



**Founded 1979 Incorporation No A6677 P.O. Box 692, Shepparton 3632**  
**July 2022**

### **SADARC committee**

President:- Rob Hose - VK3BLD Vice-President:- Barrie Halliday - VK3KBY  
Secretary:- Arthur Duke - VK3AFD Treasurer:- Ian Saunders – VK3YYY  
Membership Sec:- Ian Saunders - VK3YYY Assistant Secretary:- Geoff Angus - VK3ZNA  
Webmaster:- Ray Gardiner - VK3YNV Hamfest Co-ordinator:- Peter Rentsch - VK3AXI  
Newsletter (editor):- Rodney Champness - VK3UG  
Tech. Committee:- Geoff VK3ZNA, Ray VK3YNV, Josh Gardiner & Rodney VK3UG – 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 informal chats and technical talks. A BBQ follows (a gold coin donation). Business 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. 27/07/2022

### **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), **Testing, out of 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:-

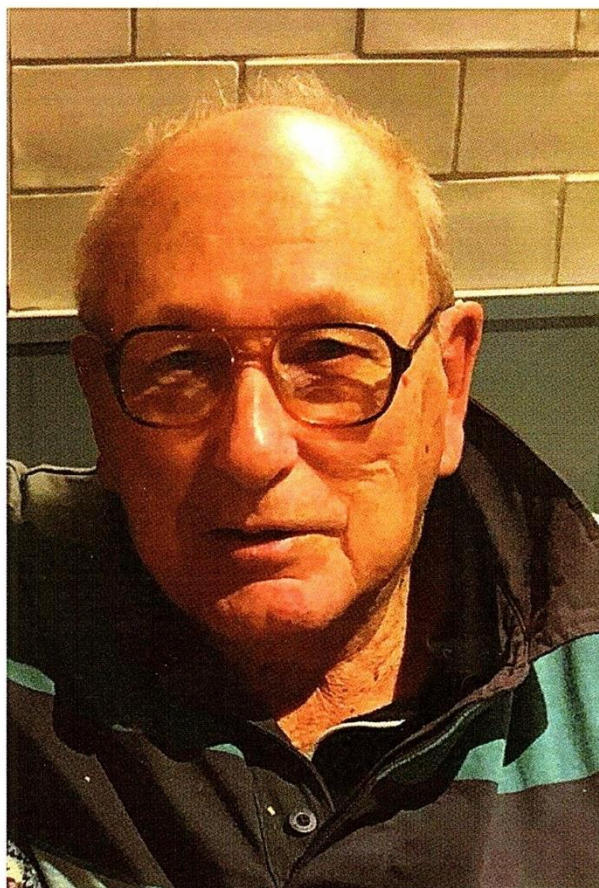
Wednesday- 2mx repeater 146.65 MHz 8.00pm, 3.63 MHz SSB ± interference 8.30pm,

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.

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.

## **Vale – Bruce Glasson VK3PNG**



## **BRUCE NEVILLE GLASSON**

**9/11/1938—10/7/2022**

Bruce passed away in the Bendigo hospital on the 10<sup>th</sup> July. It is with sadness that we acknowledge Bruce's death. We will miss you, Bruce. Our condolences go to Darren and the rest of the family. Several members of SADARC attended his service on 22<sup>nd</sup> July at the Bamawm Uniting Church. Bruce's popularity can be gauged by the fact the large church was nearly overflowing. Bruce will be buried with his deceased wife Rita at Two Wells in South Australia this week. Darren (VK3HEN) will supply me with Bruce's life story for inclusion in next month's newsletter.

## **Vale - Shirley Williams**

Shirley had no connection with the club. However, she was Karen Rentsch's mother and Peter's (VK3AXI) mother-in-law. She died on 9<sup>th</sup> of July in ARCARE Nursing home in Melbourne. She had

unfortunately suffered with dementia for the last 9 years. Our thoughts are with you Karen and Peter at this sad time. You will however have many fond memories of your mother and mother-in-law.

## **President's Report July 2022**

If you have been following our Forum and our Facebook page, you will know that there has been a lot of activity this month. There are several projects under way at the moment and I am hopeful these will be on show at the Hamfest.

It is with sadness we noted the passing of VK3PNG. Several club members attended the funeral and reports are that it was very well attended.

The Hamfest is drawing a lot of attention so it should be a good day. I have seen several ads for it, so it is being well publicised. A large portion of the next meeting will be finalising the arrangements and finding volunteers to help out on the day.

Our next meeting will be on August 6<sup>th</sup>, with the Arduino Course commencing at 10 A.M. and the informal gathering from 11 onwards. If it is not too cold the BBQ will be running, otherwise we will have another Pizza run. There will also be tea and coffee facilities for us. Josh Gardiner will continue his lecture on Making Printed Circuit Boards after the meeting. I hope you will all stay for this. It is very enlightening.

See you there.

73 Rob (VK3BLD)

## **SADARC July 2022 Meeting Minutes.**

Meeting commenced a 1.00 PM with President VK3BLD Rob, Treasurer VK3YYY Ian and Assistant Secretary VK3ZNA Geoff

In Attendance:-

VK3YNV Ray, Josh G, Bill C, VK3UG Rodney, VK3ZYZ Denys, VK3ZNA Geoff, VK3UI John, VK3AXI Peter, VK3BLD Rob, VK3TJS Jacek, VK3JSD Stevo, VK3YYY Ian, VK3ELV Phil, VK3OV Pat, VK3BPH Kevin, VK3EB Dallas.

Apologies:- VK3FALN Alan, VK3GSR Geoff, VK3ASK Peter, VK3KBY Barrie, VK3AFD Arthur.

Minutes from last meeting:- Read by VK3ZNA Geoff. Moved VK3UG Rodney, carried.

Business arising from minutes:-

VK3UG Rodney asked if the Arduino Class is to be continued and promoted? The meeting will make a decision after the August meeting.

Financial:-

The Treasurer reported that an income of 8 cents was received as income and \$499 was paid for the new 55inch TV. Cheques are to be raised to pay St Augustine's for Hall rental for the Hamfest.

VK3TJS Jacek asked if any member required name badges.

#### Technical Report:-

VK3YNV Ray reported that the IRLP 70cm repeater has been running on his bench for the past 2 months with no lock-up noted. Moved VK3YNV Ray, seconded VK3ZYZ Denys. All in favour.

#### General Business:-

Trip to Mt Wombat was discussed at the previous meeting. VK3BLD Rob reported the fire season commences on 1<sup>st</sup> October and we have our Hamfest in September. That leaves July as the only remaining meeting month for the visit and barbecue. VK3AXI Peter suggested we should wait until March next year for the visit.

#### Hamfest:-

VK3AXI Peter has been in contact with the WIA for advertising the Hamfest in the AR magazine. He was quoted \$220 for printing set-up and no cost for a half page advertisement. Josh G would assist with the drawing of the proposed advertisement. These were discussed by the meeting and accepted.

#### JOTA:-

VK3BLD Rob is to contact the local Scoutmaster to discuss a venue and involvement with Amateur Radio as a local affair.

#### Membership Card:-

VK3BLD Rob to recreate a business card size and send the artwork to Josh G. to remaster the layout for printing. Laminating was discussed and waived due to additional cost.

VK3YNV stated that a Folder has been created to store Club files.

VK3YNV Ray suggested we send a Card to VK3BXA Eric who is in hospital. VK3UG Rodney to follow up.

#### Newsletter:-

The newsletter front page layout was again discussed. VK3UG Rodney to carry out adjustments as requested.

Josh G. suggested the Arduino course duration be extended in the morning and the Circuit Board design course be held over till after the meeting.

VK3BLD Rob has a current Arduino project, to control and Icom IC22S. This replaces the channel switch and decoder board with Arduino and the S/Meter with a display.

#### Next Meeting.

VK3ZYZ Denys to continue with the Arduino course at **10 AM** before the meeting commences and Josh G. after the meeting with the PCB Design.

A vote of thanks was made to Denys and Josh for their presentations.

VK3YNV Ray discussed the construction of his 2m/70cm, 3/7 element portable Yagi antenna. It is constructed from locally available aluminium. Elements are 10mm and the boom is 25x25x3mm square section. Hunters are a ready source for the aluminium. The elements are mounted using hydraulic tube line clamps. Very professional construction.

The meeting closed at 2.05PM

# SADARC

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

## HAMFEST SUN 11TH SEPT 10AM-2PM

(open to traders at 7:00am)

St Augustines Parish Church Hall  
96 Orr St, Shepparton

**\$5 ENTRY**  
**\$15 TABLE\***

\*Trader entry :\$15 for first table  
additional tables \$10ea.

**GREAT FOOD ON SITE**  
(Profits goto local charities)

RAFFLE  
DOOR PRIZE  
INDOORS  
FUN FOR ALL  
**WE'RE  
BACK**

**ALL ENQUIRIES and BOOKINGS**  
[hamfest@sadarc.org](mailto:hamfest@sadarc.org)  
146.650 MHz+600kHz 123 Hz CTCSS

## Editor's Ramblings

- As of the 5<sup>th</sup> July a couple of new MF/HF stations have had licences granted. The licence details in short are :- Frequencies 2310 kHz and 4835 kHz, with an authorised power of 5 kw with horizontal polarisation. Emission 6K00A3E (AM broadcasting). The licensee is David Stuart and the station will be at Neilsborough, North West of Bendigo. I don't know anything about what sort of programs are intended to be broadcast or the hours of operation. Anyone know anything about this station?
- As of today (9/7/2022) Eric VK3BXA is in the Royal Melbourne Hospital. He is in good spirits and the problems with his kidneys seem to have been sorted out. Any other problems he may have I have no firm information. If you would like to ring him the phone number is 03 9342 7217, I'm sure he would like a chat. Since writing this (9/7) it has been suggested that people should ring his mobile 0402 033 117. David VK3ANP rang him on 25/7 and only got his message bank. He doesn't always have his phone on.
- Josh has been busy and drawn up a publicity flyer for the forthcoming Hamfest a copy of it shows in this newsletter. Good job Josh. I think this will be the one for inclusion in *Amateur Radio* magazine and it is and is quite impressive as *Amateur Radio* arrived a couple of days ago.
- Geoff VK3ZNA has been reading an article in *Amateur Radio* on how to put clubs out into the public arena and I'm sure he will bring this up in the August meeting.
- Ray VK3YNV has designed and built a 2m/70cm Duplexer/Diplexer which is now described. I can assure members it works well – better than those often available at hamfests.

## A Duplexer Design for 2M/70CM

### (Part 1 of 3) --- Ray VK3YNV

Dual band radios with single antenna connections are very common these days, and to be able to use both bands effectively you need to keep swapping antenna connections between the two, or of course get a dual band antenna. But if you want optimal performance then a separate antenna for each band is desirable.

This duplexer allows you to run two separate antennas from the one radio without any switching. Or one multiband antenna and two radios.

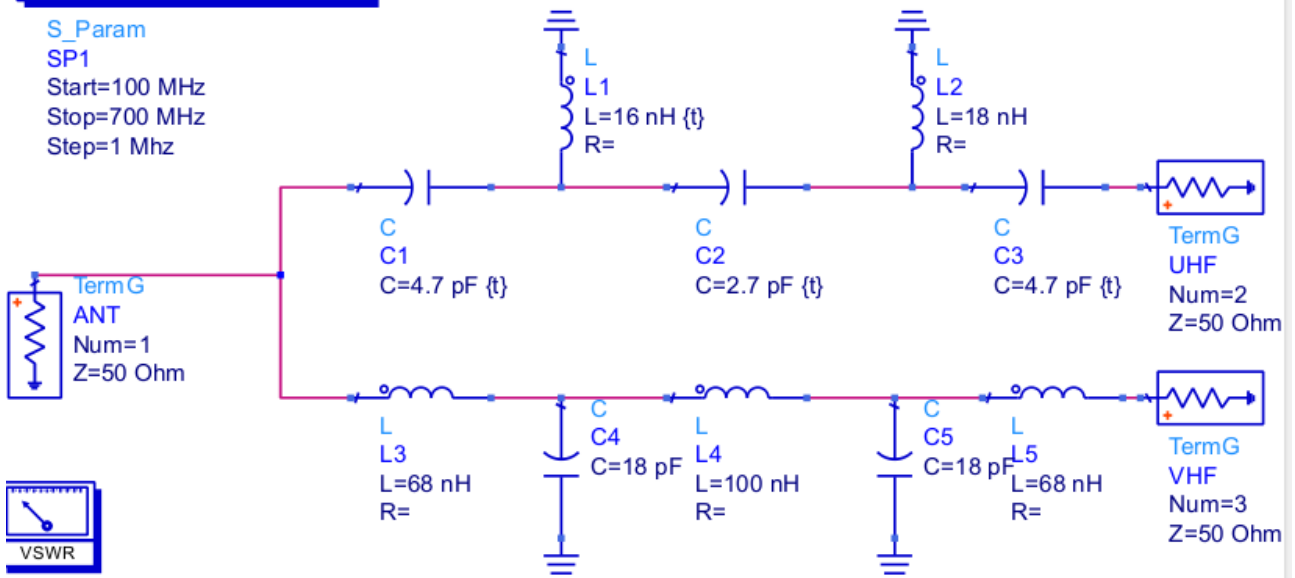
Long after I had designed and built the duplexer, I got the opportunity to check the design with the Analog Devices ADS software. Yes, this is back to front I know, but I wanted a known project to implement as a means of learning the ADS software.

So here is the ADS simulation. Next month we will describe the construction.



# S-PARAMETERS

S\_Param  
 SP1  
 Start=100 MHz  
 Stop=700 MHz  
 Step=1 Mhz



VSWR  
 VSWR1  
 VSWR11=vswr(S11)  
 VSWR22=vswr(S22)  
 VSWR33=vswr(S33)

