

June 2008

The official newsletter of The Hamilton Amateur Radio Club Inc Branch 12 of NZART - ZL1UX 85 years of leadership





Next General Meeting 18 June 2008 Conference Report/Show & Tell

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From the Committee

Situation report #3 on China earthquake

As the disaster recovery efforts continue following China ?s most powerful earthquake, the Information Office of the State Council reported (on 26 May) that the death toll had reached 65,080.

Government officials and news media have recognised that when communications failed after the Sichuan earthquake on 12 May, it was amateur radio operators who stepped in to provide vital links.

In the past two weeks there has been more than five million people made homeless. The most in-demand materials and supplies for the disaster area are tents and medicines. Disease prevention is also at a very critical stage.

China Central Television (CCTV) reported on 26 May, ?When all other communication means failed, amateur radio operators came out! An amateur radio emergency communication network was setup and one of the commanders, Liu hu called for amateur radio operators on air to provide services for disaster relief.

Thankfully one main repeater survived during the earthquake, this repeater provided 100km coverage to Mianyang. Amateur radio operators from Chengdu Shenzhen, He'nan went to the centre of the disaster area, set up repeaters in Beichuan county, and provided various valuable first hand information from the centre.

The IARU radio society, CRSA said it hoped to report later more detailed information on the role of amateur radio emergency communications in the big earthquake.

In the meantime it advises that the main organiser of local amateur radio traffic, Luo Minglin BY8AA continuously coordinated VHF/UHF communications for a 100 km radius from Chengdu , the capital of southwest China 's province of Sichuan. (*continued page 10*)

Next Committee Meeting - 2 July 2008

SB PROP ARL ARLP023 ARLP023 Propagation de K7RA

This week we saw only one sunspot, numbered 997, and only on Labor Day, May 26. Alas, this was another sunspot left over from fading Cycle 23, and the appearance was very brief. One day it weakly emerged, and it quickly faded from view. The previous five days were spotless; spots appeared on the five days prior to that, and previous to those spotted days were ten days of no spots.

If our Sun shows no more sunspots today and tomorrow, May 30-31, we will see a 3-month average of daily sunspot numbers centered on April just above the values for every 3-month average since the minimum, centered on October 2007. The values through April are 3, 6.9, 8.1, 8.5, 8.4, 8.4, and 8.9. Because this is a three month average, we won't know the value centered on May until the end of June.

If these numbers suggest Cycle 24 is stalled, we can compare with the previous minimum.

Using the same scheme, the 3-month averages of daily sunspot numbers centered on September 1996 through March 1997 (which includes all the sunspot data from August through the following April) were 8.7, 10.2, 14.2, 16.4, 11.7, 11.3, and 16.4.

Those are slightly higher values 11 years ago compared with the current numbers, but notice the six months following the minimum also seemed to flatten out. And while the last bottom had slightly higher average sunspot numbers, it had one longer period of no spots.

If we rank periods of spotless days back to the mid-nineteenth century, the period between Cycles 22 and 23 had the tenth-ranked spotless days period, the 42 days from September 13 through October 24, 1996. Now between Cycles 23 and 24 we have observed two stretches of spotless days of at least three weeks, a fifty-third ranked 22 days in September, and the twenty-ninth ranked 28 days in October and November of last year.

The three longest spotless periods since the mid-nineteenth century

were 92 days leading up to Cycle 15 in 1913, 69 days prior to Cycle 14 in 1901, and 54 days before Cycle 12 in 1879. You can peruse the 72 longest periods of zero sunspots lasting 20 days or more, all ranked from longest to shortest at the site, http://tinyurl.com/6b4d6s.

For Sale

Yaesu FT-897 in good order. Hardly used by Hamilton Search & Rescue.

Contact Barry (ZL1BNP) Ph: 7-849-1189

RSM helps out at the Australian V8 supercars championship

Published: 13.05.2008

Radio Spectrum Management was on hand to help out with the hosting of the Australian V8 Supercars in Hamilton in April. The use of wireless communications is an essential part of the event, with a significant potential for interference.

Attending teams had to reprogram their radios for this location, in some cases involving over 30 radios and up to 5 channels. Voice communication was a safety requirement between each driver and their pit team, while engineers needed real-time video and multi-channel telemetry to manage their cars. At least 1500 radios, using over 200 licensed frequencies, together with a large amount of General User Licence equipment mainly in the 921 – 928MHz and 2.4GHz bands were in use for the event.

Most of the teams audited by the RSM team had programmed their equipment correctly, while those who had not taken note of the possible

consequences of non-compliance quickly remedied the situation before racing began.

While the Australian V8s provided the main attraction, supporting races were held by NZ V8s, Minis, Porsches and Toyota classes, with many using additional radio services. Broadcasting services were also present, with the large TV displays located around the track being fed by a UHF channel, and the camera operators having voice communication with their director.

Full credit must go to the event organisers and the various radio engineers, whose planning and licensing work, with the cooperation of the participating teams achieved a very successful event with minimal interference problems.

DXCC

Have you worked 100 countries and like me don't want to send your precious cards to Yankee Land to get them counted (and probably lost in the postal system). Well, the solution is here. Lee, ZL2AL has been appointed as a DXCC Card checker. (We beat the Ozzies to this one – teach them for stealing all of our thunder.) Contact him and he will see you right.

–ZL1UD

Lighthouse Weekend

Dave, ZL1TCE; Jono, ZL1UPJ and I are starting to think about Lighthouse Weekend at Cape Egmont .

The Weekend is Friday to Sunday August 15 to 17. We need one more person in the team. Please contact me. (850-5218)

-ZL1UD

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Amateur Radio Training Classes Hamilton Amateur Radio Club (Inc)

Thursdays 7:30pm Weekly starting 2nd Week in June When : Classes will run for at least 15 weeks Training will be provided via NZART DVD training videos, NZART Training Manual, Computer Based Training and Instructors providing one-on-one and How : group training. \$50 (includes Training Manual & Club membership, also includes any Cost : classes over and above the minimum of 15 weeks)* Where : Hamilton A mateur Radio clubrooms 88 Seddon Rd HAMILTON

For further details or to enroll for training please contact the club secretary (David) by phone at 07-847-1320, by post to Hamilton Amateur Radio Club, PO Box 606, Hamilton, or by email to branch, 12@nzart, org, nz

- * An examination fee of \$15 and other costs such as an annual subscription to NZART and a one-off payment for obtaining a callsign, while optional, will be encouraged. The Hamilton Amateur Radio Club has several Certified Examiners who will test an individual or group when requested. Timing of any test will be discussed during the training and will be arranged to suit.

The Hamilton Market Day



9th August 2008

Claudelands Event Center



Heaphy Tce

Put this important date in your diary now



Entry is free for buyers. Refreshments provided. Prior vendors will receive registration details by mail.

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AUSTRALIA ISSUES CLASS LICENCE FOR VISITING AMATEURS

The Wireless Institute of Australia advises that on 14 February 2008 a Class Licence issued by the Australian regulator, the Australian Communications and Media Authority (ACMA), allowing visiting amateurs to operate while in Australia came into effect.

The Class Licence is issued under the Australian Radiocommunication Legislation, and allows any overseas amateur visiting Australia to operate for up to 90 days after each entry to Australia. A visiting amateur does not have to make any application or payment to operate, but must hold evidence of a licence or qualification recognized by ACMA and a call sign issued by the administration that issued the licence or qualification.

The conditions of operation are fully set out in the Class Licence, including the 5 levels of operation permitted.

The Class Licence may be found on the WIA's website <u>www.wia.org.au</u>.

The level of operation, which range from the privileges and bands allowed to the Australian Advanced licence to a 146 to 148 MHz low power FM licence (essentially for hand held operation), depends on the level of the overseas licence.

Overseas licences and the equivalent level are set out in the Table of Equivalent Qualifications and Licences, which can be found on the ACMA's website. The URL for the part of the ACMA site 'Apparatus Licensing – Amateurs Visiting Australia' that includes the table is:

http://www.acma.gov.au/WEB/STANDARD/pc=PC 1311.

And if an amateur wishing to visit Australia cannot find his or her licence in the Table, then they can still use the low power 146 - 148 MHz FM licence, which is where all the repeaters are to be found.

There are currently a number of errors and omissions in the Table of Equivalent Qualifications and Licences and the WIA is assisting ACMA in identifying them. Any suggestions should be emailed to the WIA at

nationaloffice@wia.org.au.

The WIA is delighted that all visiting amateurs will now find it so easy to op-

erate in Australia.

- The International Amateur Radio Union Region 3

Surfin': Google Earth's lonosphere

By Stan Horzepa, WA1LOU

This just in: NASA-funded researchers released to the general public a new "4D" live model of the Earth's ionosphere. Called *Earth Space 4-D*, this new online tool visualizes the ionosphere using *Google Earth* and an Internet connection.

"This is an exciting development," says solar physicist Lika Guhathakurta of NASA headquarters in Washington, DC. "The ionosphere is important to pilots, ham radio operators, earth scientists and even soldiers. Using this new 4D tool, they can monitor and study the ionosphere as if they're actually inside it."

NASA's Explore the lonosphere (from the safety of your own home) Web page announced the news about the tool and includes a video demo highlighting its features as well as a link to instructions on how to launch it.

In order to use *Earth Space 4-D*, you first must install <u>*Google Earth*</u> on your computer (both *Earth Space 4-D* and *Google Earth* are free). Second, you follow the simple instructions listed on the Communication Alert and Prediction System (CAPS) <u>Web page</u>.

This tool is so new (only one day old as I write this) that I have only explored the tip of this impressive iceberg, but from what I have seen, it is an important addition to the Amateur Radio toolbox (its Maximum Useable Frequency [MUF] features alone should be interesting to most hams).

I highly recommend *Earth Space 4-D*. The price is right, so try it out.

Until next time, keep on surfin'!

- WA1LOU

In the meantime it advises that the main organiser of local amateur radio traffic, Luo Minglin BY8AA continuously coordinated VHF/UHF communications for a 100 km radius from Chengdu, the capital of southwest China 's province of Sichuan.

More repeaters were set up in both Beichuan and Mianyang, among the worst hit areas outside the epicentre, to form an effective amateur radio communication network.

Zhang Zhen BG8DOU reports that right after the earthquake, two ham radio operators drove to the centre of the earthquake area and had a repeater set up by the morning of 13 May.

This repeater enabled the transmission of rescue instructions, status reports and was a main communication channel for public use.

Among the traffic the repeater carried were communications for the Mayor of Mianzhu City, who gave orders to those on the front line rescue and recovery activity.

The CRSA appreciates the support given by the amateur radio community in helping to keep clear the emergency communication frequencies of 7050kHz, 7060kHz and 14270kHz during the critical period after the earthquake.

The CRSA said, "Thanks for the cooperation and efforts made by all amateur radio societies."

Those frequencies are no longer needed for emergency communications, but should a severe aftershock occur, there will be a call by the CRSA for them to be kept clear again.

The radio society also acknowledged having received inquiries and the warm concerns of amateur radio societies worldwide.

-BA1RB

Upcoming Happenings & Events

Date	Happenings & Events	
1st June	NZART Official Broadcast	
2nd June	HF Net, 3.575 MHz, 19:30	
3rd June	VHF Net, 146.525 MHz, 20:00	
4th June	Committee Meeting	
7-8 June	Hibernation Contest	
8th June	NZART HQ Info-Line	
9th June	HF Net, 3.575 MHz, 19:30	
10th June	VHF Net, 146.525 MHz, 20:00	
14th June	Boat Anchor Sprint	
16th June	HF Net, 3.575 MHz, 19:30	
17th June	VHF Net, 146.525 MHz, 20:00	
18th June	General Meeting (Conference Report)	
22nd June	NZART HQ Info-Line	
23rd June	HF Net, 3.575 MHz, 19:30	
24th June	VHF Net, 146.525 MHz, 20:00	
29th June	WRC Shakedown	
29th June	NZART Official Broadcast	
30th June	HF Net, 3.575 MHz, 19:30	

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2nd July—Committee Meeting

5-6 July—NZART Memorial Contest 80m CW & SSB

5th July—VK/Trans-Tasman Contest 160m Phone

6th July—NZART HQ Info-Line

16th July—General Meeting

19th July—VK/Trans-Tasman Contest 160m CW

20th July—NZART HQ Info-Line

26th July—Hawkes Bay Rally

26th July—Whangarei Used Equipment Sale

26th July—Waitakere Sprints 80m Phone

27th July—NZART Official Broadcast

30th July—Hamilton AREC Section meeting

2nd August—Waitakere Sprints 80m CW

2-3 August—Brass Monkey Contest

9th August—The Hamilton Market Day

16-17 August—International Lighthouse/Lightship Weekend

29-31 August—Rally NZ (WRC)

1-2 November—Bridge to Bridge

14th March 2009—Colville Connection

2nd May 2009—45th Rotorua Marathon

For more information on any of the above please contact myself or any committee member.

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The Next AREC Section Meeting will be on July 30th at the Clubrooms.

Jono and I will be representing both the Club and the Section at both the NZART and AREC AGM's at Conference in Dunedin .

Upcoming events are listed on the Club Webpages. I am still looking for 3 people for Sunday the 2nd of November and 3 people for both Saturday 1st and Sunday the 2nd for the Water-ski Race. I am putting together a spreadsheet for Rally NZ operators for ZL1DK. Please phone me with your name, e-mail and postal address, address, shirt sizes and days available. The dates are 28 to 31 August. I am heading to Hawkes Bay for the HB Rally from July 24 to 29. I <u>think</u> I have a second operator. This is a 2 day rally and I will be stopping at Waikeremoana for a day on the way home.

The Club 2M STSP is going to have its frequency changed to 146.675MHz shortly. This will place the repeater on one of the frequencies under the NZART STSP License. If you are going to use either of the STSP's on an event, ensure that you are aware of the rules that are associated with the use of STSP's. The Policy is included in this issue of Ham Hum, and available from the NZART Website in PDF format. Please note that only NZART members can establish an STSP, and that it MUST be more than 50M from any other Communications System.

Jono, ZL1UPJ; Phil, ZL1PK; David, ZL1DGK and I took part in an AREC Comms exercise a few weeks ago. We were using the National System, 3.900MHz, 146.950MHz and 146.525MHz.

If you need gear for an AREC event, see Colin ZL2CMC. He is the Quartermaster (Q), and the procedure will be that gear will be signed out and signed back in by the borrower. It is YOUR responsibility to get the gear signed back in – not give it to someone else to sign back in.

There will be a course coming up for AREC Training. If you have not been, please go. I am trying?? to have it held in Hamilton.

-ZK1EC

Upcoming AREC Events

Please mark these dates on your calendar and/or diary

The club has 2m handheld radios for use on events like these which means YOU can help out.

WRC Shakedown

29 June 2008, Mystery Creek 2m simplex FM (SSB optional) ZL1DGK, ZL1PK, ZL1TCE, ZL1UD, ZL1UPJ already booked in.



Hamilton Section Meeting

30 July 2008

39th WRC Rally New Zealand 2008

29-31 August 2008, Mystery Creek 11th round WRC, 5th round PWRC, 5th round NZRC Names of primary operators to ZL1UD via eMail. Reserve your spot quick. ZL1UD/ZL1IC, ZL1TCE/ZL1UPJ, ZL1PK/ZL1DGK already booked in.

25th Annual Rollos Bridge to Bridge Water Ski Classic 2008

1-2 November 2008 16 operators needed ZL1DGK, ZL1DK, ZL1GWP, ZL1IC, ZL1KK, ZL1KN, ZL1LD, ZL1PK, ZL1TCE, ZL1TNO, ZL1UD, ZL1UPJ, ZL2CMC, ZL4QJ already booked in.

Kona Colville Connection 2009

14th March 2009 Using HF & 2m (simplex & repeater). ZL1KK/ZL1KN, ZL1PK/ZL1DGK/ZL1LD, ZL1UD/ZL2TW, For Details about and to help with these events, contact :-

Tony Case ZL1UD zl1ud@nzart.org.nz

or one of his deputies (ZL1PK, ZL1TCE, ZL1UPJ).

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General Meeting:	1930 Third Wednesday of each month 88 Seddon Road, Hamilton		
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HF Net: VHF Net:	3.575MHz LSB 1930 Mondays 146.525MHz simplex 2000 Tuesdays		
STSP Repeaters: ATV Repeater:			

Cover Photo: KATO MR-130 crane as used to lower a tower from a large building.

Sender Hamilton Amateur Radio Club (Inc) PO Box 606 Hamilton 3240