

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



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

May 2025 Newsletter

Next Meeting, Saturday June 7th, at club rooms

SADARC COMMITTEE

President – Graeme Martin, - VK3VSM

Vice-President: - Peter Rentsch – VK3AXI

Secretary: - Rob Hose - VK3BLD plus Adam Cleary - VK3UU as scribe

Treasurer and Membership – Ian Saunders – VK3YYY

Webmasters - Graeme Martin - VK3VSM and Ray Gardiner – VK3YNV

Hamfest Co-ordinator: - Peter Rentsch - VK3AXI

Newsletter editor and Publicity - Peter Simpson – VK3ASK

Technical Committee: Geoff VK3ZNA, Ray VK3YNV, Denys VK3ZYZ, Josh Gardiner, also power to co-opt.

To contact any member of the committee above, email committee@sadarc.org and specify who you wish to communicate with and the subject.

If you have items for the newsletter, forward to: 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 360 Health 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 from 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, Sunday.

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

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

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Next Meeting

The next SADARC meeting will be held on Saturday June 7th, at our regular club rooms, 18 Channel Road Shepparton.

The format for the day is as follows;

10am Arduino class with Denys, Ray and Josh.

12pm Our regular BBQ, with gold coin donation.

1pm Regular club meeting, plus displays of current projects.

Diary Dates

June 7th, Regular club meeting at Clubrooms,

July 5th, Club meeting, details in next newsletter.

September 14, 2025 Hamfest

November 23rd, Bunnings fund raising day.

Editors Comments

Unfortunately, I am not able to publish minutes for our May meeting. Our secretary Rob, VK3BLD, could not make it to the meeting. Our assistant secretary Adam, VK3UU, had car problems and Our President Graeme VK3VSM, tried to record the meeting on his phone, but something went wrong.

I understand that nothing major was voted on at our last meeting, but if you need explanations on any topic, please bring them up at the June meeting.

I believe Bill Crocker and Dallas, VK3EB, gave a great talk about an SDR they are setting up at Bill's property. This involved the raising of a 75 foot tower, installation of antennas, plus the setup and connection to the internet of the receiver.

I have spent many hours listening to the SDR and have discovered that the QRM is very low and there are plenty of overseas hams coming through on 20 metres at strength 7 to 9. Well done Bill and Dallas, this is a great service to our club.

Can I remind all members that our president Graeme VK3VSM has gone to a lot of trouble to create a questionnaire for our members. The purpose of the questionnaire is to get some understanding of what members are wanting from our club, their array of interests in radio and electronics, plus a chance to make suggestions for improvement. If you haven't already, please take the time to fill in the questionnaire and return to Graeme. The instructions are shown below.

At our next meeting there is bound to be plenty of discussions regarding the establishment of a permanent club house, plus ways to grow the club and to promote our hobbies to the wider community.

Geoff VK3ZNA and Graeme VK3VSM, have spent many hours attempting to source either a suitable block where a club house could be built, or the allocation of an existing building.

I think all would agree that our current venue works well, but it would be great to have our own dedicated area where we can set up a workshop and install some aerials.

There have been many suggestions, but if any of our members have some ideas, please bring your thoughts to the next meeting.

All the best and 73's

Peter VK3ASK

Presidents Report May 2025

This month, numbers were a little down, but we still had a great meeting and plenty of enjoyable conversations. The lower turnout was likely due to the timing — right after the Easter/Anzac Day period and coinciding with the Federal Election. As a result, a few committee members were unable to attend. Our Club Secretary had car trouble, as did his trusty scribe Adam, who managed to make it in the final minutes. Our Vice President also an apology on the day. So I had to step into shoes for the meeting with taking down the minutes

A big thank you to our regular chefs for putting on another fantastic meal for the members. What a great club we have! It's the enthusiasm and dedication of our members that really make it special.

Bill C. and Dallas gave an excellent presentation on their latest project. Quoting the A-Team: *"I love it when a plan comes together."* And indeed, it has! They've successfully erected a 75-foot (22-metre) freestanding triangular lattice tower with a sloping long wire antenna out on a property near Violet town, and from reports that Dallas has given due to the low QRM 20m was bumper to bumper with stations.

On Star Wars Day, May 4th, weekend Bendigo Amateur Radio & Electronics Club hosted the WIA AGM, with a dinner held on Saturday night, while I was unable to attend the AGM or the dinner, but Ray went across to the dinner in my place, I have asked him to give a report. I headed over to the Bendigo TechFest on the Sunday and caught up with Ray and Josh, who had a stall there. The event was filled with interesting exhibits and stalls. Although I only came home with a book, I had some great conversations with a few of the exhibitors.

One highlight was the Bendigo U3A group, who ran a session on Arduino microprocessor programming and interfacing with electronic circuits. U3A usually caters to the 50+ age group, and it was interesting to learn that many participants had no prior electronics experience. Yet, they were enthusiastically exploring Arduino applications — one of which included model trains.

Another standout was the Victorian Amateur Radio Direction Finding Group.

There was so much more at the TechFest that I can't cover it all here, but I picked up a few ideas we might be able to use at the SADARC Hamfest.

Until next month —

Regards,

Graeme Martin

VK3VSM

SADARC Questionnaire

Forwarded with this newsletter, you'll find a questionnaire. This is a chance for all SADARC members to have their say and help shape the club's future direction. Your input will help guide the planning of upcoming courses — perhaps a Foundation/Standard training course, a CW class, or building projects for EME or satellites. The possibilities are endless! Remember, a club is just a reflection of its members, and if we are to entice more members into the member base we need a reason for them to come.

Below is a detailed document explaining how to fill in and save the editable PDF, which then needs to be forwarded to President Graeme.

 **How to Fill Out and Save a Fillable PDF in a Browser (Updated)**

Step 1: Open the PDF in your Browser


- Find the PDF file on your computer.
 - **Right-click** the PDF → **Open With** → **Choose your browser** (Chrome, Edge, Firefox, Safari).
-

Step 2: Fill Out the PDF Form

- Click into the fields (boxes) inside the PDF.
 - Type your information into the form.
-

Step 3: Save the Filled-In PDF

Chrome or Edge:

- Move your mouse to the top-right corner.
 - Click the **Download** icon (a little downward arrow ).
 - ◆ (Or right-click the PDF → **Save As...**)
-

Step 4: Choose Where to Save

- Pick the folder where you want to save it (Desktop, Documents, etc.).
 - Make sure the file type is **.pdf**.
 - Click **Save**.
-

Step 5: Done!

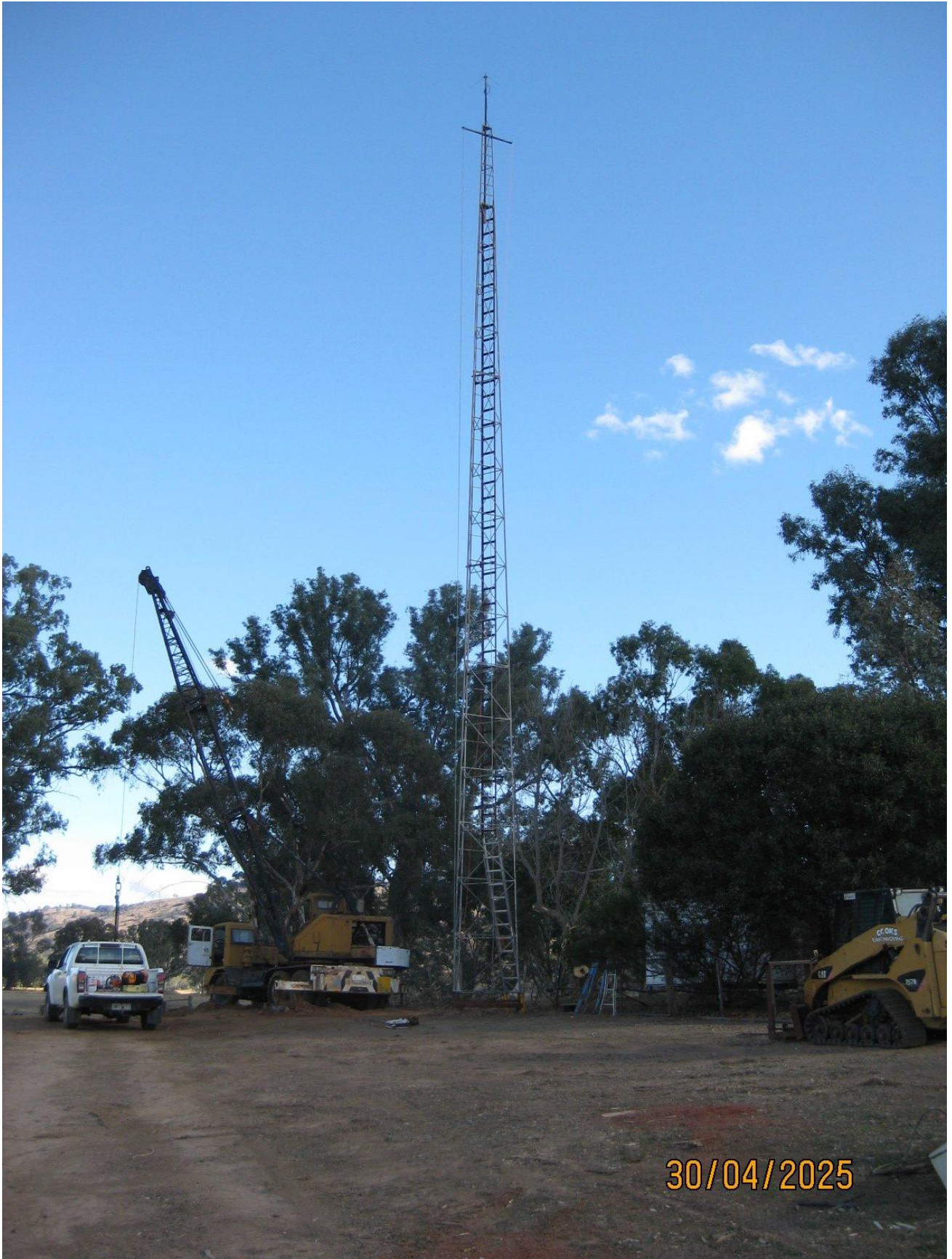
Send to vk3vsm@gmail.com

If you have troubles , you can also print the questionnaire out fill it out manually and return at the next club meeting

SDR Tower at Bill Crocker's property, with Dallas VK3EB
The tower is 75 feet high with long wire antenna's.

Some pictures of the tower being installed by Bill Crocker and Dallas James VK3EB for the SDR project.





30/04/2025

Bill with his Barlow Wadley Receiver checking out the new long wire antenna for the SDR.



Top Countries by Ham Population

I came across this very interesting article in the EMDRC newsletter, which I hope our members also find interesting.

Ham Radio Heavyweights: Where Repeaters Are Rare and Where They're Everywhere Compiled and submitted by AI on behalf of the Eastern and Mountain District Radio Club with a thank you to the crafting by Ralph VK3LL

Top 15 Countries by Ham Population (with Repeaters & Ratios)

Let's start with the raw figures for each country's licensed operators, VHF/UHF repeater count, and the calculated ratio of operators per repeater (a high ratio means many hams share each repeater; a low ratio means repeaters are plentiful for the ham population):

United States – 748,519 licensed hams ; roughly 18,800+ repeaters . Ratio: ~40 operators per repeater.

Japan – 381,899 hams ; ~1,600 repeaters . Ratio: ~239 hams per repeater (the highest in this top 15!).

China – 240,000 hams 7 8 ; (estimated a few hundred repeaters). Ratio: on the order of hundreds of operators per repeater. China's ham population has exploded to nearly a quarter-million in recent years

Thailand – 101,763 hams (2018) ; (repeaters in the dozens). Ratio: likely in the thousands-to one. Thailand once boasted over 140,000 licensees a decade ago.

United Kingdom – 75,660 hams (2018) ; ~600 repeaters (estimated). Ratio: ~126 hams per repeater.

Canada – 70,198 hams (2018) 1 ; ~1,300 repeaters (estimated). Ratio: ~54 hams per repeater. Germany – 63,070 hams 11 ; ~1,000 repeaters (estimated). Ratio: ~63 hams per repeater.

Russia – ~38,000 hams (estimate, last official count in 1993) 12 ; unknown repeater count. Ratio: unclear, but likely high. Russia's amateur radio numbers are dated and possibly diminished since the '90s.

South Korea – 42,632 hams (2012) 150 repeaters (estimated). Ratio: ~284 hams per repeater (using 2012 figures). South Korea is an intriguing case: it had 140,000+ hams in the 1990s, but stricter licensing led to a dramatic drop to about 42k by 2012 .

Spain – 58,700 hams (1999) 200 repeaters (estimated). Ratio: ~294 hams per repeater (estimate). Spain's data is somewhat old, but it remains a major European ham country.

Brazil – 32,053 hams (1997) 150 repeaters (estimated). Ratio: ~214 hams per repeater. Brazil leads Latin America in ham radio population and has a modest repeater network.

Turkey – 32,000 hams (2023) ; ~50 repeaters (estimated). Ratio: ~640 hams per repeater.

Italy – ~30,000 hams (approx., last official count 1993) 300 repeaters (estimated). Ratio: ~100 hams per repeater. Italy's ham population is thought to hover around 30–35k today.

Australia – 15,448 hams (2023) ; “hundreds” of repeaters . Ratio: roughly 20–30 hams per repeater – the lowest ratio among major ham nations! Australia may have a smaller operator community, but it makes up for it with an abundance of repeaters. From the major cities to the Outback, hundreds of VHF/UHF relay stations (analog FM, digital Fusion/DMR, etc.) dot the landscape, ensuring wide coverage for emergency comms and road travelers. With only ~15k operators sharing perhaps 600+ repeaters (according to the national WIA directory), each Australian repeater serves only a few dozen hams on average. This world-beating repeater density means Aussie hams are

spoiled for choice – a fact that puts Australia at the extreme low end of the global operators-per-repeater spectrum.

If you would like to read all the details, follow this link, which you can get from the EMDRC website