



NET CHECK-INS:

Wia National News - n/a

HF Dawn Patrol – 53 for the week ending 6th April 2018.

Sarc Digi Net – (see full “*Digital Modes*” report below)

Wicen Net – 6 - Field Station Safety Check-list

Wednesday Tech Net – 10 - Antenna analyzers

Thursday 6Mtr Net – 6 - drones for ham radio use...?

Friday Night Net – 8

More things to do:

Coffee morning:

1000 on the 1st Wednesday of the month

Rous Hotel (cnr) Keen/Zadoc St. Lismore

Lunch day:

1200 on the 3rd Wednesday of the month

Ying's Chinese & Thai Restaurant
142 Keen St. Lismore

News item No. 1

It may be over an hour long but check out this you-tube video from Joe Taylor.

https://www.youtube.com/watch?v=233HQs_8JGQ&feature=youtu.be

Joe Taylor, author of the WSJT software series is a magnificent speaker. Don't worry if you can't see the slides he presents in the background; his speech is enough all by itself. Sure there's a few technical points he makes but his backgrounding to the development of the weak signal software makes fascinating listening.

Even on holidays Rob VK2ARL keeps his ear to the ground and has picked up this glorious gem. For those with limited Internet, Duncan VK2DLR has downloaded the 332MB video and will put a copy on the PC connected to the TV.

News Item No. 2

Upcoming events:

05/06 May: Wicen NR will be providing radio communications for the Girard State Forest Horse Enduro. A great weekend in the bush just east of Drake. More details as they come to hand.

19/20 May: SARC will be crossing the border into Queensland and providing radio communications for the Spring Mountain Horse Enduro. Another good weekend in the scrub on the south western outskirts of Brisbane. More details as they come to hand.

Cheers,

Duncan, DLR

DIGITAL MODES:

Monday 2 April 2018

I was not able to conduct the Digi net as I was on an aeroplane coming back from Adelaide. Duncan VK2DLR started things off in my absence but had no operators logging in to transmit. Thanks to Duncan for making the effort.

Well, I have heard it said that the weak signal digital modes including the new WSJT-X mode FT8 are impersonal. I would say that I understand where that opinion comes from in a hobby dominated by voice contacts through the microphone. The weak signal modes packaged into the WSJT-X program do use computer generated short messages that give the minimum information required for a QSO. It hardly needs to be said that these modes within WSJT-X make radio contacts possible when signals received are way below the noise floor and would not normally be audible. Adding the personal touch to these weak signal modes can be done through QSL cards and messages.

There is an excellent program working with WSJT-X called JTAAlertX which pops up the names of active stations on WSJT-X and presents information on that station. This information is obtained by hovering the cursor over the callsign when it appears in the window. This handy program also saves the log of your contacts as an ADIF, or other filetype, which can be uploaded to two websites that I use all the time. These websites are eQSL and my page on qrz.com which contains my log. Not every operator uses eQSL but about half the contacts I have made with FT8 use it. Some operators use LoTW (Logbook of the World) or paper QSL cards. This eqsl website enables you to create a QSL card and have it uploaded to your contact's inbox and your contact's QSL card goes to your own inbox. eQSL also has an email message service. JTAAlertX also has a text message service that is sent to other JTAAlertX users and uploads spots to HamSpots.net. WSJT-X itself can send a personal message but it is limited to 13 characters.

So, it is possible to add that personal touch to these new digital modes by sending messages and exchanging QSL cards, it just needs a bit of extra time to set things up. One website that I find invaluable is PSK Reporter that shows where my signals have been heard thus showing you where propagation is working. It receives spots from WSJT-X and can display signals from a wide variety of digital modes, FT8, RTTY, PSK31 etc etc. and the results are filtered by band and it works from VLF up to 23cm. I strongly recommend investigating the websites listed, eQSL, qrz.com for your online logbook and PSK Reporter for checking on propagation.

Cheers

Paul

VK2PMG

*{this pic is from a
previous Digi-Net}*



UNDERSTANDING GRID REFERENCES

for Australian topographic maps and GPS devices.

Prepared for WICEN NSW Inc. by Chris Meagher VK2ACD 2017.

A universal method of describing an exact location on the earth, is by giving co-ordinates of latitude and longitude. When working from maps, especially of a small area, this can be very inconvenient and error-prone. The lines of 'lat and long' are usually not marked except at the edges. Also the system is awkward when it comes to a precise location, because degrees of lat and long are divided up into 1/60ths (minutes) and again into 1/60ths (seconds). So for maps on a scale of 1:250,000 down to 1:25,000, the common system is to mark the whole map with a grid of squares, using horizontal and vertical grid lines at equal intervals. The intervals are chosen to suit the scale of the map. Map grids were developed by the military during WW2, and became standardised as the Australian Map Grid (AMG). This was originally in miles and yards, but eventually was metricated.

{for the rest of this article on the Sarc website, click below}

<http://sarc.org.au/wp-content/uploads/2016/03/UNDERSTANDING-GRID-REFERENCES.pdf>

MEASURING SIGNAL STRENGTH AT THE RECEIVER: {by VK2ACD}

Most amateur radios have a meter of some kind to indicate the received signal strength, commonly referred to as the 'S-meter'. These typically indicate a range from S0 to S9, then increments above S9 at 10 or 20dB intervals, up to around +60dB. Why stop at S9? Because this would make the standard RST signal report difficult since the 'S' figure could potentially have 2 digits!

Ideally, the meter input would measure the incoming signal right at the input, where the feedline is connected. However this is impractical since the meter would be indicating the total strength of signals across all bands. Of course, the operator only wants an indication of the signal that is being tuned.

Therefore the signal is measured usually after the IF stage (or direct conversion stage in a simple receiver), so that only the tuned signal is indicated. It is commonly taken by a feed from the AGC voltage, which responds to signal strength.

The IARU standard for S meter readings on MF and HF frequencies, is that a signal of 50 μ V at a 50 Ω input (at the 'antenna' socket) should indicate S9, and each 'S-point' lower is 6dB weaker (half the voltage and one quarter the power).

{for the rest of this article on the Sarc website, click below}

<http://sarc.org.au/wp-content/uploads/2016/03/S-points-and-dBm.docx>

Cross-band Repeater at SARC:

An experimental cross-band repeater is running at the clubrooms. VK2DLR, ELH & PMG have set up a cross-band repeater at the clubrooms to evaluate its performance for use at horse enduro and other temporary events. It will be probably run for a week or so and any comments would be appreciated. The parrot repeater VK2SRC on 146.575 simplex will be off air during this experiment as the cross-band is using the parrot's antenna.

Basic details: Callsign: VK2SRC-X1

Uplink 433.825 MHz **Downlink** 147.425 MHz

No tone. **Output power** 20W

de Duncan

VK2DLR

SARC 2018 Calendar:

What's On For the full year's calendar visit http://sarc.org.au/	
This Month	Next Month
April 2018 Sun 01 Easter Sunday Sat/Sun --/01 Mon 02 Easter Monday Sat/Sun 07/08 Sun 08 <u>Wicen AGM 1000</u> Sun 08 <u>Committee Meeting 1300</u> Sat/Sun 14/15 Sat/Sun 21/22 Wed 25 Anzac Day (<u>AX Prefix</u>) Sat/Sun 28/29	May 2018 Sat/Sun 05/06 Sat/Sun 05/06 <u>WICEN Horse Enduro (Girard)</u> Sat/Sun 12/13 Sun 13 <u>Committee Meeting 1300</u> Sat/Sun 19/20 Sat/Sun 19/20 <u>WICEN Horse Enduro (Spring Mountain)</u> Thu 17 World Telecommunications Day (<u>AX Prefix</u>) Sat/Sun 26/27

WEEKLY NEWSLETTERS

On our website we have a short-term archive of SARC newsletters – each weekly issue from the start of the previous year.

If you want to find an older issue, please send a request to the committee and we can send it to you providing it is in the long term archive at the clubrooms.

To unsubscribe:

Please reply to sarcnews@gmail.com

Disclaimer

The opinions expressed by contributors in SARC NEWS are theirs alone, and do not reflect the opinions of the Summerland Amateur Radio Club or its members. SARC is not responsible for the accuracy of any of the information supplied by the contributors.