Newsletter February 2016 – 7th Edition

Hello and Welcome to the newsletter.

The News from around New Zealand. Note: Only new updates are added each month

Christchurch
An update from Christchurch.
Current hotspot software has been updated & working better.

ZL3CHD C: Cashmere Hills Christchurch. http://zl3chd.ddns.net:83 (ircDDB) **CCS7 5303049**

We have acquired a couple of Lenova computers to run the D-Star repeater when we get it. Should be on its way down to us soon.
A few guys here are using D-Star so some increasing activity which will be boosted when we get the repeater installed.
Repeater is going to be installed at our new clubrooms while we work through a few issues with antenna systems etc at our repeater site.
So watch this space for more activity from Christchurch.
Cheers.

Rory Deans ZL3HB
Secretary
Chch Amateur Radio Club
NZART Br 05

HOTSPOTS
ZL2JML C: zl2jml.ddns.net:82 on air now using a SAN extreme SD card on an RPi2.

ZL1HN C: zl1hn.ddns.net:82 on Odroid C1+

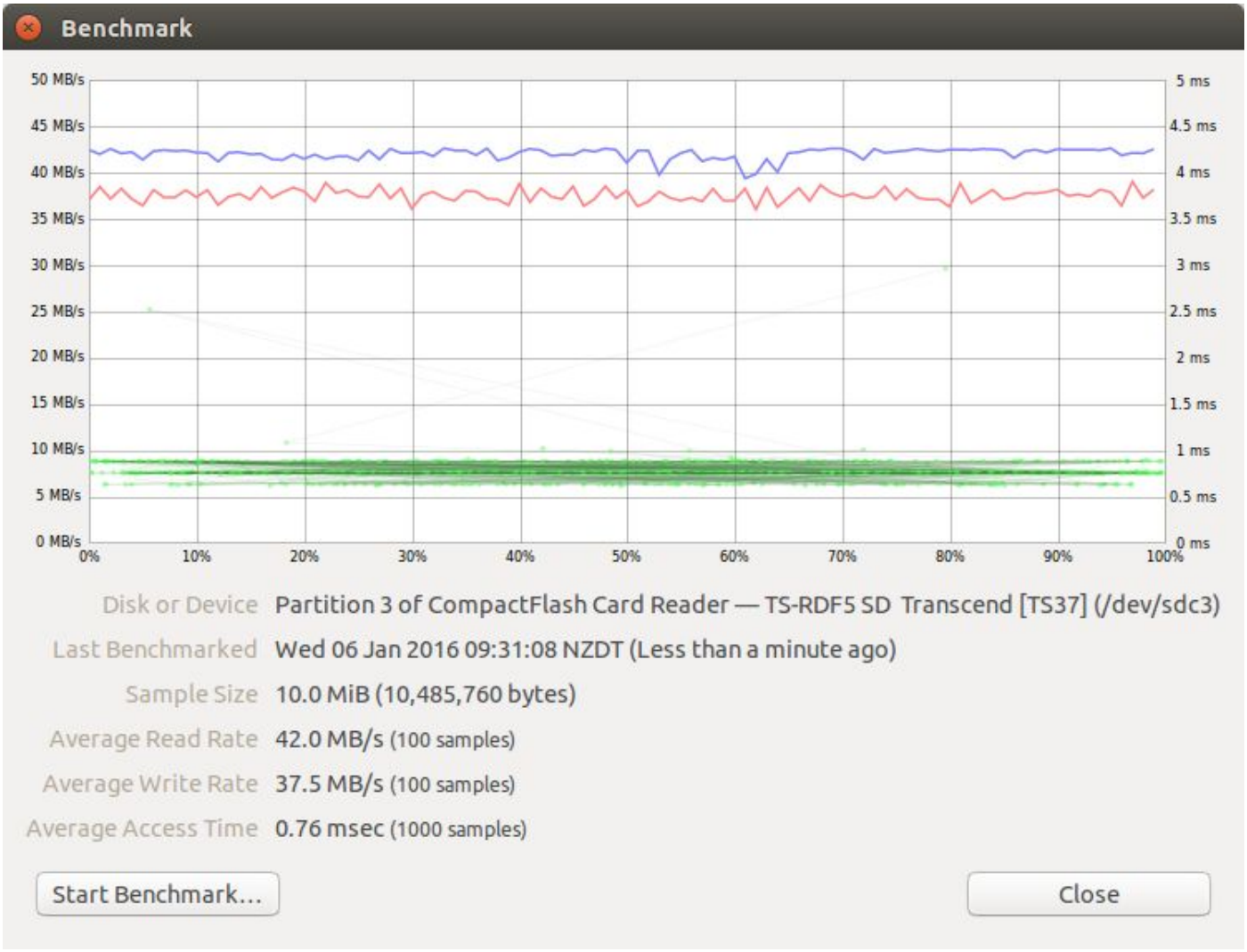
ZL2NSA B: zl2nsa.ddns.net:82 on air now using an Odroid C1+ and eMMC RAM.
Connected via a DVRPTR-V1 to an FT-8800 NBFM radio.

ZL2SFM C: Back on air using a Solid Run Humming board SOM i2eX and SAN Extreme card.
Dual core ARM A9, 1GHz CPU and 64 bit, 1GB DDR3 @ 1066Mbps
http://solid-run.com/freescale-imx6-family/hummingboard/
http://solid-run.com/freescale-imx6-family/imx6-som/imx6-som-specifications/
Uses the Ethernet AR8030/AR8035 chip that is only doing the Ethernet.
USB is handled separately.
http://solid-run.com/freescale-imx6-family/hummingboard/hummingboard-documentation-block-diagram/
https://wikidevi.com/files/Atheros/specsheets/AR8030.pdf
Now give it a hard time and see if we can crash it.
I also have next on the list an i4Pro with 2GB of RAM that needs to be pressure tested.

uSD and eMMC card testing.

Recent testing has produced excellent results for the SAN Extreme cards. Be careful of clone copies. Expect to pay $35-$40 for a genuine card from the NZ authorised distributors. ZL2UDF found a good source of these at appropriate prices around $30 each.

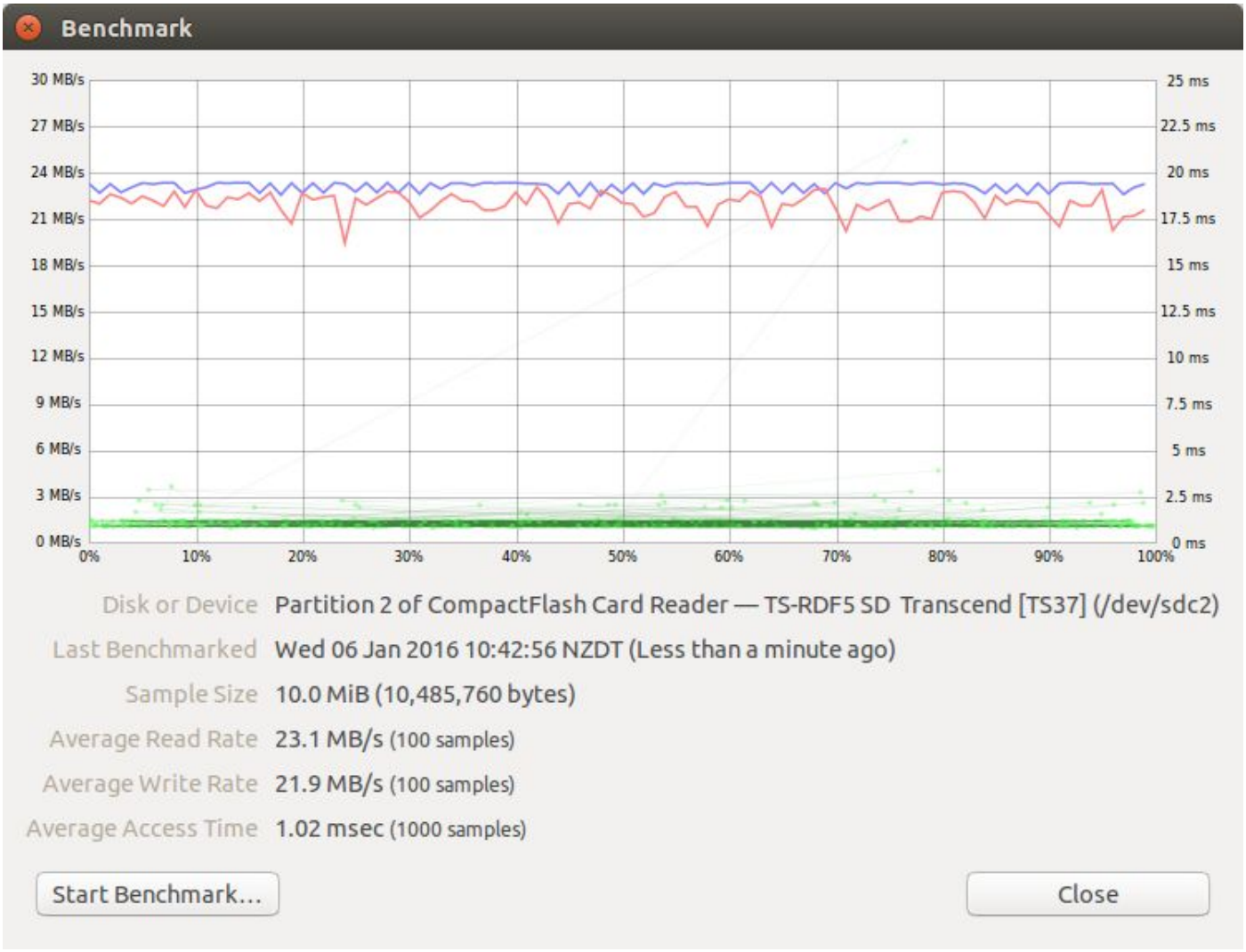
This picture below shows the performance from a 16GB SAN extreme uSD card.



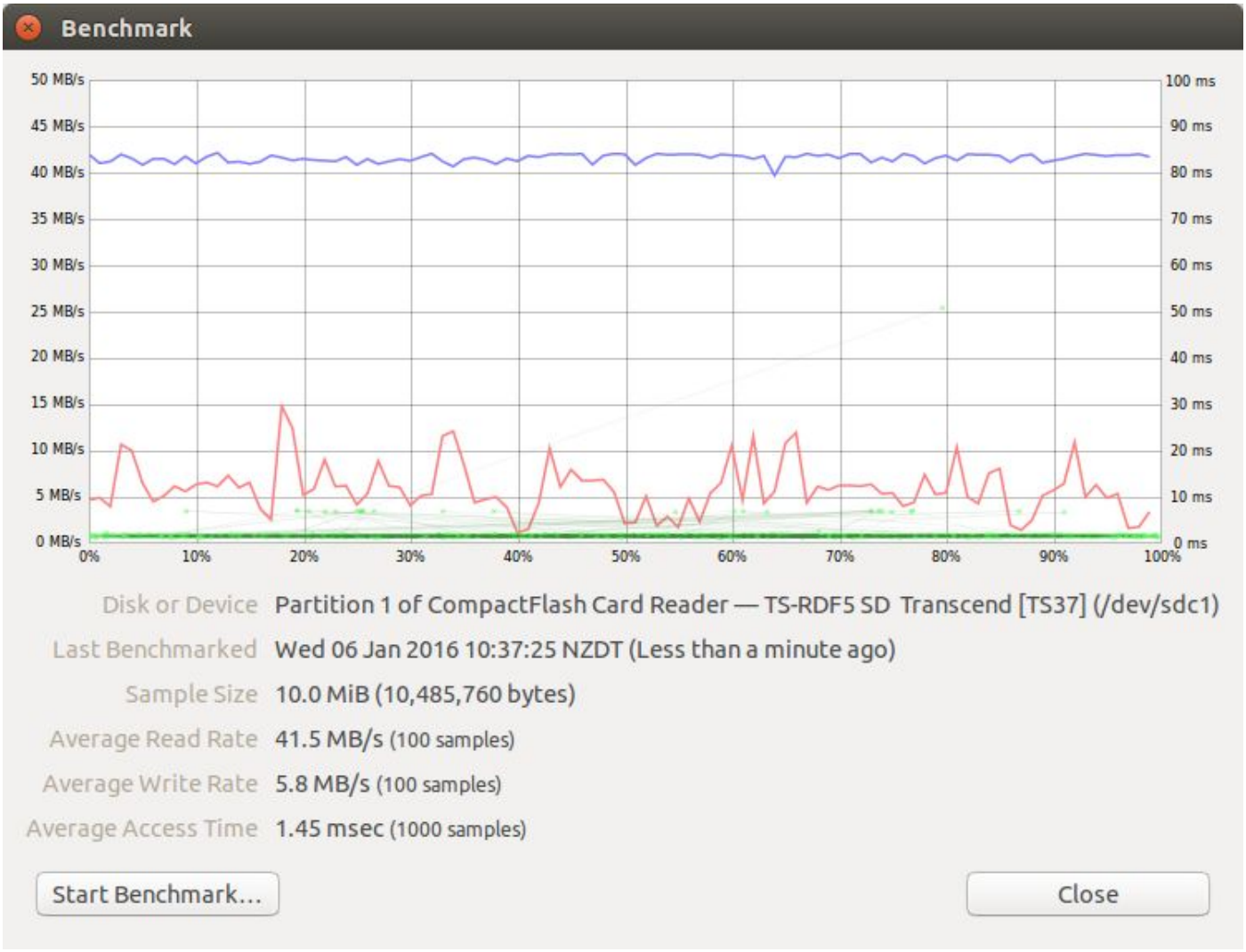
For those using the Odroid C1+ boards the Extreme SD or eMMC RAM chips can be used. eMMC is Embedded Multi Media Card and uses an embedded control chip to manage the RAM. These are similar to an SSD but not the same speed. SD cards are a different construction.

After some months we hope to report on the longevity between eMMC and SD cards.

Here is the performance of the 16GB eMMC.



In comparison the SAN 16GB UHS-1 (Class 10 card)
This goes some way in finding out why RPi2 hotspots can crash or lockup. The write speed of the card is not reliable for regular log file writing. If log files are switched off or the RPi2 is run in a “headless” mode the standard Class10 card will last a lot longer.



CCS7 (Call Connection System 7)

The following list of stations that are working at the time of publication. Please try them. You can check each hotspot dashboard to verify your connection.

ZL2ARN (530)1082
ZL1SB (530)1091
ZL2JML (530)2009
ZL2SFM (530)1072
ZL2NSA (530)2018
ZL3CHD (530)3049
ZL1HN (530)1074

DV Dongle and DVAP devices

Experimentation with DV4mini has mixed results using either Odroid C1+ or XU4.
Not as reliable like the Internet Labs DVAP and Dongle devices. The reason for this seems to be the internet errors that eventually cause the DV4mini to stop working and needing a restart.

How to contribute to this newsletter

The newsletter is published in the first week of each month.
Send any articles and pictures sized no larger than 200kbs to one of the editors listed below.
The editor will acknowledge that the information has been received and will be distributed to the chief editor for compilation. The close off date is the last day of each month.

The following is a list of editors and the local contact people to send articles for the newsletter. The newsletter is compiled from input given to these editors.

Auckland and Hamilton is Brian ZL1HN (zl1hn@xtra.co.nz)
Tauranga is Kevin ZL1KRH (zl1krh@ihug.co.nz)
Hawke's Bay region is Jan ZL2CZE (jan.s@eastek.co.nz)
Wellington region is John ZL2TWS (zl2tws@clear.net.nz)
Christchurch is Mike Barnes ZL3TMB (mike@barnes.net.nz)
Invercargill and ZL4 is Daniel ZL4DE (zl4de@icloud.com)

Each month useful links will be placed at the end of the newsletter so you always know where to go quickly to find them.

facebook page called ZL DSTAR https://www.facebook.com/groups/184445028555391/

Gateways with dashboards:

Auckland. https://zl1vhd.dstar.org.nz/ (Dplus)

Auckland. https://zl1hk.dyndns.org (Dplus)

Hamilton. http://zl1cct.d-star.nz (ircDDB) **CCS7 8530100**

Tauranga. http://johnkc.dyndns.tv:81 (ircDDB) **CCS7 8530001**

Te Puke. https://zl1ibd.dstar.org.nz (Dplus)

Wellington. http://123.255.47.67 (dual dashboard with Dplus below the ircDDB) **CCS7 8530304**

New Zealand Reflector XRF063. http://162.248.141.148

Other sites for reference information:

ZL2VH Web site. http://zl2vh.org.nz/d-star/

KiwiD-Star group. https://groups.yahoo.com/neo/groups/KiwiD-STAR/info

Examples of these hotspots with dashboards that you can view and connect to this month:
ZL2DRN (http://zl2arn.dyndns.org:82)
ZL2UDG (http://202.154.159.177:82)
ZL1SB (http://zl1sb.ddns.net:82)
ZL2JML (http://zl2jml.ddns.net:82)
ZL2SFM (http://zl2sfm.ddns.net:82)
ZL2NSA (http://zl2nsa.ddns.net:82)
ZL3CHD (http://zl3chd.ddns.net:83)

ZL Host lists

ZL gateways and hotspots.
On the Branch 63 site you can retrieve the host files at any time. They are small text files.
http://zl2vh.org.nz/d-star/links/
Title is "ZL Gateways and Hotspot Host files"
Alternatively here. http://zl2vh.org.nz/assets/d-star-hosts/

ircDDB Visability

For those who want to be visible on the ircDDB "live" list.
http://www.ircddb.net/live.htm
Do the following from this URL:
http://ircddb.net/live-vis.html
UR:VIS ON and then transmit once.
Then revert the UR:CQCQCQ
Once you transmit via an ircDDB enabled gateway using RF your call sign will be seen to be live on the dashboard and also listed on the ircDDB "last heard" list on the local dashboard.

Previous issues of this newsletter are available from http://zl2vh.org.nz/d-star/newsletter/
or the KiwiD-Star Yahoo group.
https://groups.yahoo.com/neo/groups/KiwiD-STAR/files/D-Star Newsletters/

D-Star Net to join

http://www.dstarinfo.com/nets.aspx
Friday afternoon at 16:00 REF012A PAPA D-Star round table net is a technical net and well worth joining. The net runs for 3 hours or more and has a "shout box" type web forum you can also contribute to. http://d-star-roundtable.boards.net/

73 and good DV.

Chief editor John ZL2TWS. Proof reader Brian ZL1HN