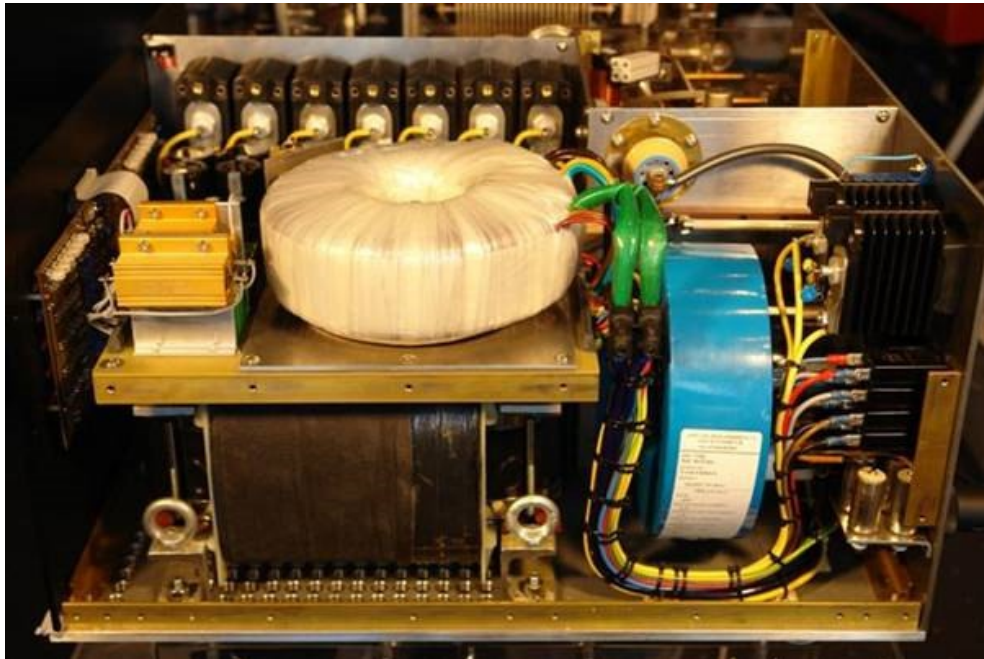


Ham Hum

July 2009



The official newsletter of
The Hamilton Amateur Radio Club (Inc.)
Branch 12 of NZART - ZL1UX
Active in Hamilton since 1923



Next General Meeting
15th July : Ian Ashley—KiwiSat

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From the Committee and/or Editor

Congratulations to John (ZL1AUB) for his second place in the recent Boat Anchor Sprint running a Collins TCS-12 and a Chinese Type 222.

The clubs HF dipole is back up in the air. It was taken down as part of the Jock White Memorial Contest and with minimal solar activity there wasn't much demand to get it reinstalled. Now it's back and ready for use by members.

The annual Hamilton Market Day is almost upon us. Keep August 15th free for your morning trip to the Claudelands Event Centre for bargains and catching up with old friends.



**Next Committee Meetings -
1st July & 5th August**

SB PROP ARL ARLP026

ARLP026 Propagation de K7RA

Two new sunspots appeared last week, numbered 1022 and 1023, and both were Cycle 24 spots. 1022 lasted through June 23 and 1023 until June 24. On June 24 geomagnetic indices were unsettled.

This weekend is ARRL Field Day, and conditions should be stable. Planetary A index is predicted to be around five, which is quiet.

Chip Margelli, K7JA wrote about some surprising openings last week. He writes, "Sunspots or no, there are DX opportunities even with a solar flux of 67. Both Friday and Saturday nights (U.S. time June 19-20), the 21 MHz and 28 MHz bands were open to Japan from my location in southern California, and along much of the West Coast, around 0500-0800 UTC (that's 10 PM to at least 1 AM!). Both nights, the 15-meter CW band was crawling with loud JA signals from stations working the All Asian DX Contest, and there were many loud signals on 10 meters, as well. I fear many did not think to check ten at this hour, but it very much was open."

He continues, "And Saturday night I worked 54 JA stations in a nice run on 50 MHz, so perhaps those noctilucent clouds were being kind to me."

Steve Brandt, N7VS of Portland, Oregon had a similar observation. On 10 meters CW last Friday night (at 0336z Saturday) Steve worked JK1YMM in the All Asia CW Contest with S7 reports in both directions. Steve also observed sporadic-E openings this week out to about 1,000 miles, and said other stations have reported working Japan on 10 meters this week.

In last week's bulletin, Carl mentioned the upcoming DXpedition to Glorioso in July. Now he has written a set of predictions for propagation to Glorioso from various areas, and you can see it at <http://mysite.verizon.net/k9la/id11.html>. Just click on the "Glorioso in July 2009" link.

I received some interesting mail from Red Haines, WO0W of La Crescent, Minnesota. I did a search for past emails from him, and came across an unread mail from December, 2007. Just to review and clarify, an ionosonde is a tool for measuring the critical frequency (f0F2) for the area just above. It sweeps an RF signal, beaming straight up, and looks for reflections.

Some quotes from Red occupy the next few paragraphs.

"Though we use the sunspot number and the solar flux index to assess propagation expectations, there is only an indirect connection between these indices and propagation. Neither sunspots nor the radiation measured by the solar flux index directly increase or decrease the levels of ionization in the ionosphere. All three are determined, somewhat independently, by physical processes on or in the Sun.

"Sunspots and the solar flux are caused by solar conditions that are often associated to a limited degree with high energy radiation that reaches Earth and ionizes molecules in the atmosphere. Only the energetic radiation (UV, X-ray, and Gamma rays) from the Sun or other sources ionize those molecules. The solar flux radiation is not energetic enough. The sunspots are only a visual phenomena associated with solar events, including radiation. It often happens that no solar radiation associated with a sunspot reaches Earth.

"In past years, we didn't have any better predictors of propagation than the sunspot number and the solar flux index. They remain useful, but we must recognize their limitations. In fact, propagation correlates very poorly with them. Smoothed sunspot numbers are useful to study the solar activity cycle. Smoothed sunspot number doesn't predict the next day's propagation or even the next cycle's timing or magnitude. In fact, the smoothed SSN cannot be calculated until 6 months have passed. The daily SSN is just about meaningless to propagation.

"Today, we have better indicators of propagation potential. Hams may view near real time measures of X-ray radiation from the GOES satellites. See <http://www.swpc.noaa.gov/today.html>.

"The various propagation beacons are very useful to assess current propagation.

"A source of near real time ionospheric conditions, including the various critical frequencies, may be accessed at http://www.swpc.noaa.gov/ftpdir/lists/iono_day/. This index links to the worldwide system of ionosondes to report measured values on short time intervals, typically near 15 minutes. The shortcoming is the relatively small number of ionosondes, which requires interpolation to estimate the MUF for a propagation path, as well as educated guesses regarding details of the path.

"The Australian IPS Radio and Space Services offer several maps that at-

tempt to depict interpolated propagation conditions, based on ionosonde measurements. For an example and links to additional products, see http://www.ips.gov.au/HF_Systems/4/3."

Internet Links

Web-based free content project to collect and list all known pinouts

<http://www.allpinouts.org>

If you would like to add something that you've found on the internet to be useful, informative, or just plain funny, send it to me at zl1dgk@nzart.org.nz

New Portuguese prefix blocks

Anacom, the Portuguese agency for the amateur radio service, has published new legislation which will also impact the callsign structure of Portuguese (Portugal, Madeira and the Azores) callsigns.

The new prefix block will be allocated starting with June 1, 2009. Each area will have four blocks (old calls under old legislation, new calls under new legislation, club calls and special calls):

Portugal:

block 1: CT1, CT2, CT4, CT5

block 2: CR7, CS7, CT7

block 3: CQ0, CS5

block 4: CQ7, CR5, CR6, CS2

Madeira:

block 1: CT3

block 2: CR9, CS9, CT9

block 3: CQ2, CS3

block 4: CQ3, CQ9, CR3

Azores:

block 1: CU1, CU2, CU3, CU4, CU5, CU6, CU7, CU8, CU9, CU0

block 2: CR8, CS8, CT8

block 3: CQ1, CS4

block 4: CQ8, CR1, CR2

Callsigns from block 1 (CT1/2/4/5, CT3, CU) will no longer be issued.

Current hams will keep these calls if they like or submit to a new exam to have the new prefixes (CR/CS/CT7, CR/CS/CT8, CR/CS/CT9).

New hams will have block 2.

Club stations will have calls in block 3 (CQ0/CS5, CQ2/CS3, CQ1/CS4) and special occasion and contest calls will be from block 4 (CQ7/CR5/CR6/CS2, CQ3/CQ9/CR3, CQ8/CR1/CR2).

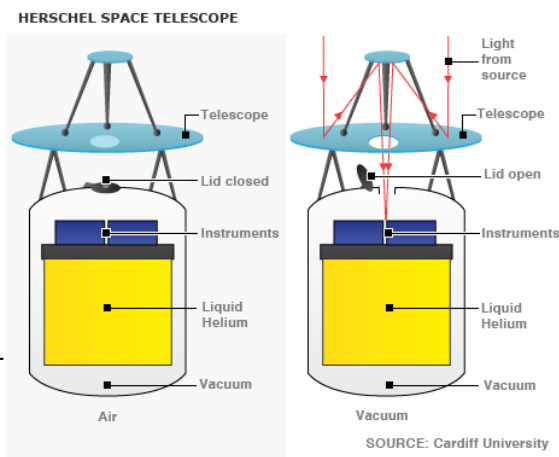
More information at: <http://www.anacom.pt/render.jsp?contentId=944999>

Herschel telescope 'opens eyes'

Europe's new billion-euro Herschel space observatory, launched in May, has achieved a critical milestone.

The telescope has opened the hatch that has been protecting its sensitive instruments from contamination.

The procedure allowed light collected by Herschel's giant 3.5m mirror to flood its supercold instrument chamber, or cryostat, for the first time.



The observatory's quest is to study how stars and galaxies form, and how



they evolve through cosmic time.

The command sent on Sunday to fire two pyrotechnic bolts holding down the hatch was arguably the key moment in the European Space Agency (ESA) mission since the 14 May launch from Earth.

"We need the lid open or we can't see the sky, so it's a really important event," said Professor Matt Griffin, the principal investigator on SPIRE, one of three instruments inside the cryostat.

There is a [YouTube video](#) that shows what would have happened - in slow motion.

-BBC (with thanks to ZL1GWP)



From The NZART Contest Manager: 2009 Conference Contest Forum

Around 30, or so attended the Sunday morning Forum. Originally, Stuart Watchman, ZL2TW, was scheduled to jointly conduct the Forum along with myself. However, Stuart was unavoidably detained at the AREC Annual General Meeting and as a consequence discussion of Jock White Field Day Contest matters was somewhat restricted.

The following contests were reviewed and ideas were canvassed for comment and suggested revision, improvement, or otherwise of the respective rules governing their running.

Sangster Shield

I put forward a proposal based on my discussions with Glenn Kingston,

Contd page 9



Annual Market Day

Claudlands Event Centre

Saturday August 15th 2009

Vendors from 8:00am

Buyers (free entry) from 10:00am

Refreshments available, Free parking on site, WARO meeting

An excellent chance for some social time with fellow Amateurs in the Waikato and surrounding areas.

All Enquiries to :

Market Day

Hamilton Amateur Radio Club

PO Box 606, Hamilton 3240

Or

harcmday@nzart.org.nz

Sangster Shield Contest Manager in mid-2007:-

"that the Sangster Shield Contest be conducted on one evening only, the Saturday, with extended operating hours until 2400 NZST, i.e. the hours of operation being 2000 NZST until 2400 NZST"

The general consensus was acceptance of the proposal, with implementation becoming effective in the 2010 event.

NZART Memorial Contest

A proposal was put to me following the 2008 event suggesting a couple of changes to the Contest rules. At the time I advised the proposer that I would like to gauge other participants' views and to do this I would raise the matter at the 2009 Conference Contest Forum. The proposals were:-

- (1) Revise the present hourly operating periods to half-hourly operating periods making a total of 12 operating periods spread over both evenings.
- (2) Introduce a new operating section for Low Power (20 watt max, out put) SSB operation to encourage VK Foundation License (and ZL Foundation Licensees, later if introduced into NZ).

The first proposal was supported by the meeting, while the second matter failed to get any support.

Jock White Memorial Field Day Contest

In the absence of Stuart, ZL2TW I raised the issue as outlined by him in the May/June 2009 Break-In Contests column (page34) regarding the fostering of increased 40 m operation by Field day stations. The proposal generally found support from those present, although there were diverse views on how any incentive scoring would be applied. I requested those present to take this topic back to their Branch(es) and advise Stuart Watchman, ZL2TW of their respective views.

Inter North Island Top Dog Field Day Station - Jock White Memorial Field Day

Lee Jennings, ZL2AL commented on the lack of rivalry between the ZL1 and ZL2 (North Island) Field day Teams that previously existed prior to the re-structuring of the Contest awards to the present day format. He kindly offered to fund the provision of a trophy to the top-scoring Branch, in any of the four districts in the Annual Field Day Contest. Lee has suggested that the trophy be named "The Ron Wills, ZL2TT Memorial Trophy" – honouring and remembering the late Ron Wills, ZL2TT a well-respected contesteer and dear friend of Lee and his family.

PLEASE TAKE THESE MATTERS TO YOUR BRANCH FOR DISCUSSION AND THEN SUBMIT SUGGESTIONS, OR AN INDICATION OF APPROVAL TO STUART WATCHMAN, ZL2TW

Email: zl2tw@nzart.org.nz or his Call Book address.

Contest Manager

Towards the end of 2007 I indicated to Council that I would like to hand over the reins in mid 2010. This I confirmed to Council in late 2008.

Council has appointed Edwin Musto, ZL1BBO as my successor and I envisage the changeover will occur in early/mid 2010.

Mary, my XYL and I are keen to undertake some travel and as the years roll by, the concept of emulating "Old Mr Grace", of Are You being served fame is decidedly unattractive, hence my decision.

73

-John Powell ZL1BHQ

Upcoming Happenings & Events

<i>Date</i>	<i>Happenings & Events</i>
1st July	Committee Meeting
4th July	NZART Memorial Contest
5th July	NZART HQ Info-Line
6th July	HF Net, 3.575 MHz, 19:30
7th July	VHF Net, 146.525 MHz, 20:00
10th July	Break-In copy due
11-12 July	IARU HF World Championship
13th July	HF Net, 3.575 MHz, 19:30
14th July	VHF Net, 146.525 MHz, 20:00
15th July	General Meeting
19th July	NZART HQ Info-Line
20th July	HF Net, 3.575 MHz, 19:30
21st July	Franklin Junk Sale
21st July	VHF Net, 146.525 MHz, 20:00
25th July	Whangarei Junk Sale
25th July	Waitakere Sprints (Phone)
26th July	NZART Official Broadcast
27th July	HF Net, 3.575 MHz, 19:30
28th July	VHF Net, 146.525 MHz, 20:00
29th July	AREC Section meeting (AREC)

1st August—Waitakere Sprints (CW)
1-2 August—Brass Monkey Contest
5th August—Committee Meeting
8th August—Boat Anchor Sprint
9th August—NZART HQ Info-Line
15th August—Hamilton Market Day
15-16 August—Lighthouse Weekend - ILLW
19th August—General Meeting
22nd August—Possum Bourne Memorial Rally (AREC)
23rd August—NZART HQ Info-Line
30th August—NZART Official Broadcast
September—9th Kairangi Hill Climb (AREC)
6th September—NZART HQ Info-Line
7th September—NZART Doug Gorman Frequency Measuring Contest
12th September—Nostalgia Night
20th September—NZART HQ Info-Line
27th September—NZART Official Broadcast
3-4 October—Microwave Contest
11-17 October—"GET READY GET THRU" Disaster Awareness Week
12-16 October—14th IARU R3 Conference (Christchurch)
17-18 October—JOTA/JOTI
17-19 October—Admin Council of IARU (Christchurch)
November—Bridge to Bridge (AREC)
November—GlobalSET Exercise
March 2010—VHF mini-convention

Hamilton AREC Section News

Hello Members,

Presently, Robin is working on an event within the area involving up to 6 operators. Jono is working on the Bridge to Bridge and I am working on Kona 10. There is also a car club event coming up shortly.

Saturday the 22nd of August is Rally NZ.

Please remember the Section Meeting at the end of July. I look forward to seeing you all there.

Owing to my health, I am stepping down from being on call for SAR and CDEM. I am looking for a replacement for both of these positions. If you are interested, please see Dave ZL1TCE for SAR and Phil ZL1PK for CDEM.

That's it for this month.

Tony

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.

AREC Section Meeting
29 July 2009

Possum Bourne Memorial Rally
22 August 2009



9th Kairangi Hill Climb 2009
September 2009

26th Annual Rollos Bridge to Bridge Water Ski Classic
November 2009
16 operators needed

Colville Connection (Kona)
13 March 2010
Using HF & 2m (simplex & repeater)

WRC Rally New Zealand
7-9 May 2010

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).

Club Information



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88 Seddon Road, Hamilton

General Meeting: 1930 Third Wednesday of each month (except Jan)
88 Seddon Road, Hamilton

Homepage: <http://zl1ux.tripod.com>
eMail: branch.12@nzart.org.nz

HF Net: 3.575MHz LSB 1930 Mondays
VHF Net: 146.525MHz simplex 2000 Tuesdays

2m Repeater: 145.325MHz -600kHz split
STSP 146.675MHz -600kHz split
Repeaters: 438.725MHz -5 MHz split
ATV Repeater: 615.250 Ch39 (off air)

Cover Photo: On the bottom: three-phase alternating current hypersil plate transformer with 10 KVA, on top the central controller board with a toroidal transformer with 1200 VA (green connectors: 7.5 V / 75 A heating current), fan (blue), 7 Zener diodes (50 W each) for the screen grid (behind the toroidal transformer). For a 4CX10000D valve. http://www.dc9dz.de/index_en.html

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