

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



Annual General Meeting

16 February 2011 7:30pm **Club Rooms** 88 Seddon Road

Next General Meeting AGM 16th February, 19:30

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From the Editor

Two big events for us this month.

Club AGM on 16th February at the clubrooms. Get to hear about what the club has been up to in the past year that you may have missed out hearing about. Take a look at the books. Make sure you have your say on w ho leads our club for the next year. All essential stuff that is critical to our clubs future.

Jock White Memorial Field Days is upon us again on the 26th and 27th. We erect aerials from 12noon to 3pm on the Saturday before the 3pm to midnight part of the Field Days. Then, Sunday from 6am to 3pm. We run 80m & 40m, Phone and CW. See Page 7-8 for more info. I hope to see you all there.



Next Committee Meetings -19th January & 2 February

SB PROP ARL ARLP003 ARLP003 Propagation de K7RA

Average daily sunspot numbers dropped from 50 on the reporting week ending January 5, to 38 on January 6-12, and now 21.3 on January 13-19. Average weekly solar flux over the same three periods dropped from 89.5 to 83.8 to 80.4 over this past week.

The latest solar flux prediction shows a value of 82 for January 21-27 and 88 on January 28-30, followed by 87, 85, 85, 84 and 84 on January 31 through February 4. Geomagnetic predictions have the planetary A index at 5 over the next couple of weeks, except for a value of 7 on January 22 and February 2-4.

Geophysical Institute Prague expects quiet conditions on January 21, quiet to unsettled January 22, and quiet January 23-27.

Carl Luetzelschwab, K9LA, has a propagation column in WorldRadio Online for February 2011 titled "Using Antenna Height As An Aid to Propagation." Of course, the higher the better, right? But Carl calculates the propagation modes over a particular path at a particular date and time, and shows how the antenna radiation pattern at different elevations would affect the signal.

Download the latest issue at http://www.WorldRadiomagazine.com.

Carl used the propagation prediction program VOACAP, and this program as well as W6ELprop and others use the monthly predicted smoothed sunspot number. The latest predicted smoothed numbers for January, February and March 2011 are 39, 43 and 47. They show it increasing four points every month through July, then three points from July to August, and two points per month after that, through June of 2012, followed by one point per month increase through October 2012, then one point every two months until a peak of 90 in 2013 during February through July.

You can download W6ELprop at <u>http://www.qsl.net/w6elprop</u> and see a tutorial in PDF format by K9LA at <u>http://www.arrl.org/files/file/Technology/propagation/</u> W6elprop.pdf. K4LWS has another guide at <u>http://www.datasync.com/mdxa/</u>

w6elprop.html.

Information on VOACAP is at <u>http://www.voacap.com</u>, and there is a fascinating online version at <u>http://www.voacap.com/prediction.html</u> in which you can calculate MUF from any point to any other point.

At <u>http://www.voacap.com/coverage.html</u> you set the time, month and year, and it generates a coverage map with your station at the center. Color coding on the map shows the percentage reliability. For location, they have many prefixes selectable in a drop-down menu, or 59 locations in the United States, and 16 across Canada.

As an alternative, you can enter a four or six character grid square. You can find six character grid squares by call sign online at <u>http://www.qrz.com</u> after you create a free account and log in. Then another drop down gives you a wide variety of antenna heights for vertical, dipole, and 3, 5 and 8 element Yagi antennas as well as a theoretical isotropic radiator.

Any of nine HF bands, 80 through 10 meters, are selectable in another drop down. The sunspot number used is the International Sunspot Number, which is lower than the NOAA Boulder number reported in this bulletin. For each month they use the predicted smoothed sunspot number for that month.

This tool is fun to play with! One cool trick is to open the page in two web browsers, set up parameters (for example) to have everything equal except the year, then use Alt-Tab (if you are using Windows) to take you back and forth between the two maps, easily seeing the differences. Or you could do the same thing with a page open in each of multiple tabs in a single browser. I actually found this easier than doing the Alt-Tab selection.

So for instance, I set up five tabs in my browser, one for each month, January through May 2011, and used 10 watts on 10 meters into a dipole at 10 meters high at 2100 UTC. It is fun to dick through each tab and see how my 10 meter coverage would change over the end of this winter and through spring.

Strangely, they have separate pages for the 11 meter band for each type, point-to



-point, and area coverage. I suppose there are still operators on the Citizens Band who might want this, and for the extreme (and illegal) CBer, you can actually select up to 1500 watts, and an 8 element Yagi at 198 feet! Doing this for March, 2013 sets up an impressive coverage map. I can hear the howl of heterodynes now.

Scott Bidstrup, TI3/W7RI sent in an article about creation of a three dimensional model of the ionosphere that helps explain F layer anomalies in equatorial regions after sunset. Read it at online at <u>http://www.sciencedaily.com/</u> releases/2011/01/110118113138.htm.

Peter Laws, N5UWY of Norman, Oklahoma had a response to W1YO's comment in last week's bulletin that "I have been through five solar cycles and this one is not normal."

Peter writes: "With all due respect to W1YO, a sample size of five is hardly enough to make a judgment about what is normal. This cycle may be different from the previous four or five, but we have little evidence to determine if any of them is normal."

"In all, we only have good data on the last 24 or so cycles and less-accurate data for few more cycles before that."

"But our nearest star is about 4.5 BILLION years old. That's over 400 MILLION solar cycles!"

True enough, but "normal" expresses what you are accustomed to, as well as what expectations are. I think many of us wish that Cycle 19 was normal, as in, not unusual and that Cycle 24 was normal as well.

Speaking of what is normal and what is not, occasionally you can read something in the press quoting someone who seems to be getting it terribly wrong regarding solar activity. There was a "long range weather forecaster" quoted this week in the Australian press who says he uses sunspot activity to make his predictions. He was quoted as saying, "There is a huge amount of solar activity and solar flares at the moment." Don't believe it? Read it at http://snipurl.com/1w52z9.



Rotorua Marathon:

The 47th" Round the lake" Rotorua Marathon will be held on April 30th, 2011, with a 9.00 am start.

This event will include a 'Half Marathon' option and also the 5km and 10km races have been changed. All entrants in all races will now finish under the Government Garden's "Prince's Gate" famous arches.

The 'Half Marathon' will start at the same time as the full marathon, but the start will be at the Reserve by the Marama Resort, halfway around the lake. There will be a bus drop off at the reserve. The half Marathon runners will follow the same route back to the Govt. Gardens, allowing the field to spread out.

The organisers new manager Murray Fleming and his Company 'Event Promotions', for the 'Athletics NZ' race, expect a total field of up to 5,000 runners of which about 2,000 will run the Half Marathon.

For the 50th Anniversary Marathon event in three years time, they are expecting 10,000 runners- a very special event.

As the start time is 9.00 am, all area posts and helpers will need to be at their stations well before the 9.00 am start time.

(Thanks Ted ZL1MG and Margaret ZL1MB, for this item.)

Further details will be published in the next two Newsletters, relating to our dub's involvement in providing radio communications for the event, as we have done for many years.

Thanks to Rotorua Branch newsletter for this info



Electronic Ham Hum

Would you like a Ham Hum in colour? With internet links that work with just a click of the mouse? Are you a Branch Secretary that would like to receive Ham Hum as a PDF?

Then contact the Ham Hum Editor (that's me) at $\frac{11 \text{ dgk}@nzart.org.nz}{21 \text{ dgk}@nzart.org.nz}$ and I'll add you to the list.

This also saves the club paper, toner, stamps, etc, etc.....which is a good thing.

-ZL1DGK

Jock White Memorial Field Days

One of the highlights of the local Ham calendar, this years event is happening 26/27 February 2011 at the clubrooms.

Saturday 3pm—12 (midnight) Sunday 6am—3pm

Come along and enjoy a fun activity. We need operators (phone & CW), log keepers, coffee makers, story tellers (for when a band is dead), etc, etc,...

Items of note for this years event include :-

- The maximum power in the open section has been reduced from 150 to 100 watts. The bulk of Field day stations use transceivers in the 100 watt dass, this rule change will make the playing field more even.

- The minimum number of CW contacts per band operated needed to gain branch point status has been reduced from 25 to 20, see rule 15.2.4.

- Entries must be scored and submitted on the correct sheets, see rule 17. The

contest managers job is made much easier if all entries are scored on the same sheets.

- The new single station 80 and 40 metres section was a success in 2010 and will remain for 2011. It is suggested that the first 15 to 20 minutes of each period is on 80 m phone, then change to 40 m phone. Then do the same for the second half hour of each period for CW.

- Splatter and distortion is still a cause of significant QRM and must be avoided. There are two main causes for this:

- Insufficient DC supply voltage at the transceiver terminals. Solid state HF sets soon distort badly and generally misbehave if the supply voltage falls much below 12 V. Make sure your DC supply is up to the job, which means checking the voltage at the set while transmitting a carrier or on voice peaks.

- Overdriven Tx. Check ALC readings, particularly giving attention to the correct use of the microphone gain control. This is particularly important if a different microphone from usual is in use. When operating under Field Day conditions it is best to turn your power down a little, not to run at maximum. Refer rule 7.



2010 Field Days in the park.

NZART News

NZART has a Publicity and Marketing Officer. David—ZL3DWS has been appointed to the position.

From David :-

"I'm indeed thankful to be here and to have some skills and resources to promote and celebrate the great hobby that has served us all so well over the years.

The task of encouraging everyone to become a ham is a big one. However as a team, together, we should be able to start making a difference.

One step at a time.

I look forward to reading NZART's Marketing Plan and building on it, with lots of Council input, shortly.

In the meantime, I would welcome informal suggestions or ideas now via <u>email</u> <u>zl3dws@nzart.org.nz</u> or phone. This is so the best can be researched, given thought and included in plan that WILL work.

As we visit branches, read the amateur/electronics press and talk to colleagues, we'll all see/hear ideas that should WORK for us.

Then, please tell me. Together, we'll build something good that lasts.

Thanks and all the best for 2011, 73's, David ZL3DWS"

QSLING: ARRL LOTW NOW AVAILABLE TO VHF AND UHF OPERATORS

NEWS FROM ARNEWSLINE USA

The ARRL has announced that its very popular Logbook of the World has been upgraded to support awards based on Maidenhead grid squares, such as VUCC and





the Fred Fish Memorial Award.

Logbook of the World ins an online system for hams to use to confirm two-way contacts. It can also be utilized that can be used for various ARRL awards. Until now it has been limited to confirming contacts on the high frequency bands. Now members of the ham community who enjoy operation on 50 MHz and above can utilize its services as well.

To take advantage of the new features, you need to log in to your Logbook of the World has account or create one if you are not already as user of the service. After that, just follow the outlined procedures found on the Logbook of the World pages. More information on how to do this is at the ARRL website.

Use <u>www.tinyurl.com/5vw4nkd</u> to take you directly there.



Upcoming Happenings & Events

Date	Happenings & Events	
5th February	Summer Sprint (Phone)	
5-6 February	NZART VHF/UHF/SHF DX Weekend	
6th February	NZART HQ Info-Line	
7th February	HF Net, 3.575 MHz, 19:30	
8th February	VHF Net, 146.525 MHz, 20:00	
12th February	Summer Sprint (CW)	
12th February	Boat Anchor Sprint	
14th February	HF Net, 3.575 MHz, 19:30	
15th February	VHF Net, 146.525 MHz, 20:00	
16th February	Annual General Meeting	
20th February	NZART HQ Info-Line	
21st February	HF Net, 3.575 MHz, 19:30	
22nd February	VHF Net, 146.525 MHz, 20:00	
26-27 February	NZART Jock White Memorial Field Days	
27th February	NZART Official Broadcast	
28th February	HF Net, 3.575 MHz, 19:30	

5th March—Te Puke (Paengaroa) Junk Sale

6th March—NZART HQ Info-Line

10th March—Copy for Break-In due

12th March—Colville Connection (AREC)

16th March—General Meeting

20th March—NZART HQ Info-Line

27th March—NZART Official Broadcast

2-3 April—NZART Low Band Contest

16th April—KDMG RTTY (80m)

22-25 April—VHF Convention (Wellington)

23 April—KDMG RTTY (40m)

30th April—Rotorua Marathon (AREC)

14th May—Tasman Sprint (Phone)

21st May—Tasman Sprint (CW)

4-5 June—NZART Conference (Upper Hutt)

11-12 June—NZART Hibernation Contest

2-3 July-NZART Memorial Contest

6-7 August—NZART Brass Monkey Contest

13th August—NZART Boat Anchor Sprint

5th September—NZART Doug Gorman Freq Measuring Contest

1-2 October—NZART Microwave Contest

1st October—Oceania All Bands SSB Contest

3-4 December—NZART VHF Field Day Contest

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

AREC Event Operators Page

WRC Rally NZ/ Possum Bourne Rall y	2011	(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	November 2011		Organiser : ZL1UPJ	
Position		Saturda y Operator	<u>Sunday Operator</u>	
Base				
Start Boat				
Rescue Boat				
X-Band				
Α.	Ngaruawa hia/Tau piri			
	Start/Finish at Point			
В.	Ngaruawa hia Ramp			
С.	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	SundaySeptember 2011		Organiser : ZL1IC		
Position	Operator				
1.					
2.					
3.					
4.					
5.					
School C ycling	July 2011		Organiser : ZL1IC		
Position	<u>Operator</u>	Position	<u>Operator</u>		
1.		5.			
2.	6.				
3.	7.				
4.		8.			
Colville Connection	12th March 2011		Organiser :		
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				
Contacts :-				
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General Meeting:	1930 Third Wednesday of each month (except Jan) 88 Seddon Road, Hamilton			
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HF Net: VHF Net:	3.575MHz LSB 1930 Mondays 146.525MHz simplex 2000 Tuesdays			
2m Repeater: STSP Repeaters: ATV Repeater:	146.675MHz -600kHz split			

Cover Photo: AGM Notice

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