

# Ham Hum

May 2009



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



**Next General Meeting**  
**21st May : Remit Night &**  
**Professor Godfrey Lucas**

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## **From the Committee and/or Editor**

From an administrative point of view , our club has two extra important meetings every year. The AGM, and Remit Night. And on the 21st May we have our annual Remit discussion. There are 3 remits this year and I've been told they shouldn't take very long to sort out.

To summarise :-

Remit 1 : Proposes that branch members don't need to be NZART members.

Remit 2 : Deals with AX.25 packet data on the National System at night.

Remit 3 : Deals with APRS data on 144.650 MHz and/or 144.575 MHz.

This meeting is also an opportunity to make sure our delegate to Conference is fully informed of what we, in Hamilton, think are the important things facing NZART today.

As I write this SMART is being upgraded. SMART is the online system provided by the government which we can use to update details about our Amateur Radio licenses. If you are having problems using SMART (<http://www.rsm.govt.nz/smart/>) after 27th April don't hesitate to contact a committee member or come up on one of our nets for assistance.

Jock White Memorial Field Day results are out. Congratulations to everyone for their efforts which resulted in second place in the open class. Just shows what can be done from the middle of town with good keen operators.

-Editor

## **Next Committee Meetings - 6th May & 3rd June**

## **SB PROP ARL ARLP018**

### **ARLP018 Propagation de K7RA**

The data at the end of last week's Propagation Forecast Bulletin ARLP017 reported daily sunspot numbers from April 16-22 were six zeros, then 11, when in fact they were zero on every day until April 21, when it was 11, then zero again the next day, April 22. Just as many zero sunspot days -- and only one day with a sunspot -- but on Tuesday, April 21, and not April 22.

We had two additional days with a sunspot this week, Wednesday and Thursday, April 29-30. The sunspot number was 15 and 12 on those days. But this was another old Cycle 23 sunspot, and it appeared near the western limb, and may have either faded away completely or rotated out of view today, May 1. The data at the bottom of our bulletin shows seven days, Thursday through Wednesday for the reporting week, so the sunspot number of 12 for Thursday will appear in next week's data.

Now that we have all the data for the month of April, it is time to present our running 3-month average of daily sunspot numbers, centered on March.

The last time we presented this was four weeks back, in Propagation Forecast Bulletin ARLP014 on April 3. We were hoping last Fall that the sunspot minimum was centered around August 2008, when we showed the three month average centered on that month with data from July through September at 1.1. The following two averages for September and October were 2.5 and 4.5, but then it began another decline, to 4.4, 3.7, 2.3 and 2.1 for November 2008 through February 2009.

The average daily sunspot number centered on March was just 1.5, so the decline continues. Why so low? From February 1 through April 30 we had very few days with sunspots, in fact only eleven. There was never more than one sunspot visible on each of those eleven days, and the highest sunspot number (an index which does not equal the number of sunspots)

was just 15, and that was this last Wednesday. That is not a high sunspot number, but we haven't had one that high since November 13, 2008 when the sunspot number was 16.

The only days with visible sunspots over the past three months were February 11-14 and 24-26, March 6-7, and April 21 and 29-30. That's it. And if you add all those sunspot numbers together on those dates, you get a sum of only 133. Divide 133 by the 89 days over those three months, and you get an approximation of 1.49438, or 1.5 to round it up.

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## Internet Links

Path Profile via Google Maps

<http://www.heywhats-that.com/profiler.html>

Impedance, impedance matching and high-frequency power transmission

<http://www.g3ynh.info/zdocs/index.html>

APRS maps (restored from Brenda)

<http://www.zl1amw.wallace.net.nz/maps/>

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

[zl1dggk@nzart.org.nz](mailto:zl1dggk@nzart.org.nz)

## **NZART Conference 2009—Queen's Birthday Weekend 29 May - 1 June 2009**

The Hawkes Bay Amateur Radio Club Inc (Branch 13) and the Napier Radio Club Inc (Branch 25) invite you to join us for what promises to be an exciting weekend on the amateur radio calendar.

The venue is the Hastings Racecourse in Hastings city. The last time a Conference was held in Hawkes Bay was 1984. The members of both radio clubs looking forward to meeting and hosting old friends again in 2009.

Hawkes Bay is Wine Country. With our 37 wineries and unique Art Deco architecture, Hawkes Bay has become a fun place to travel for a holiday. Napier and Hastings were rebuilt in 1931 after the famous but deadly earthquake of that time. Boutique art galleries, great restaurants and bistros are numerous and Hawkes Bay hospitality is legend.

The Annual General Meeting on Saturday morning will be opened by Lawrence Yule, the Mayor of Hastings. A Recruitment forum will begin after the AGM and afternoon tea. There will be pre dinner drinks in the Cheval Room before you will enjoy a sumptuous buffet dinner.

We expect to run the following forums: Recruitment, OTC, WA RO, Icom, DX, A REC, Contest, SPAM, VHF. Others are planned and will be in the programme timetable.



### **Easy cure for microphonic VHF VCO in Yaesu FT817**

Some manufacturing series of the Yaesu FT817 has problem with a microphonic VCO, at least on 2m band, when using radio's internal speaker. The PLL tin box including the VCO components is too close to the internal speaker, and with high volume or suitable audio signal the PLL box starts to resonate with the speaker resonance. This effect disturbs highly CW operations as it garbles the sidetone, or just creates howling sound from the speaker when the volume level is increased enough.

Fix is to insert muffle in to the PLL box. I've used antistatic foam mat used

for IC's, and it works well. Open the top side of the FT817 by removing screws on the side and top and back. When the hood is loose, carefully lift it and disconnect the speaker cable when reachable.

The PLL box has copper tape around it, peel the tape open carefully to be able to reuse it, then open the PLL box. It might be soldered from some of its corners, remove the solderings carefully.

Inside the PLL box there are three coils, which cause the problem. Cut a suitable piece of muffle material, e.g. the IC mat and place it around the coils as seen in the picture. Close the lid of the box, solder it from all four corners to improve grounding and restore the copper tape on it. Reassemble the top cover and you're done!



- OH2LAK

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## Super Capacitors

You are probably like me and thought you had those super capacitors sorted out. Up to 2 Farads or so at 5V rating. Great for maintaining voltage on a memory chip or two.

**WRONG.**

I have just looked at the web site of one of the manufacturers of these capacitors. This company calls them Ultracapacitors or Boostcaps.

The company have axial connection devices at 350 Farads but only 2.5 Volt rating. These have a maximum current rating of 390 Amps for 1 second or 20 Amps continuous.

If you want to get more serious they have units with threaded or welded connections that are 3,000 Farad at 2.8 Volts and around 4,000 amps for 1 second or 150 Amps continuous.

In case you think there are only low voltage packages they also sell 500 Farad 16.2 Volt packages (also 4,000/150 Amps with screw terminals) and all sorts in between.

By the way I was not game to check on the price!

- ZL1PK

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## **Time for the Annual Internet Clean Up!**

Its that time again!

As many of you know , each year the Internet must be shut down for 24 hours in order to allow us to clean it. The cleaning process, which eliminates dead email and inactive ftp, www, and gopher sites, allows for a better working and faster Internet.

This year, the cleaning process will take place from 12:01 am GMT on May 24 until 12:01 am GMT on May 25. During that 24 hour period, five powerful internet-crawling robots situated around the world will search the Internet and delete any data that they find.

In order to protect your valuable data from deletion we ask that you do the following:-

1. Disconnect all terminals and local area networks from their Internet connections.
2. Shut down all Internet servers, or disconnect them from the Internet.
3. Disconnect all disk and hard-drives from any connections to the Internet.
4. Refrain from connecting any computer to the Internet in any way.

We understand the inconvenience that this may cause some Internet users, and we apologise. However, we are certain that any inconvenience will be more than made up for by the increased speed and efficiency of the Internet.

We thank you for your cooperation.

*{Humour from one of our members.....Editor}*



## **The International Lighthouse and Lightship Weekend**

It all started in 1994 during a wet wintry evening when two members of the Ayr Amateur Radio Group, John GM4OOU and the late Mike GM4SUC, after a club meeting were talking about creating an event in the summer when club members could get out on a sunny weekend and play radio. Various themes were considered; ports, airports, historic Scotland sites, the Firths of Scotland, castles etc. but it was finally decided that lighthouses of Scotland would be ideal.

Following research it was discovered that the lighthouses of Scotland were controlled by the Northern Lighthouse Board in Edinburgh who were not only responsible for the lighthouses of Scotland, but also around the Isle of Man. Approval was sought and obtained from the Northern Lighthouse Board to establish amateur radio stations adjacent to their property. In February 1995 an invitation was sent to all Scottish clubs and the Isle of Man club to join in the fun of a weekend, to be called the Northern Lighthouse Activity Weekend, by establishing an amateur radio station at a lighthouse during the third weekend in August. This first year's event saw 11 stations established at lighthouses, operating primarily on the HF bands, with each station making approximately 750 QSOs over that weekend.

The following year, the Scottish clubs were involved in a weekend activity with the theme of Scottish Firths (river estuaries), so two years elapsed before the next Northern Lighthouse Activity Weekend. During this period Anne-Grete OZ3AE enquired through a letter to Practical Wireless if there

was any lighthouse activity on amateur radio. Following discussions with her it was decided that Danish stations could join in the fun of the weekend. Quickly Germany, South Africa and France asked to join, so the name of weekend was changed to The International Lighthouse/Lightship Weekend. It was at this time that John, GM400U, due to pressure of work, had to cease his connections with the event. The weekend became an annual event taking place over the third full weekend in August and has slowly grown in popularity - in 1999 there were 204 lighthouse/lightship stations in 36 countries, and in 2008, 406 stations took part. Full statistics and guidelines for participation can be found on the ILLW web site at <http://illw.net>.

The main reason the event has become so popular is because it is NOT a contest. It is a relaxed fun weekend without the pressure of a contest. The guidelines are simple and the onus is on the operators to act within the spirit of the weekend which is simply to expose amateur radio and the plight of lighthouses to the public. This is why it is important for the ham station to be as close to the lighthouse/lightship as possible and with the controlling body's approval. A few years ago the International Association of Lighthouse Keepers decided to have an annual open day for lighthouses all around the world to encourage visitors to visit their lighthouses. They decided that no better day could be decided upon other than the Sunday of the ILLW. This move has been highly successful as the media have become involved in a number of the countries that take part in the event.

This year's event takes place on 15-16 August 2009 so if you haven't done so already, find a lighthouse nearby and get a group together or do it solo and fire up a lighthouse station. In most cases if you don't intend operating from within the lighthouse itself or one of its cottages, you really don't need to get any approval. Most first time entrants are so enthused with the event that they return year after year. A report from the Burlington ARC, Canada summed their first participation in these few words:

*"The greatest delight of the day was the active participation of the visiting children who showed a remarkable interest in the whole idea of amateur radio, especially the use of Morse Code. It was an honour and a delight to participate in this adventure and we look forward with increased enthusiasm to next year's participation."*

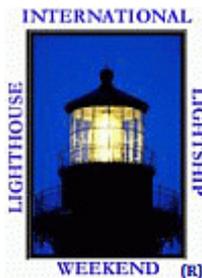
As can be seen from the ILLW website, Mike Dalrymple passed away in December 2005. He was the Treasurer of the Ayr Amateur Radio Group and one of the existing members (Peter Sturgeon MM0BQP) has taken on Mike's roll as the PR man and main co-ordinator for the ILLW. The event is now dedicated to Mike's memory as is the official web site <http://illw.net> where you will find the event guidelines, an on line entry form and lists of participating lighthouses since 1999.

- VK2CE

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## Lighthouse Weekend: 15-16 AUGUST 2009

I am looking for a team of three other people to participate in Lighthouse weekend this year.



Please phone me (07) 850-5218 if you are interested in joining the team. If we are going to do this, we will need to put the team together shortly. We will then need to decide where to go. We will travel on Friday and Sunday afternoons. There will be fuel costs.

For the new folks in the Club, the idea behind Lighthouse Weekend is to operate within a reasonable distance of a Lighthouse. All bands and modes can be used, although we will only be using 80, 40, 2 metres and 70cm. It is NOT a contest.

- Tony Case – ZL1UD

## Upcoming Happenings & Events

<i>Date</i>	<i>Happenings &amp; Events</i>
<b>2nd May</b>	<b>45th Rotorua Marathon (AREC)</b>
<b>2nd May</b>	<b>Wanganui Junk Sale</b>
<b>3rd May</b>	<b>NZART HQ Info-Line</b>
4th May	HF Net, 3.575 MHz, 19:30
5th May	VHF Net, 146.525 MHz, 20:00
<b>6th May</b>	<b>Committee Meeting</b>
<b>9th May</b>	<b>Boat Anchor Sprint</b>
<b>10th May</b>	<b>Deadline for Break-In copy</b>
11th May	HF Net, 3.575 MHz, 19:30
12th May	VHF Net, 146.525 MHz, 20:00
<b>16-17 May</b>	<b>Sangster Shield QRP CW Contest</b>
<b>17th May</b>	<b>NZART HQ Info-Line</b>
18th May	HF Net, 3.575 MHz, 19:30
19th May	VHF Net, 146.525 MHz, 20:00
<b>21st May</b>	<b>General Meeting (Remit Night)</b>
<b>23rd May</b>	<b>Trans-Tasman CW &amp; Digital Contest</b>
<b>24th May</b>	<b>NZART Official Broadcast</b>
25th May	HF Net, 3.575 MHz, 19:30
26th May	VHF Net, 146.525 MHz, 20:00
<b>29 May-1 June</b>	<b>NZART Conference (Hastings)</b>
<b>31st May</b>	<b>NZART Official Broadcast (Conference)</b>

**3rd June—Committee Meeting**  
**6-7 June—Hibernation Contest**  
**7th June—NZART HQ Info-Line**  
**17th June—General Meeting**  
**21st June—NZART HQ Info-Line**  
**28th June—NZART Official Broadcast**  
**4th July—NZART Memorial Contest**  
**5th July—NZART HQ Info-Line**  
**19th July—NZART HQ Info-Line**  
**25th July—Waitakere Sprints (Phone)**  
**26th July—NZART Official Broadcast**  
**1st August—Waitakere Sprints (CW)**  
**1-2 August—Brass Monkey Contest**  
**8th August—Boat Anchor Sprint**  
**15-16 August—Lighthouse Weekend - ILLW**  
**22nd August—Hamilton Market Day**  
**September—9th Kairangi Hill Climb (AREC)**  
**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**

## Hamilton AREC Section News

Another month has come around and I have been asked to file another report for Ham Hum.

On Saturday the 18th of April four of our members went and completed the AREC course at Papakura. We now have had 10 members complete the course.

On Tuesday the 28th of April, your management team will be having a dinner to discuss a few things that have come up. These include a replacement for me on the CDEM and SAR phone lists (health) and the topics for the Section Meeting on the 29th.

The next major event that the club has in its programme for AREC is the Bridge to Bridge Water-ski Event. This is an "all hands on deck" event, as we need a high number of operators, especially on the Sunday.

During May, I will be attending the AREC Forum at Conference. Conference is a busy time as I have meetings all day Friday, Saturday and Monday Morning. I will be doing the AREC Forum on the Sunday, and then making the "Great Escape" for a few hours.

The Icom IC-F7000 is cradled and in the Green Suitcase at the club-rooms. It needs an antenna tuner and it will be all go. It can be used CAREFULLY on a correctly cut dipole. This is a commercial rig and comes fitted with certain commercial frequencies. It has its own callsign and can only be used with this callsign. This rig does NOT belong to the club. It is owned by AREC National.

That's all for this month.

Tony Case ZL1UD/ZK1EC and another non Ham (Marine VHF) Callsign Section Leader.

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## 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.



### 9th Kairangi Hill Climb 2009

September 2009

### 26th Annual Rollos Bridge to Bridge Water Ski Classic

November 2009

16 operators needed (ZL1DK, ZL1DGK already booked in)

### Colville Connection (Kona)

13 March 2010

Using HF & 2m (simplex & repeater).

For Details about and to help with these events, contact :-

Tony Case ZL1UD [z1ud@nzart.org.nz](mailto:z1ud@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://z1ux.tripod.com>  
**eMail:** [branch.12@nzart.org.nz](mailto: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: Pogo Stick CW key by OH6DC. See <http://oh6dc.cw.googlepages.com/pogostickcwkey>*

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