SaDArC

Shepparton & District Amateur Radio Club and Electronics Club

August 2024 Newsletter
Next Meeting Saturday September 7th.

SADARC COMMITTEE

President:- Peter Rentsch – VK3AXI   Vice-President:- Barrie Halliday - VK3KBY   Secretary:- Rob Hose - VK3BLD   Treasurer:- Ian Saunders – VK3YYY   Membership Sec:- Ian Saunders - VK3YYY   Assistant Secretary:- Peter Rentsch - VK3AXI
Webmaster Graeme Martin - VK3VSM and Ray Gardiner – VK3YNV
 Hamfest Co-ordinator:- Peter Rentsch - VK3AXI
Newsletter editor: - 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 <mark>10 am</mark> 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.

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 <mark>(-1.6 MHz 123Hz)</mark>

 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 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 September 7th[t.]at 1pm.

Please note that this is a radio only meeting and will be held on the 2 metre Mount Wombat Repeater.

146.65MHZ

The format for the next meeting is as follows;

1pm start on 2 mx repeater.

This will be a brief radio only meeting to finalize plans for the Hamfest and any other general business.

Please take the time to read the August minutes prior to this meeting.

Diary Dates

September 7th;   Radio only meeting, to finalize Hamfest.

September 8th,   Hamfest

October 5th: Regular club meeting at 360 Health, Man behind the Mic is Rob, VK3BLD, Also Arduino at 10am.

November 2nd,   Regular meeting at 360 Health, details in the next newsletter.

Presidents Report August 2024

An excellent role up again to our meeting which is great to see. We continue to attract new members which is excellent, but we also loose the occasional one. We need to follow up those who leave and in a nice way ask them why they left the group. Some have work commitments; some have family commitments and others leave the hobby. We need to enquire if we are not meeting their needs as a Club and how we can improve. As a positive, even though we lose the occasional member we are still growing very strongly.

Cojutating over this I decided to have a play with AI –(no, not Artificial Insemination). I have not tried this previously, so I found it very interesting.

The following is as a result of my query. My question to Copilot was:-

How to grow an Amateur Radio Club? - The answer I received back is below. Growing an Amateur Radio Club can be a rewarding challenge! Here are some strategies to help your club thrive:

1. **Create a Welcoming Environment**: Ensure meetings are fun and engaging. Keep business discussions short and focus on activities that members enjoy [1].
2. **Offer Diverse Programs**: Regularly survey members to understand their interests. Organize workshops, guest speaker sessions, and hands-on activities that cater to these interests [1].
3. **Promote Learning and Growth**: Provide training sessions on various aspects of amateur radio, such as operating procedures, antenna design, and digital modes. This not only educates members but also attracts new ones [2].
4. **Foster a Sense of Community**: Encourage members to take on leadership roles and participate in club activities. Create committees for different tasks and organize social events to build camaraderie.

5. **Engage with the Public**: Host public events like special event stations, field days, and emergency communication drills. This raises awareness about amateur radio and can attract new members [1].

6. **Utilize Online Platforms**: Maintain an active online presence through a website, social media, and newsletters. This keeps members informed and engaged, and also helps in reaching a wider audience [2].

7. **Collaborate with Other Clubs**: Partner with nearby clubs for joint events and activities. This can provide fresh ideas and increase participation [1].

By focusing on these areas, your club can grow and become a vibrant community for amateur radio enthusiasts. What specific activities or programs do you think your members would enjoy the most?

Source: Conversation with Copilot, 25/08/2024

1. [Tips and Tonics for Healthier Radio Clubs - ARRL](#)
2. [Leading the Way: How to Keep Amateur Radio Club Members Interested and …](#)
3. [Local Clubs: How Are They Important and How Can They Help?](#)

So, the answers above. We are doing most of them but perhaps we need to fine tune some of them to continue to improve our Club. If you have any thoughts or ideas, please let me know and I will follow it up with the Committee.

Don't forget we have our Hamfest in a few days, so all hands-on deck is needed. It is always a great day and that is due to the work we all put in. It looks like this year will be as good as what we have come to expect from what I hear on air.

Also, don't forget there is no meeting in September as it falls the day prior to the Hamfest so we are having an On-Air Meeting like we did during COVID.

That's it for this month and I look forward to another great day on the 8th of September.

Cheers,

Peter Rentsch

VK3AXI

President

Minutes from August 3rd, SADARC Meeting

In Attendance: VK3AXI Peter, VK3BLD Rob, VK3YYY Ian, VK3GSR Geoff, VK3KBY Barrie, Wayne Mays, VK3UU Adam Cleary, VK3HOR Ben, VK3KFM Kev, VK2JKN Jim, VK3FALN Alan, VK3ZDK Kevin, VK3BPH Kevin, VK3VSM Graeme, VK3JSD Stevo, SWL Josh, VK3TEX Les, SWL Bill Crocker, VK3TJS Jacek, VK3ZYZ Denys, VK3YNV Ray, VK3OV Pat, VK3ASK Peter, VK3ZNA Geoff.

Guests: Colin, Jason, Kevin, Peter.

Apologies: VK3EB Dallas, VK3MFE Mark, VK3AFD Arthur, Jason VK3NQS

President Peter opened the meeting at 13:00.
The minutes of the previous meeting were included in the newsletter.
VK3FALN Alan Moved the minutes be accepted as read. Seconded VK3JSD Stevo. All in favour.

Correspondence:

Treasurers Report:
Tabled by Ian VK3YYY.
Ian VK3YYY moved that the treasurers' report be accepted. Seconded VK3ASK Peter.
All in favour.

Technical Report:
VK3YNV Ray reported that we lost our internet connection on Mt Wombat. This was due to our data limit being exceeded. He has changed the SIM to Vodaphone, and we will only have the speed reduced if we exceed our limit. This will not be a problem since we only need a slow service.
The URLP repeater will be returned to service on the next visit to Wombat.
Ray Moved that the Technical Report be accepted. Seconded by Geoff VK3ZNA. All in favour.

General Business:
Peter VK3AXI gave an update on the VK2RK situation.

Barrie VK3KBY has offered the club a BBQ. Peter VK3ASK moved that we look at the BBQ, and if it is not suitable, we should go ahead and purchase the Bunnings BBQ. Seconded VK3JSD Stevo.

Bunnings Sausage Sizzle:
Ray reported on the Sausage Sizzle at Bunnings. We are scheduled for 29th December from 9am to 4 pm. We will need 8 people to help out, and we will need shift rotation to cover the whole event.

Man Behind the Mike:
Geoff VK3GSR was the Man Behind the Mic. He talked about his radio experiences, and well as the jobs he has performed over the years.

The next meeting will be on 7th September. It will be a on air meeting because the HamFest is the following day.
Meeting closed at 15:10

Editors Comments
Another great meeting in August, a great attendance and wonderful to see new members coming along, as well as the regulars.
After the usual reports and discussions about improvements to the Mount Wombat antenna, Ray gave a detailed description on his planned application to the Shepparton Connected Communities for a grant to pay for the repairs.
Ray did a fantastic job in preparing this application and I can confirm that the document has been received by the GSCC and will be reviewed next Tuesday, September 3rd. at the Monthly board meeting.
Hopefully I can give the club an update at our next meeting on September 7th.

The feature of our last meeting was the man behind the mic. Geoff VK3GSR.
Geoff told us all about his many experiences in the work force, from his days as an apprentice Fitter and Turner, to his many overseas projects, which took him to many parts of the world.
He also told us about his early days in amateur radio and his 1st transmitters, not always on the ham bands.

One interesting story was about the borrowing of a callsign, which he was assured would not be used elsewhere, that worked out fine for quite a while until our local radio inspector took him aside and in strong words recommended that he get his own licence and callsign and stop bending the rules.

I am sure most members would know who the inspector was, a member of our club for many years who has sadly passed away.

Geoff assures me that he is going to get his story down in writing one day, so hopefully this can be a feature article in this newsletter.

Well, that's it for me this month, see you all at the Hamfest on September 8.

Peter Simpson
VK3ASK

External VFO for Kenwood TS520 by Denys VK3ZYZ

Once again, this Month, Denys VK3ZYZ has been busy, this time working on an external VFO project for the Kenwood TS520 Series of Transceivers.
Thanks for the contribution, Denys and over to you.

My latest project is an external VFO for the TS520 series HF transceiver. The original internal, and optional external VFOs have a 0 to 600 scale so some mental arithmetic is needed to work out the operating frequency. My thought was to display the actual frequency in use.

This is another Arduino Nano driven Si5351 VFO similar to my others. But there are some extra features.

The basic external VFO block diagram is as follows.
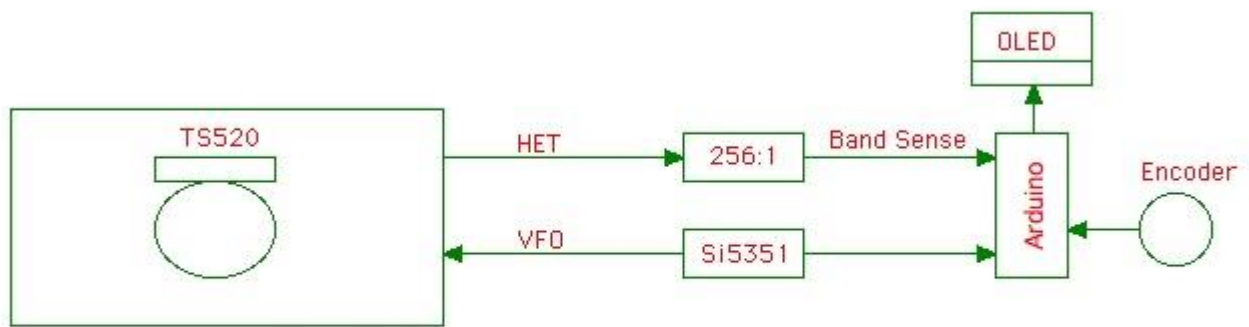
VK3ZYZ TS520 VFO running external VFO

The Si5351 signal generator is controlled by the Arduino Nano and encoder to tune the 5.5Mhz to 4.9Mhz signal that the radio uses. The frequency is displayed on the OLED display. The HET signal that the radio produces, that is, the crystal oscillator output that is used for band setting, is fed to the Arduino that is running as a counter so it can determine the band selected. A pre-scaler is included as the frequency is too high for the Arduino to count on the higher bands. Some math is used to calculate the displayed frequency.

When using the radio's internal VFO, I thought it would be a good idea to display the frequency there too. So, this is the setup.
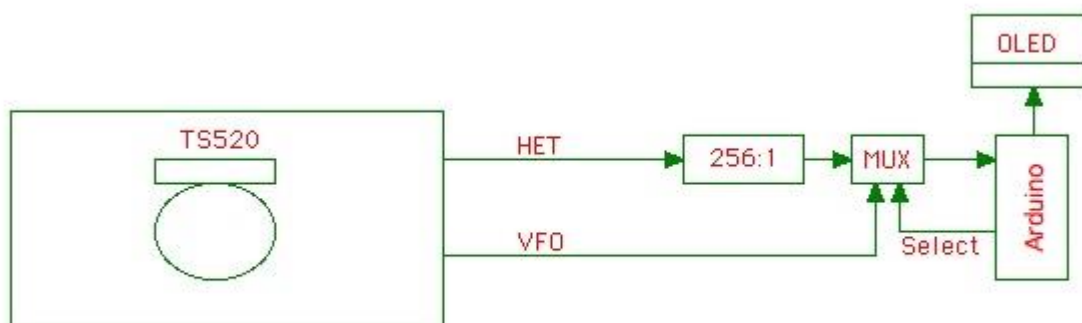
VK3ZYZ TS520 VFO running as frequency counter for internal VFO

Here, the Arduino counts the internal VFO frequency, but to complicate matters, it also has to count the HET signal every so often to check the band as it may be changed. So, a switch (MUX) is driven from the Arduino to select the signal to be counted.

When running on the internal VFO, pushing the encoder button copies the internal VFO frequency to the external VFO as that makes it easier to tune later. Also, the external VFO is way more stable than the internal one.
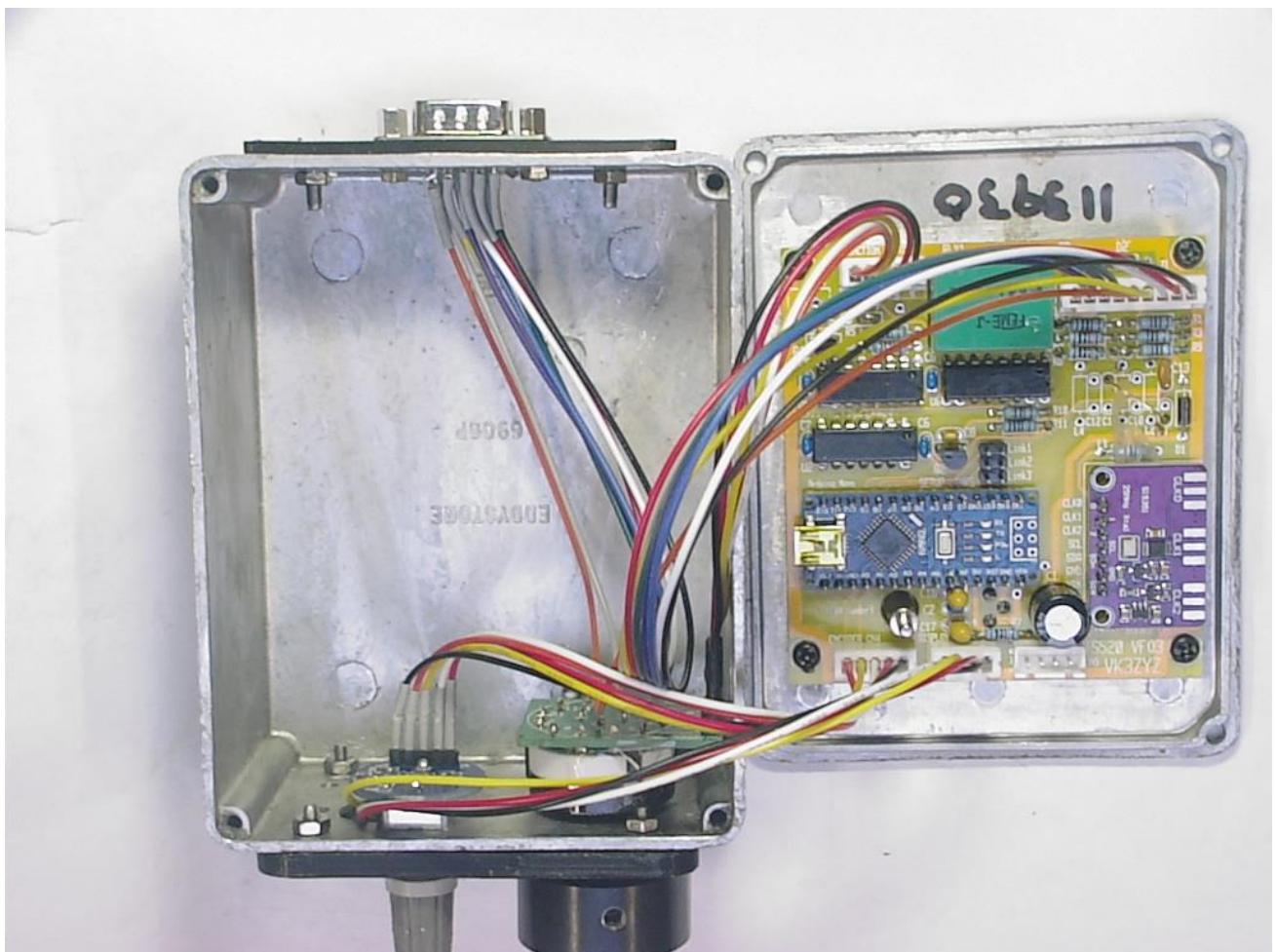
I did have "fun" getting the timing working ok with this switching between both inputs! The counter is not a real accurate display, probably +/- 100Hz or so when on the internal VFO but that is better than the dial in my opinion.

Full posting of the progress is on the forum..

http://www.sadarc.org/xenforo/upload/index.php?threads/ts-520s-vfo-using-the-arduino-nano-vfo-board-then-a-custom-pcb.545/

This includes the home made 9 pin plug needed as well as various "smoke" events.

Denys VK3ZYZ

Hamfest 2024 on September 8th.