

Ham Hum

March 2009



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



Next General Meeting
18th March 2009

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From the Committee

The club AGM was held last month. An excellent crowd of people were there made up of club members, new Hams and newly relicensed Hams.

Some changes occurred in the committee due to people stepping down (including myself). We continue to have two secretaries, one dealing with correspondence and the other with minutes. (see page 1 for more details)

ZL1TCE (David) mentioned that he is planning to move up north at the end of the year. David has played a major role in our annual Market Day for many years now so the committee will be busy looking for someone to learn from David this year and to take over in following years. ZL1UPJ and ZL1TFA remain as key Market Day team members.

Jock White Memorial Field Days has just finished for another year. Many thanks to all who helped this year in whatever way they could including those from out of town and those who found gaps in “real life” to visit.

Conditions on 40m was much improved from last year making it easier for the CW and Phone ops to get those multipliers and contacts.

-Editor



**Next Committee Meetings -
4th March & 1st April**

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SB PROP ARL ARLP009

ARLP009 Propagation de K7RA

Excitement mounted a few days ago when new Cycle-24 sunspot 1013 emerged, but two days later it was fading away, similar to other recent sunspot appearances. The sunspot number for February 24-26 was 12, 14 and 12. Today's number will likely be 0.

In a few weeks is the Vernal Equinox -- the first day of Spring in the Northern Hemisphere -- on March 20, 2009 at 1144z. Areas north and south of the equator will be bathed in an equal amount of Sun, and this is always a good time for HF propagation.

Using one of the popular propagation programs to predict a path from California to Australia using an average sunspot number of 12, on 15 meters on January 20, there was a good chance of an opening from 2130-0100z, with an excellent chance within that period, at 2330-0030z. On March 20 using the same numbers, the chances of propagation look excellent from 2200-0230z, with the band perhaps opening at 2130z and shutting down at 0330z. This gives us an illustration of propagation changing with the season.

Another example would be Dallas to Brazil. On January 20 on 20 meters the band would probably be open from 1800-2300z, with signals gradually increasing about 12 dB over that period. On March 20 a likely 20 meter opening would be from 1830-0230z, with signals increasing 16 dB over that period, and rising faster as well.

Geomagnetic activity has been very quiet for a long time now, and this is expected to continue. NOAA and the U.S. Air Force predict a planetary A index of 5 over the next two weeks, with minor exceptions. On March 3 the A index may rise to 8. Geophysical Institute Prague predicts quiet conditions February 28 through March 2, quiet to unsettled March 3-4, then back to quiet on March 5.

The predicted quiet conditions should be good for the CQ 160-Meter SSB DX Contest this weekend.

Internet Links

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

Technology Convention 2009

Hamilton Branch 12 and the Waikato VHF Group Branch 81, of NZART, invite you to attend the bi-annual Convention in Hamilton, Easter weekend, 11 and 12 April, 2009.

The venue for Convention is the Chartwell Scout Hall, Belmont Street, Chartwell, Hamilton.

Registration forms are available from the NZART website at:- <http://nzart.org.nz>, will be sent out via Infoline, or email application to :- techcon09@nzart.org.nz You must register before 21 March if you want to attend.

NO REGISTRATIONS ACCEPTED AFTER 21 MARCH 2009

Convention programme will be similar to other years, with speakers, demonstrations and forums, on subjects of interest to Radio Amateurs. Full programme available later.

It is vital that accommodation is booked NOW, due to V8 Supercar races the following weekend.

All enquiries to :- techcon09@nzart.org.nz

Distress beacons frequency change

Published: 11.02.2009

From Sunday 1 February, only 406MHz distress beacons are being monitored by satellite. The new 406MHz digital beacons are also more accurate at pinpointing the location.

The worldwide permanent switch to the 406MHz frequency was first announced nearly nine years ago.



Radio Spectrum Management would like to advise all users of older beacons to dispose of them correctly and ensure batteries have been removed.

-MED/RSM

Broadcasting use of frequency Band 7.1 to 7.2 MHz

Published: 11.02.2009

In accordance with the ITU Radio Regulations published last year the use of the frequency band 7.1 to 7.2 MHz for Broadcasting services will cease after 29 March 2009.

This change aligns use of the band in ITU-R Regions 1 and 3 with Region 2. (Region 3 includes New Zealand). PIB 21 will be amended by removing the New Zealand broadcasting allocation in this band.

This change means that the amateur radio service will enjoy primary access to the band after 29 March 2009.

-MED/RSM

SMT or DIL/DIP, which one was first

The late 1950's brought us the Integrated Circuit (IC) thanks to Texas Instruments and Fairchild Semiconductor. However it soon became obvious that cylindrical metal cans weren't the best for heat dissipation or for higher pin counts.

In 1962 Texas Instruments created a forerunner to the modern SMD with the TO-91 flatpack.

In 1964 Fairchild Semiconductor created the DIL package which ended up being what most ICs became available in.

As SMDs became cheaper and more circuit boards became machine-assembled, more and more ICs are now only made as SMDs.

So, while SMT is the older technology, it has become the technology of the future as more functionality/ability is crammed into an ever smaller space.

{Thanks to Elektor Vol 34 No 382}

-ZL1DGK



Setting Up a Satellite Dish for New Zealand's Free To Air Reception

- ★ Assemble dish as per manufacturer's instructions, Ensure dish mount is vertical. Leave clamps firm but adjustable.
- ★ Fix the LNBF to dish with feed cable at approximately 8 o'clock position as viewed looking into the front of the dish.
- ★ Set elevation approximately using scale on dish, to required angle.
(For Hamilton, NZ, set to **316.0° Compass bearing** (or azimuth) (in degrees) and **43.4° Elevation** above horizon (in degrees).

For more detail for your area see:

www.satsig.net/maps/satellite-tv-dish-pointing-australia-new-zealand.htm

- ★ Point the dish somewhere east of compass bearing (or azimuth setting).
- ★ Set up your Satellite set top box Receiver, and connect to your TV as per the instruction manual.

Follow the installation instructions to receive from required satellite, (E.g. Optus D1 for NZ Free To Air) and with Satellite set top box Receiver set to one of the channels you intend to watch.

Christian channels are mainly set up on Optus D2

- ★ Note: Satellite set top box Receiver must be turned on.
- ★ Insert your Satellite Finder or SatBeeper in cable between the LNB and your Satellite set top box Receiver at the LNB end of the cable, taking note of connection direction.
- ★ Adjust control Clockwise until tone sounds then reduce for no sound. Turn dish westwards on mount until tone increases as it picks up signal from satellite.

The meter reading should go off the scale when you "hit" a satellite.

(Note - by approaching from the east you should pick up Optus D1 first).

Using SatBeeper, follow the same directions as with meter. The tone pitch will increase as you pick up on the satellite but will decrease again if you move off it.

- ★ Turn meter knob anticlockwise to bring reading back to centre of scale.

Adjust dish (elevation and compass direction) and rotation of LNBF for maximum reading on meter and loudest sound output. Gradually adjust knob anticlockwise to reduce reading then readjust dish to maximise meter reading for greatest sensitivity. Repeat as necessary.

- ★ Lock off the dish. Satellite receiver is now ready to download channels.

- ★ If your satellite receiver indicates good signal level but no quality you may be on the wrong satellite or the LNB local oscillator setting is incorrect. Usually 11300 for single LNB and 10750 for Sky dual LNB.

Points to remember.

1. NZ Free To Air (Freeview) Channels are set to Vertical polarization and as such requires only 10 - 14 volts to drive the LNB.
(Horizontal Polarization requires 14 - 20 volts) Make sure this is set correctly otherwise you may not receive a signal.
2. If you are setting up an old "SKY" dish to receive Freeview, only alter the setting of the LNB from 0° to Minus 20° (degrees).
This should allow you to pick up BOTH SKY and Freeview signals off the same dish (if dish is still aligned).
3. Three different LBN's can be setup on one dish to pick up three different satellites (e.g. Optus D1 (SKY and Freeview etc.), Optus D2 (Christian and Aussie channels etc.) and Optus C1 (other Aussie Channels etc.)) but will require a DiSEqC (Digital Satellite Equipment Control) switching device which is setup inline behind the dish and uses a 22KHz signal to control the switching between each LBN.
This is done when respective channels are selected in the set top box.

-written by a club member

Club Web Pages

Past issues of Ham Hum are becoming available at the club web pages at <http://zl1ux.tripod.com>

From the main page select "Ham Hum Online" to see the front covers of

past issues. Clicking on any front cover will display the issue of Ham Hum as a pdf.

The free Adobe PDF Viewer can be downloaded from <http://get.adobe.com/reader/>

On-air training for Examination Trainees

Club station trustees may authorise the use of the suffix "XT" with the club's permanent callsign for the purposes of instructing and training prospective amateur operator candidates in practical on-air operating procedures. Provided they are directly supervised at all times by a GAOC holder, candidates may take an active part in general communication, operate transmitter controls, and engage in calling and signing off procedures. A log of contacts made under a candidate's name using the XT callsign, must be kept by the trustee for 1 year after the last contact is made by a candidate .

So, don't be too concerned if you hear ZL1UXXT on air. However, please do encourage the trainee as they work towards obtaining an Amateur Radio license.

- NZART/Q-Bit/RSM

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

The Hawkes Bay Amateur Radio Club Inc and the Napier Radio Club Inc 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.

Registrations will take place from 6.00 pm to 9.00 pm on Friday evening at the Angus Inn just a short distance away from the racecourse. The bar will be open and dinner will be available in the restaurant to meet with old friends. You may also register at the Race Course venue Saturday morn-

ing from 8AM.

The last time a Conference was held in Hawkes Bay was 1982. 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.

This will be an occasion to remember with some great speakers and many specialist forums, an innovative alternative program and an opportunity to catch up with your mates. Forums planned are AMSAT, AREC, Contesting, DXing, Icom D-STAR, HF SSTV, Antennas, VHF and WARO. A DXCC QSL Card checking service will be available.

The exciting alternative program will include an Art Deco Walk, Arataki Honey, Te Mata Cheese, Wool World. Wine tasting will take place at Black Barn and Clearview Estate with delicious schnapps tasting at Prenzels. You will need to book early for the alternative program because it will be popular and the number of places is limited.

And don't forget to get a group of your Branch members or friends together and produce an act on Sunday evening for us. The best act will receive a prize.

Register on line at <http://www.hbarc.org.nz/> and we will offer an installment plan for your fees. We have limited booked good quality accommodation at the Angus Inn located near the racecourse on Railway Rd, Hastings with special prices including breakfast for conference goers

Contact the Angus Inn directly on 0800 109 595 or email angushotelhb@xtra.co.nz for further information. There are many other excellent hotels and motels around Hawkes Bay. See <http://www.hawkesbaytourism.co.nz/> We advise you to book early and get set for a wonderful conference.

Upcoming Happenings & Events

<i>Date</i>	<i>Happenings & Events</i>
2nd March	HF Net, 3.575 MHz, 19:30
3rd March	VHF Net, 146.525 MHz, 20:00
4th March	Committee Meeting
5-12 March	ZL7T (Chatham Island)
7th March	Te Puke Market Day (Paengaroa)
8th March	NZART HQ Info-Line
9th March	HF Net, 3.575 MHz, 19:30
10th March	VHF Net, 146.525 MHz, 20:00
10th March	Break-In deadline
14th March	Colville Connection (AREC)
16th March	HF Net, 3.575 MHz, 19:30
17th March	VHF Net, 146.525 MHz, 20:00
18 March	General Meeting
22nd March	NZART HQ Info-Line
23rd March	HF Net, 3.575 MHz, 19:30
24th March	VHF Net, 146.525 MHz, 20:00
28th March	EXPO-09 5th Wellington Region Expo
29th March	NZART Official Broadcast
30th March	HF Net, 3.575 MHz, 19:30
31st March	VHF Net, 146.525 MHz, 20:00

1st April—Committee Meeting
4-5 April—Low Band Contest
5th April—NZART HQ Info-Line
11-12 April—VHF Convention 2009 (Hamilton)
15th April—No meeting (Annual Club Dinner)
17-19 April—V8 Supercars
18th April—World Amateur Radio Day
19th April—NZART HQ Info-Line
26th April—NZART Official Broadcast
29th April—Hamilton AREC Section Meeting (AREC)
2nd May—45th Rotorua Marathon (AREC)
2nd May—Wanganui Junk Sale
2nd May—GlobalSET (EmComm) Exercise
3rd May—NZART HQ Info-Line
9th May—Boat Anchor Sprint
17th May—NZART HQ Info-Line
30 May-2 June—NZART Conference (Hastings)
31st May—NZART Official Broadcast
6-7 June—Hibernation Contest
25 July—Waitakere Sprints (Phone)
1st August—Waitakere Sprints (CW)
1-2 August—Brass Monkey Contest
8th August—Boat Anchor Sprint
15-16 August—ILLW
September—9th Kairangi Hill Climb (AREC)
3-4 October—Microwave Contest

Hamilton AREC Section News

AREC Column

Following the AGM, I intend to make no changes to the line up of AREC Deputy Section Leaders. Our system works well, and if something works it is not in need of change.

As I write this we are two weeks out from Kona. Both H.F. Icom's will be used on this event. There will be a briefing on Wednesday the 11th of March 1930 at the clubrooms.

Please keep your eyes open for sporting events that may require the need of communications. If you know of any, e-mail the Section Management Team at zk1ec@nzart.org.nz This will go to the management team.

During an event in the South Island a few months ago, a participant in the event died. Although the AREC Communications Team was blameless, they were interviewed by Police. This underlines the need for keeping logs on events when communicating messages regarding the event and being attached to a National Organization, as we are with AREC.

The next issue will contain a report from Kona.

That's it for this issue

Tony Case ZL1UD/ZK1EC
Section Leader

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.

Colville Connection (Kona) 2009

14th March 2009

Using HF & 2m (simplex & repeater).

ZL1TNO/XYL, ZL1PK/ZL1DGK/ZL1LD,
ZL1UD/ZL1CNM, ZL1UPJ/OM, ZL1IC,
ZL1TCE Reserve : ZL1AVR, ZL1TXQ
already booked in.



Hamilton Section Meeting

29 April 2009

9th Kairangi Hill Climb 2009

September 2009

26th Annual Rollos Bridge to Bridge Water Ski Classic 2008

November 2009

16 operators needed (ZL1DK, ZL1DGK already booked in)

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



Contacts :-

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: <http://z11ux.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: Optus D1

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