Good-evening, Many thanks to Paul PMG & Duncan DLR for their extended reports below.

73, Dave VK2ZDR
{editor}

NET CHECK-INS:

Wia National News – n/a

Dawn Patrol - 43 check-ins to the Dawn Patrol for the week ending 28 April 2017.

Sarc Digi Net - (see "digital modes" report below)

Wicen Net – 0 (No net as R6800 wasn't working)

Wednesday Tech Net – 7 (Conducted on Woodburn repeater)

Thursday 6Mtr Net - 6 (horse enduro/new radio returns/cooler weather ahead)

Friday Night Net – n/a

For all 'net' times & frequencies please check out the sarc website:
www.sarc.org.au/nets-broadcasts/

More things to do:

Coffee morning: 1000 on the 1st Wednesday   *Lunch day:* 1200 on the 3rd Wednesday of the month
                  of the month   Yings Chinese Restraint
                  Rous Hotel 44 Keen St. Lismore   142 Keen St. Lismore

Future 'sarc' Comms Trailer:

This was sent to me from Ross VK2ARD

for some 'pondering' over….hihi

(it's nice to dream){from NZ}

DIGITAL MODES:

Well, there has not been a Digi Net for a couple of weeks. I was in Melbourne the first week and in spite of an effort by Duncan VK2DLR to start one, there were no takers. The second week was starting out the same way, but I had a call from my mother (aged 92) who was feeling very ill, so I went down to help her out. No idea whether anyone would have appeared. Not a good sign. In place of a report I would like to try and give a brief introduction to digital text modes. The best starting off point is the excellent article written by Chris VK2ACD, on the club web site. Perhaps there is an impression that digital modes are all very difficult. Not so. The easiest introduction is via text messaging using the popular program FL Digi. The latest version, 4.0, can be downloaded from here, for free:

https://sourceforge.net/projects/fldigi/

This is the cornerstone of a series of programs that work together. The main requirements for digital modes are a radio preferably with a data socket but that's not essential – and a computer and you don't need a super-duper one. FL Digi will run on a Raspberry Pi. The other component is a USB soundcard interface such as a Signalink although there are others. The manufacturer is Tigertronics:

http://www.tigertronics.com/

This is attached to the computer via a USB cable and a data cable to the radio. The Club sometimes puts in a bulk order from the USA but it is also available from the Brisbane dealer: radios.net.au:

http://www.radios.net.au/sound-card-interface/signalink-units/signalink-usb-sound-card-interface-digital-modes-made-easy-/prod_1028.html

How many of you have sent an email? Pretty much most people. You have an address, roughly the same as tuning in a frequency and choosing a mode. The email program has a box in which you type a message and you hit SEND. FL Digi has a box in which you type a message and hit TX. Not difficult. Yes, there is some setting up to do in the program and on the computer but that can be fixed with help.

As I have always said: help will always be given on the Digi Net for those who need it. One you get started there are quite a few modes to choose from. Some of them are old, such as RTTY which derived from the old radio teletype and PSK. The last one, in particular PSK31 is so narrow that 20 PSK31 signals will fit side by side in the same bandwidth as a normal SSB signal. A popular new mode is JT65, just one of a number of weak signal modes developed by Joe Taylor. These were designed for incredibly weak earth-moon-earth contacts and meteor scatter. These use brief responses– 13 characters are what you have available. These modes are very tightly synchronised in time, so the computer clock needs to be kept on "internet time". A good time sync program is Dimension 4 which lets you choose from a number of super accurate clocks such as the one used by Deakin University:

http://www.thinkman.com/dimension4/

The main modes used for text messaging on the Digi Net are Olivia 8-500, and Thor 16. These MFSK modes perform very well when propagation is difficult, getting a decodable signal through when you didn't think it was possible.

I could go on for a long time, but the impression I am trying to give is that Digital Modes are not that difficult. Give it a try or catch up at a club meeting or on a normal Sunday afternoon.

Cheers from VK2PMG

Girard Horse Enduro:

SARC members Chris VK2ACD, Geoff VK2AGC, Duncan VK2DLR, Lachlan VK2FOOD, David VK2IXI, Roger VK2LRB, Malcolm VK2OTA operating as Wicen NR provided radio communications over the weekend for the Tenterfield Endurance Riders Club's Girard State Forrest Horse Endurance ride.

The advance party arrived at Girard's on Friday with two trailers of repeater and other stuff. The repeater took two hours to establish thanks to a lot of work Geoff had done making and labeling cable harnesses. Somehow we have to solve the problem of the electronics and 2m cavities surviving transport on the rough riding repeater trailer. Both the 2m and 70cm repeaters worked well on Friday and most of Saturday. Late Saturday the 2m repeater stopped transmitting. Same problem as with it's twin at Parrots Nest a week ago. A lot of problem solving ahead of us there. Fortunately the 70cm repeater using older technology continued to work well.

We would have had serious difficulties making communications work without the repeater. It requires time to establish and needs more time to keep the generator fueled but it makes things work so much better. It helped us cope with the additional challenge of a last minute change of checkpoint location sprung on us. Checkpoint 1 was moved a lot further away and was best accessed via a lengthy highway and gravel road commute. A welcome treat was TERC picking up our tab at the caterers from Saturday night to Sunday lunchtime. We delivered radio communications as they requested and handled all traffic. No riders lost and only one call for a horse float to carry a lame horse back to base.

Another great weekend in the bush. Cold without being too cold any no rain! We carried out some experiments with digital and image transmission but the pressure of event traffic prevented serious experimentation. Chris at checkpoint 2 and Duncan at base exchanged images using easypal on 40m. Malcom operated using his 2m/70cm crossband handheld as a remote microphone at his checkpoint. Lachlan experimented with a dual band Yagi at the new checkpoint 1 to reduce power usage and prolong battery life.

de VK2DLR [who is too tired to write any more]

COMING UP SOON:

What's On	
For the full year's calendar visit http://sarc.org.au/	
This Month	**Next Month**
April 2017	**May 2017**
Sat/Sun 01/02	Sat/Sun 06/07
Sat/Sun 08/09	BARC Brisbane Hamfest?
Sun 09 Wicen AGM 1000	Sat/Sun 13/14
Sun 09 Committee Meeting 1300	Sun 14 Committee Meeting 1300
Sat/Sun 15/16	Sat/Sun 14/15
Sat/Sun 22/23	Tue 17 World Telecommunications Day
Tue 25 Anzac Day **(AX Prefix)**	(AX Prefix)
Sat/Sun 29/30	Sat/Sun 20/21
Sat/Sun 29/30 WICEN Horse Enduro (Girard)	Sat/Sun 27/28