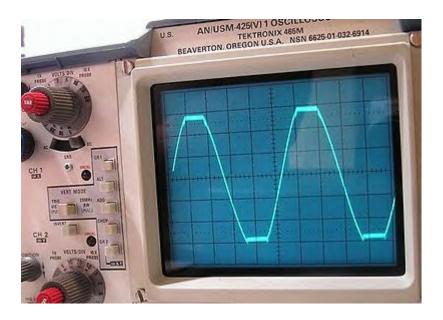


# March 2012

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





## Next General Meeting 21 March - 7:30pm ZL1UJG on rig output signals

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#### From the Editor

The AGM has been and gone for another year. You might notice some changes in the list on page 1.

I'd like to take this opportunity to welcome Jono (ZL1UPJ) to the role of president. And I'm sure you'll all agree that he has all the qualities to make an excellent Pres.

Of course, we must thank Robin for his years of leadership and technical expertise that have got us to where we are now in excellent shape. Thank you Robin.

This months General Meeting will feature Kevin (ZL1UJG) giving a talk and demonstration on output signals from amateur radio rigs. He will demonstrate output spectrum, ALC effects, Speech Compressor effects, signal width, distortion, etc, etc. You are more than welcome to bring your own rig along for analysis.

The April general meeting clashes with the Hamilton 400 V8 race, so location really has to be moved. May become a dub dinner, but nothing is finalised yet. Keep listening to the dubs nets for more info.

Next Committee Meetings -7th March & 4th April

### SB PROP ARL ARLP008 ARLP008 Propagation de K7RA

We don't know if this is a significant trend, but solar activity has really leveled off recently. Not everyone is unhappy about this. During the recent long minimum, 160 and 80 meter operators sang the praises of great conditions.

In response to my "we hope it isn't true" (prediction for a low solar cycle) comment in last week's bulletin, Ken Meinken, WA8JXM of Aberdeen, Ohio wrote: "Why would that be bad? You are showing your 20-15-10m bias. To those of us who prefer 160/80/40, the lower the sunspots, the better. Personally, I prefer the low part of the sunspot cycle to the peak. Of course I understand that other hams have various different opinions."

The average indicators this week were almost exactly the same as last. Average daily sunspot number rose from 55.6 to 55.7. The average daily solar flux declined 2.6 points to 105, and in an unusual coincidence the planetary A index and midlatitude numbers were the same this week as last, 8 and 6.7. For the numbers at the end of the bulletin, and had to check three times to make sure I hadn't just copied last week's numbers.

The geomagnetic activity was concentrated around February 19-20, and was the result of a solar wind stream, causing aurora visible in the lower 48 states.

Tim Goeppinger, K6GEP of Orange, California reports an amazing 10 meter aurora opening between the West Coast of the U.S. and Scandinavia last Saturday night, February 18.

The latest prediction shows solar flux at 105 on February 24-25, 100 on February 26-29, 105 on March 1, 100 on March 2-4, 105 on March 5-11, 110 on March 12-13, and 115 on March 14-19. The prediction sees planetary A index at 5 on February 24 through March 1, 8 on March 2-3, 5 on March 4-6, 8 on March 7, and 5 on March 8-10.

Jeff Harley, N8II of Shepherdstown, West Virginia wrote on February 18, "10M has been open to EU most days here recently, but nothing like the Oct-Dec openings. In the PACC Dutch contest last weekend, Dutch stations were worked as early as 1330Z and as late as about 1645Z with the best conditions around 1620-1640Z I worked a total of about 27 PA-PI stations on 10 meters and 20 was open past 2030Z, but most Dutch stations migrated down to 40 and lower quite early.

"This weekend was a salt mine weekend, so time was limited in the ARRL CW. I stayed on 20M and worked what I could working about 132 QSOs in 31 countries in about 2-1/2 hours between 0030Z-0315Z. Conditions over the pole were very

good, my very first CQ was answered by a BA1 station and BV1EH, 9V1YC, E21EIC and another E21, UN7, two HLs, many JAs, and many zone 18 and 19 Siberian Russians all answered CQs. The increased polar daylight is improving and lengthening the 20M polar openings. The band was open well to the Caribbean at first and Africa and even CS2C in Portugal was worked. Also the big gun OH8's and one LA2 were logged.

"Saturday morning, 20 was wide open to EU by before sunrise and also open to Zone 17 and 18 in Russia with signals from there having a wicked flutter. Two HS0s called in and signals stayed very strong from EU until around 14Z. Then I checked 10M which was open to areas very unexpected/poorly explainable for a SFI of only 103. UA1AFT running 5W was about S6, another loud RA1, several OHs, SM, OZ, LY, YL, ER, UR were all logged. Some of the best signal were from Poland, but Germany just to the west was marginal as were Gs and ONs. Many OKs and Is were logged, but at times even the Is were somewhat weak. Around 1530, the Balkans big guns S5, 9A, E7DX were S9+. My 10M CQ QSO rate was never very high, but there was fairly steady stream of stations. Signals from the Caribbean farther south than ZF were generally S9+."

#### Thanks, Jeff.

Julio, NP3CW wrote: "Last night Feb 22, 2012 I was able to contact CP6UA on 50.115 MHz after been looking for him for long time . This is my new one for 124 entities worked. It was a nice contact from FK68wl to FH82ue. It took me nearly 10 yrs to complete all South America Countries. Recently also worked HK0NA on 6 meters, Enrique told me he will soon get a 1 KW amplifier for 6 meters, so maybe more stations can work him in North America. Today Feb 23 2012 many stations heard strong in PR on 6 meters from LU, CX, and PY. Among them were CX1DDO, LU2DPW, PY2LED, CX6DH and PY1RO."

CP6UA asked if there are any propagation prediction programs that work for 6 meters. I was pretty sure there are none, but I inquired with Carl Luetzelschwab, K9LA for comments.

Carl wrote: "None of our propagation prediction programs cover 6 meters - they stop at 30 MHz. The reason why is the extremely dynamic nature of the F2 region, which varies widely on a day-to-day basis due to other factors than solar radiation. Thus our understanding of the F2 region is statistical in nature over a month's time frame, and this ultimately results in extremely low predicted probabilities for 6 meters since the frequency is so high. Coupled with this is the fact that 6 meter propagation may not be simply refraction - it may involve scatter, help from the underlying E region, and some other things."

Carl has an article on predicting 6 meter F2 propagation, which you can read at, <u>http://myplace.frontier.com/~k9la/Predicting 6 Meter F2 Propagation.pdf</u>.

In the ARRL Letter we promised some comments by K9LA on recent solar activity

trends, but that will have to wait. Carl ran some smoothed solar flux numbers for Cycles 19-23, to observe any double-peaks, and noted: "Cycle 19 didn't have a second peak (it didn't need one!).

"Cycle 20 might have had a second peak - hard to tell.

"Cycle 21 had a definite second peak.

"Cycle 22 also had a very nice second peak.

"And Cycle 23 had a second peak that showed considerably more 10.7 cm radiation than the first peak. That was a blessing for 6m DXers in the winter of 2001."

And finally, we haven't mentioned this site in awhile, for info on Space Weather Basics: <u>https://www.meted.ucar.edu/training\_module.php?id=901</u>.

If you would like to make a comment or have a tip for our readers, email the author at, <u>k7ra@arrl.net</u>.

For more information concerning radio propagation, see the ARRL Technical Information Service web page at <u>http://arrl.org/propagation-of-rf-signals</u>. For an explanation of the numbers used in this bulletin, see <u>http://arrl.org/the-sun-the-earth-theionosphere</u>. An archive of past propagation bulletins is at <u>http://arrl.org/w1awbulletins-archive-propagation</u>. Find more good information and tutorials on propagation at <u>http://myplace.frontier.com/~k9la/</u>.

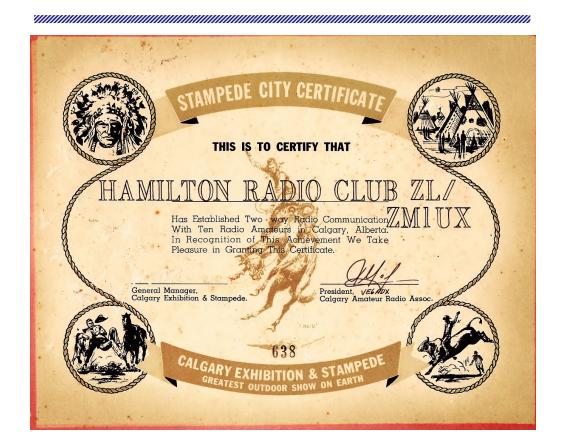
Monthly propagation charts between four USA regions and twelve overseas locations are at <u>http://arrl.org/propagation</u>.

Sunspot numbers for February 16 through 22 were 41, 53, 63, 69, 72, 61, and 31, with a mean of 55.7. 10.7 cm flux was 103.2, 103.7, 104.1, 105.3, 111.1, 103.3, and 104.2, with a mean of 105. Estimated planetary A indices were 4, 2, 4, 16, 16, 6, and 8, with a mean of 8. Estimated mid-latitude A indices were 4, 2, 3, 11, 14, 4, and 9, with a mean of 6.7.

#### From the Hamilton QSL Manager

QSL cards for the following callsigns can be collected from :- 33A Galloway Street Hamilton East but a phone call to 8563832 first would help. Otherwise they may be collected at the Clubrooms 88 Seddon Road Hamilton on a General Club night which is the 3rd Wednesday each month.

ZL1ALH, ZL1ALT, ZL1BCZ, ZL1BH, ZL1BMS, ZL1BO, ZL1BPI, Z1BSF, Page 5 ZL1BWQ, ZL1BYH, ZL1CYH, ZL1CDJ, ZL1CLE, ZL1DJH, ZL1DU, ZL1GK, ZL1IO, ZL1JPS, ZL1KDX, ZL1OJ, ZL1PO, ZL1RA, ZL1SE, ZL1ST, ZL1TKG, ZL1UFJ, ZL1UV, ZL1VO, ZL1WT.



Digging around in the old records we found this certificate. Don't know which year it was for. I wonder if any of our members remember the dub getting this certificate?

Found this info on the RAC web page :-

Stampede City Award

Sponsored by The Calgary Amateur Radio Association.



Obtain 10 points by contacting Calgary amateurs on any band/mode from January 1, 1962.

Log information, only, required. VE6 stations can qualify by operation outside of Alberta.

The award is available to SWLs.

The following stations:

VE6AO, NQ (Club Stns) & Life Members: VE6AP, AUZ, JI, MX, RQ, VK, VO, and VE7DE each count 2 points.

Other Calgary stations count 1 point each.

Send Log information ONLY to:

Award Manager, Stampede City Award

Calgary Amateur Radio Association,

PO Box 592, Station "M",

Calgary, AB.

T2P 2J2.

Cost of the Award is CDN\$3.00 for Canadian Amateurs & US\$3.00 for other stations.

So, if anyone was part of the team that got this award for ZL1UX, can you please contact the branch secretary ZL1PK.

#### New electronic waste facility for Hamilton

A new electronic waste collection facility is scheduled to open early next year in Hamilton.

The new facility, at 8A Jolly Street in Frankton, will collect and disassemble a range of domestic electrical appliances ("e-waste") so components and materials can be reused and recycled.



The Hamilton RCN e-Cycle site will be operated by Raglan-based recycling organisation Xtreme Waste Incorporated, in conjunction with nationwide company RCN Group, says City Waters Manager Tim Harty. Hamilton City Council signed a service agreement with both organisations last week, and Mr Harty says the new facility is expected to be open in January next year.

Hamilton will join 21 sites around the country providing everyday recyding of electronic waste. A minimum of 15 new sites will open nationwide between now and June 2012. RCN Group and Community Recyding Network (CRN) have received funding from the Ministry for the Environment to form the RCN e-Cycle scheme, and are recognised as industry leaders in the disposal of electronic items.

Electronic waste is one of the fastest growing and most toxic waste streams. Electronic items contain toxic heavy metals and chemicals that can harm land, water and people.

The Ministry for the Environment estimates 80,000 tonnes of e-waste goes to New Zealand landfills each year. "RCN Group estimates its collaboration with Xtreme Waste, on behalf of Council, will divert between 120 and 250 tonnes of electronic waste from landfill every year," Mr Harty says.

E-Cycle Hamilton will be a permanent facility, initially open four days per week (Wednesday/Thursday and Friday/Saturday) from 9am to 4.30pm. The facility will operate on a "user pays" basis: customers who offload large TVs will be charged \$20 per unit, \$2 per keyboard, and \$5 per computer hard drive. Photocopiers and toner cartridges can also be disposed of at the site.

"Although there will be a small charge for disposal, customers can take confidence from the fact their e-waste will be dealt with in an ethical and environmentallyfriendly way," Mr Harty says.

The user-pays method of e-waste disposal has already proven successful in Auckland, Wellington and Christchurch, Mr Harty says.

-Scoop

#### Proposed changes affecting the 130 to 190 kHz Amateur Band - Outcome

Members may recall that we put in a submission late last year (see in HQ Infoline 31s on 16 December) commenting on changes the MED were proposing to make that would affect part of our 130 - 190 kHz Amateur band.

The Ministry has now posted their decision on the RSM website at <u>http://</u> <u>www.rsm.govt.nz/cms/policy-and-planning/projects/proposed-power-increase-for-short-range-devices</u> together with a summary of the submissions.

As expected, the Ministry has approved the change, agreed that the current compliance and radio standards regime should continue (the system that has replaced "type approval") but decided not to take up our suggestion that a warning against modification be included with the devices as this "could add an unreasonable cost to industry for low volume, low risk activity".

Don Wallace, ZL2TLL, NZART Administration Liaison Officer

### Special Event Station - VO1AA - April, 25, 2012

The **Society of New foundland Radio Amateurs** (SONRA) will make history on April 25, 2012.

April 25th each year marks the birthday of Guglielmo Marconi, who received the first wireless signal at Signal Hill, Newfoundland.

This April 25th, SONRA will celebrate the event by making an Amateur Radio contact with Princess Elettra (Marconi) who will be in Bologna Italy to celebrate her father's birthday. It is planned to have the Canadian Heritage Minister, the NL Premier, the City of St. John's Mayor along with the NL Lieutenant Governor, exchange greetings with the Princess via Amateur Radio from VO1AA at Cabot Tower.

SONRA appreciates the wonderful relationship that it enjoys with Parks Canada,

Signal Hill National Historic Site, and looks forward to many years of commemorating this important event.

73

**Doug Mercer, VO1DTM/VO1DM** Chief Field Services Officer Radio Amateurs of Canada Inc.



Guglielmo Marconi



### Upcoming Happenings & Events

Date	Happenings & Events
2th March	NZART HQ Infoline
3rd March	Te Puke/Paengaroa Junk Sale
5th March	HF Net, 3.575 MHz, 19:30
6th March	VHF Net, 146.525 MHz, 20:00
10th March	Colville Connection (AREC)
10th March	WARO 50th Anniversary Celebration
10th March	Break-In copy due
12th March	HF Net, 3.575 MHz, 19:30
13th March	VHF Net, 146.525 MHz, 20:00
16th March	NZART HQ Infoline
19th March	HF Net, 3.575 MHz, 19:30
20th March	VHF Net, 146.525 MHz, 20:00
21st March	Club General Meeting
25th March	NZART Official Broadcast
26th March	HF Net, 3.575 MHz, 19:30
27th March	VHF Net, 146.525 MHz, 20:00

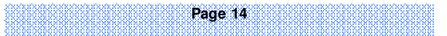
6th April—NZART HQ Infoline 14-15 April—NZART Low Band Contest 18th April—Club General Meeting 20th April—NZART HQ Infoline 29th April—NZART Official Broadcast 4th May-NZART HQ Infoline 10th May—Break-In copy due 18th May-NZART HQ Infoline 19-20 May-NZART Sangster Shield 27th May—NZART Official Broadcast 30th May—AREC Section meeting 2nd June—NZART Hibernation Contest 21-24 June—Rally New Zealand NZRC/WRC (AREC) 7-8 July—NZART Memorial Contest 28th July—Waitakere Sprint (Phone) 4th August—Waitakere Sprint (CW) 4th August—NZART Brass Monkey Contest August—Hamilton Market Day 6th October—NZART Microw ave Contest 31st October—AREC Section meeting 4th November—NZART Straight Key Night 30th November—AREC Section meeting 1st December—NZART VHF+ Field Day Easter 2013—NZART Technology Conference - Auckland

### AREC Event Operators Page

WRC Rally NZ/ Possum Bourne Rally	21-24 June 2	012 0	Organiser : ZL1DK		
Please contact the Section Leader with your team information and he will pass it on to Auckland.					
Rollo's Marin e Bridge to Bridge W ater-Ski Race	Decemb er 2012		Organiser : ZL1UPJ		
Position		Saturda y Operator	<u>Sunday Operator</u>		
Base					
Start Boat					
Rescue Boat					
X-Band					
A.	Ngaruawa hia/T au piri				
	Start/Finish at Point				
В.	Ngaruawa hia Ramp				
C.	Ngaruawahia W/S				
D.	Horotiu				
E.	Pukete Ramp				
F.	Days Park				
G.	Fairfield Bridge				
н.	Malcolm St				
l.	Narows				
J.	Field Days				
К.	Between Pipe and F/Days				
L.	High Level Bridge				

Kairangi Hill Climb	SundaySep	tember 2012	Organiser : ZL1IC
Position		Operator	
1.			
2.			
3.			
4.			
5.			
School C ycling	July 2012		Organiser : ZL1IC
Position	<u>Operator</u>	Position	<u>Operator</u>
1.		5.	
2.	6.		
3.	7.		
4.	8.		
Colville Connection	10th March 2012		Organiser : ZL1PK
Position	Primar y Op erator	Secondary Operator	Other Operator
Base			
StonyBay			
Fletcher Bay			
Hill 1			
Hill 2			
Fantail Bay			
Stand By			

For Details about and to help with these events, contact the person indicated as the organiser for the event. See Page 1 for their contact information.



Club Information				
Business Meeting:	1930 First Wednesday of each month 88 Seddon Road, Hamilton			
General Meeting:	1930 Third Wednesday of each month (except Jan) 88 Seddon Road, Hamilton			
Homepage: eMail:	<u>http://zl1ux.tripod.com</u> branch.12@nzart.org.nz			
HF Net: VHF Net:	3.575MHz LSB 1930 Mondays 146.525MHz simplex 2000 Tuesdays			
STSP Repeaters:	145.325MHz -600kHz split 146.675MHz -600kHz split 438.725MHz -5 MHz split 615.250 Ch39 (off air)			

Cover Photo: Audio clipping shown on an oscilloscope <u>http://en.wikipedia.org/wiki/</u> <u>Clipping %28audio%29</u>

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