that a bulk order would save on freight. A number of members expressed interest, orders can be made through the forum.

**John Moyle Memorial Field Day:** Mike VK3FMAA suggested that the club contest the next event in march 2024. A suitable location could be Waranga Basin, and we could make it a family day. Peter requested more information for newsletter.

**Jaycar Day Debrief:** Stevo VK JSD said it was an excellent day and complemented members for their "putting in ", and staying to pack up. The purpose of the exercise was to promote electronics and amateur radio and attract new members. As a result, we had three visitors today, one becoming a member. Jacek VK3TJS said he was impressed and suggested we have a similar event at the Shepparton Show. Ray VK3YNV Suggested that at our next Jaycar event we should firstly consolidate our display and secondly request that Jaycar advise us of upcoming promotions. They might like to conduct a carpark sale in conjunction with our display.

There was much discussion as to how we might attract younger people. It was

suggested that we demo. radio direction finding projects to scouting groups, as an extension of their orienteering and JOTA.

Peter VK3AXI suggested that the building of transmitting and receiving equipment, that could be used for a “foxhunt” would be a great club project. Ray VK3YNV has offered to investigate.

Jacek VK3TJS noted that our club is not mentioned in the monthly “whats on in Shepparton” in the Shepp.News. Peter VK3ASK volunteered to provide varied content for each month.

**Hamfest:** Peter VK3AXI advised that 30 tables have been booked. Peter called for volunteers, and members were allocated jobs for the day on. Publicity for event will also be promoted on “whats on in Shepparton “, VKClassifieds and members are asked to spread the word on HF. Mike VK3FMAA has a contact with Win TV, will investigate and get back to Peter VK3AXI

Meeting Closed at 2:20pm

### **Editor’s Comments**

August was another great meeting for our club. We had some people who attended the Jaycar day, who came along to the meeting to see what we are all about. Hope to see them all again at our next meeting.

Bill once again amazed us all with his talents at not only building fiddles from scratch, but also his ability to play. Seems that Bill’s talents go far wider than just designing and building receivers.

Ray and Josh presented a small USB soldering iron, which many club members may be interested in purchasing.

They also had on display some de-soldering tools and various items for surface mount assembly.

Denys displayed his latest 3D printer works.

We once again were not able to use our regular BBQ, but using the unit in the main building seemed to work quite well, hopefully they will get the side door repaired soon.

As Peter stated in his report, we will need to put the final plans in place for the hamfest at our next meeting. I have sent the promo to the Shep News, for publication on Friday September 8th and thanks to Denys, we also have a promo on 1FM radio.

Below a picture of the work done by Bill



See you all at our next meeting,  
Regards and 73's Peter VK3ASK.

### **Sale of Equipment from the shed of Rodney Champness.**

Ray Gardiner VK3YNV and a team of willing volunteers, spent a weekend clearing out the back shed of our dear friend Rodney Chanpness.

They have sorted and catalogued many of the items and have filled 20 large containers with equipment. Photo below.

Once again, at our next meeting these items will be up for sale and all proceeds will go back to Rodney's wife Lyn.

No reasonable offer will be refused, so bring along some money and get ready to have a hunt.

There are coax connectors, switches, project boxes, ferrites and many other components, too many to list.

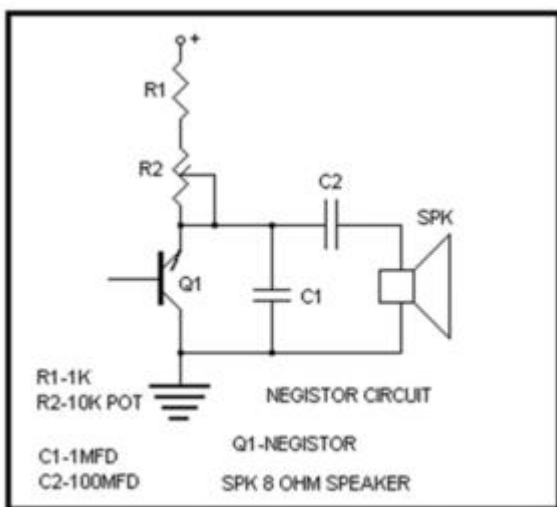


## Technical Tip from our President VK3AXI

### Negistor

One of the most unusual devices in electronics is the Negistor. A common NPN transistor can be turned into a Negistor by wiring it in reverse. The emitter is connected to the power source through a resistor and the collector is connected to ground. When wired this way the transistor exhibits a phenomenon known as negative resistance, also known as avalanching.

In the diagram we see that a capacitor across the transistor charges until the reverse breakdown voltage is reached. At this point the collector-to-emitter resistance actually reaches a resistance of less than zero and then the capacitor is discharged through transistor. Once the capacitor is discharged, the transistor returns to its resistive state and the capacitor starts to charge again. While not all transistors will operate in this mode, a surprisingly large number do. Even transistors that test bad may operate as Negistor.



Amazingly, the circuit is extremely stable and produces a linear ramp wave. It can feed a speaker directly, or an amplifier stage can be added to use the oscillator as a function generator. Its wide range and stability make it suitable for use in music synthesizers. The components used in the circuit are just a starting point, as different transistors will react differently, and you may have needs that require other component values, so experiment. It is advisable to use a regulated power source of at least

15 volts.

## **John Moyle Memorial Field Day Contest.**

As reported in the minutes, Mike VK3FMAA has suggested that a group of club members should get together to participate in the next John Moyle memorial field day. The event would be held over the weekend of March 16-17 2024.

His suggestion is that we should have a weekend at the Waranga Basin Caravan Park and participate in the multi operator mobile competition.

Many members appeared to be quite interested in this idea and it is certainly an activity, which needs further discussion and planning.

John Moyle was a pioneer in amateur radio in the 1930's and was the technical editor and then editor of Radio and Hobbies magazine from 1939 until his passing in 1960.

He was one of the early presidents of the WIA and served under many committees involved in radio and electronics until 1960.

In 1959 he represented Australian amateurs at the administrative radio conference in Geneva.

Since the early 1960's the WIA has organised an annual John Moyle Memorial Field Day.

### **Aim of the contest**

This is a 24-hour event and the aim is to encourage and provide familiarization with portable and field operation, and provide training for emergency situations. The rules are therefore specifically designed and focused to encourage field operations. This contest is a Field Day Contest and not another contest where very powerful home stations operate under one call to amass huge scores.

Mike was the winner of the 2023 portable operation, Single operator contest having had 307 contacts and gaining 608 points.

If you would like more details regarding the contest, including the complete set of rules, check out the WIA website <https://www.wia.org.au/members/contests/johnmoyle/>



# SADARC

SHEPPARTON & DISTRICT AMATEUR RADIO CLUB  
[www.sadarc.org](http://www.sadarc.org)

## HAMFEST SUN 10TH SEPT 10AM - 2PM

(open to Exhibitors at 7:00am)

St Augustines Parish Church Hall  
96 Orr St, Shepparton

**\$5 ENTRY**  
**\$20 TABLE\***

\*Trader entry: \$20 for first table  
additional tables \$15ea.



**ALL ENQUIRIES and BOOKINGS**

[hamfest@sadarc.org](mailto:hamfest@sadarc.org)

146.650 MHz - 600kHz 123 Hz CTCSS