BREAKOUT

The Newsletter of the Hastings and Napier Amateur Radio Clubs

Hastings Branch 13 NZART – Napier Branch 25 NZART

Volume 5, Issue 4, April 2007

Editor
Leith Jennings
ZL2AL

Hastings Br 13
Club Call
ZL2AS

Napier Br 25
Club Call
ZL2GT

IRLP
Node
6793
147.250

HB DX
Cluster
ZL2AL-1
144.650
Connect
and type

Branch Nets
9.00 AM
Sunday
Morning
3615 Hz
147.250
MHz

Why is This Man Distraught?

The East Coast Contesters ZM2M Team survives equipment failure to post a good score in the 2007 CQ WPX Contest. Full Story and Photos Inside.

Join the KIWI DX Group
Talk to ZL2AL for Details

Inside This Issue

HASTINGS BRANCH 13

President: *Warren Harris ZL2AJ 027 564 9284 or 856-8587 email warren@technaserve.com*

Vice President: *Robert Wallace ZL2SG Ph. 878 4993 email robandtina@freenet.co.nz*
Secretary:
Treasurer: *Bill Lowes ZL2UBG Ph. 877 5078 email bill.lowes@clear.net.nz*
AREC/CD: *Robert Wallace ZL2SG Ph. 878 4993 email robandtina@freenet.co.nz*
AREC Deputy: *Warren Harris ZL2AJ 021-649284 email warren@technaserve.com*

Committee: *- John Newson ZL2VAF Ph. 876 3218 email john_newson@clear.net.nz*
- Wayne Wilson ZL2WL Ph. 027 499 7109 email autoworxcarvalet@airnet.net.nz
- Chris Johnson ZL2VC Ph.879 5219 email zl2vc@paradise.net.nz
- Lee Jennings ZL2AL Ph. 876 6662 email leejen@paradise.net.nz
- Peter Dingley ZL2LF Ph. 843 2664 email

Hastings QSL Distribution: *Chris Johnson ZL2VC Ph.879 5219*
Hastings Newsletter Distributors: *Lee (ZL2LE) & Morrie (ZL2AAA) White Ph 876 7904 email zl2aaa@paradise.net.nz*
NZART License Examiners: *Lee - ZL2AL and Peter - ZL2LF*
Club Call: ZL2AS

Club Nights: Fourth Wednesday each month at 7.30 pm Surf Club Rooms, Windsor Park, Hastings

Hastings Branch 13 - President's Report

This coming branch meeting will be a demonstration of DominoEX, the new digital mode developed by ZL's and being used world wide. I look forward to seeing you there.

Note Ham classes have now begun. If you have anyone you know of wishing to become a ham get them to get in touch with me immediately

Warren Harris ZL2AJ

I will be travelling to Hamilton's REG junk sale on the 12 May leaving Fri 11th ,
if any one has anything they wish to sell be happy to take as i have a table which i can fill half off, contact me on 8703848 work or 027 499 7109
will pickup between 7th -11th only Returning home Monday also have ad page 52 Break In
Wayne ZL2WL

NAPIER BRANCH 25

President: *Laurie Winton ZL2TC 843 8519* *email laurie@wilcom.co.nz*
Secretary: *Stan White ZL2ST 845 2422* *email stan.white@paradise.net.nz*
Treasurer: *Stan White ZL2ST 845 2422* *email stan.white@paradise.net.nz*

AREC: *Tony Wall ZL2RZ* *email* ***ttwall@paradise.net.nz***

Committee:

Tony Wall ZL2RZ *email* ***ttwall@paradise.net.nz***
Gary James *ZL2GAZ 843 9596* *email gazaj@paradise.net.nz*

Committee Meetings: *Third Monday of the month 7pm at Club Rooms*

Club Call: ZL2GT

Club Nights: First Wednesday each month (except January) 7.30pm at the Club Rooms: 123 Latham Street Napier

Branch 25 Napier News...

The next Napier meeting will be at the clubrooms at 7.30 pm on Wednesday 3 May. Consider the remit for conference in Break In and bring your opinion to the meeting.

At our last meeting Stan ZL2ST showed some video clips of the recent ZM2M CQ WPX contest activity plus Field days of 2007 and 1998. Some things change and some things don't. The 1998 operation was down at Tait's Beach before we moved to the hangar.

Look for a report and photos elsewhere in Break Out of the recent CQ prefix contest ZM2M activities. A good effort for the bottom of the sunspot cycle despite our wire aerials being on the ground when we arrived on site plus logging problems and an equipment problem.

DXpeditions continue with K8S on Swains Island (near Western Samoa) kicking up a storm on all bands in an excellent operation. From mid March they will be on from Western Samoa itself. A country that is awaited by many will be on from 20 April. It is Scarborough reef in the Taiwan area. Some predictions are that we are very close to sunspot minimum and the next peak will be about 2010.

de STan ZL2ST

East Coast Contesters WPX SSB Contest

The East Coast Contesters were at it again during the CQ WPX SSB Contest on March 25. The contest is a 48 hour affair and the object is to work as many prefixes and counties during the weekend. There are many divisions but as usual we chose the MO2R (Multi op – 2 radios) division. Stan, ZL2ST, Lee ZL2AL, Michael ZL2FAR, Peter ZL2LF and Mike ZL2CC from Gisborne were on hand to burn up the bands. Station 1 consisted of a FT1000MP and Dentron Amplifier into a 20M Force 12 yagi or an 80M dipole on 80M. The second station had another FT1000MP MK V Field driving an Ameriton amplifier into a TH3MK3 Tribander or a 40M Dipole on 40M.

We were a little late getting under way as some critical antenna work on the antennas absorbed our time until after the contest started at noon local time on the Saturday. Within a few minutes of getting operational on 15M good run rates of 150 and hour were achieved but as 15M slowly died during the afternoon focus shifted to 20M. As usual one had to play hopscotch with two stations, four antennas and what of the five bands were producing the best run rate. 40M came alive around 0500UTC and working split listening about 7200 produced some good runs and The Ameritron amplifier gave out a large flash and a loud bag about a third of the way into the contest. The computers run Windows 98SE along with Writelog software. A few hours into the contest we noticed that one computer's clock was well out of UTC time. Horrors!!!

The problem was not setting the UTC time to GMT (Monrovia) rather GMT (England) It's a known software fault and I should have picked up before we started to operate. The other station had some time issues also so we were really hit with a bad dose of "Murphy" this contest and Stan has been "volunteered" to clean up the messy logs. (Thanks Stan) It goes to show what can happen if you don't check and recheck everything before a contest starts.

All in all we did reasonably well with over 1100 QSOs and 1.787040 million points when the logs are finally finished. The timing errors may cost us dearly but we won't know that for another year when the results are published in CQ Magazine. Contests are great for learning how to be an effective operator. It does take a while to get your head around the fact that your head should control your mouth, not the other way around.

I would recommend that everyone should have a go in one of these international contests. They re a lot of fun and it makes for a great weekend with your mates. If anyone feels so inclined please give me a call and I will help you get started in contesting.

73, Lee ZL2AL

The ZM2M East Coast Contesters

ZM2M Statistics

9 DXCC Entities on 80M

50 DXCC Entities on 40M

62 DXCC Entities on 20M

39 DXCC Entities on 15M

1 DXCC Entity on 10M

Total of 86 Entities (Counrties)

480 unique prefixes

1143 QSOs

TOTAL 1,787,040 Points

All in 48 hours!

Thanks Stan

CQWW WPX Contest Pix

Mike ZL2CC tries out the newly designed "Contest Toaster" early Sunday morning.

Stan ZL2ST concentrates on "running" a pilup

The ZM2M Contest Site with 3el 20M Force 12 Yagi at the end of the shack.

Michael ZL2FAR wonders "When will it ever end?"

Stan ZL2ST and Mike ZL2CC doing the business during the weekend.

Lee ZL2AL looking for rare prefixes in the wee small hours.

Peter, ZL2LF loves a good joke!

ZL2CC's Ameritron Amplifier suddenly exploded with a flash and a loud bang. One of the 572Bs (the amp has four) shorted taking out a couple of resistors and carbon tracking a glass fibre circuit board. Mike vows to have it working for the next contest.

The VHF Convention Easter Weekend in Wellington

by Warren Harris ZL2AJ

Hi all. This months report will cover my trip to Wellington for the bi-annual VHF Convention.

Easter weekend I spent i Wellington, attending the VHF Convention. It was hosted by Wellington VHF Group in Tawa. I met many hams that I have only spoken to, and was able to talk technical with many people about common interests.

Saturday morning the program began with an official opening by the Branch 74 President John Andrews. Our first guest speaker was Bendon Pitt, from the RNZAF. He spoke about the P-3 Orion upgrade, and focused on the new communications facilities to be fitted. We obtained an understanding of the communication capabilities the new aircraft will have, and were the first outside of the air force to be so briefed. Brendon was an excellent speaker and held everyone's attention. Following morning tea Trevor Burgess, the CEO of Execom, formally AWA, spoke to us about the products Execom are producing, the market they are delivering to and some of the difficulties with current economics. Trevor spoke with passion, and gave us an insight into a local industry in commercial radio.

Doug Ingham ZL2TAR spoke next about up and coming digital freeview TV, both satellite and terrestrial. The presentation included information about channelling, data error correction, some of the politics involved, and a current time frame for roll out. Doug has an in depth involvement in this subject, contracting to Cordia, formally BCL.

ZL2VK Peter Ford was next with a presentation on how he has converted a T752 Trunking commercial radio for use in the 70cm amateur band, by effectively re-writing the code for the micro controller. So if you spot any T752's floating about on Trade-me, they just might be valuable after all...

After lunch Fred ZL2AMJ gave us a talk on how to teach radio to school kids. With some cheap parts and a bit of time, Fred was able to demonstrate to us, the subject class, how radio waves work, polarisation, radiation patterns of simple antenna, and even a simple form of modulation. The teaching kitset Fred has developed has already been taken up by physics teachers in some schools in the Wellington region.

ZL1BPU Murray then gave us a talk on some new digital modes that he has helped develop This included DimonoEX mode, a simple digital chat mode that requires very little hardware, a computer with a sound card, and a transceiver Although this mode is used most on HF, its applications are just as valid on VHF. It is extremely reliable on a noisy path, and was claimed to work 10dB deeper into the noise than CW. The software for this mode is redily available on the net, and the mode is simple enough for the beginner in digital modes, as well as the serious digi moder. Google Dominoex for more info.

ZL2AFP Con took the floor next with narrow mode TV. Again mostly used on HF, this mode is a fuzzy mode, where with a PC and a webcam, and some software, some simple interconnects, and a transceiver, you can send your mug around the world. He was able to demonstrate this using his PC with a webcam and showing us on the projector. Google ZL2AFP NBTV for more info.

After afternoon tea we were set loose on ZL2TLL, the Wallace mobile rally. With 6 car teams, we were set with the following tasks. First task was to navigate the instructions provided. Second was to answer the questionnaire given on the way. Third was an operating contest, where we had to make as many contacts as possible in 3 x half hour slots. Forth was the mystery task, which was to make an Easter bonnet with the materials provided. A fun way to spend an hour and a half.

Saturday evening we had a dinner at a Chinese restaurant in Porirua. I was able to chat with other hams from all around the country, while enjoying the smorgasbord meal.

Sunday morning began with an update and demonstration on the Kiwisat project. They are close to their goal now and require funds for solar panels and launch. If you are interested in donating to this project please contact Wellington VHF group or myself. For more info Google Kiwisat

After this was a talk called "20 years of the national system". Various speakers presented their experiences of getting the national system going, from conception to trials, to getting it on the air. There was footage of the first trials of the system. Some of the stumbling blocks along the way, along with the solutions were discussed, and where to from now with the system.

After lunch ZL2ASF, a repeater trustee of Motueka 670, discussed some of the issues you can have on a repeater site, and ways of solving them. He discussed intermods, isolation, and a way of measuring site noise with normal test equipment. Google f-intermod for the intermod calculation tool.

ZL1JD John and ZL1WTT Grant gave us a talk on D Star, a digital mode now used in the united states. Grant and John have been developing an enhanced version of D Star, that would be backwards compatible with existing D Star systems. This is the forefront of amateur radio today,

and is being developed by hams for hams right here in New Zealand. Google d-star for more info.

The forum followed next with such subjects being discussed as Contest dates and rules, a database for contest sites, a ZL CTCSS implementation plan, "repeaters will be the death of amateur radio", and the next VHF convention venue in 2 years - Hamilton. Ideas were thrown around the room, and alot was covered.

This was followed by the repeater trustees meeting, which covered an update on the progress of up and coming national system nodes, and some site issues by a few branches.

On display at he conference was the Kiwisat display, a 24GHz transceiver, some Execom commercial equipment, and a repeater controller project I am developing.

The one on one contact at the convention was invaluable, being surrounded by like minded people for 2 days and throwing around ideas and having them churned up and thrown back around was brilliant. Fr anyone interested in VHF or UHF I recommend attending the next convention, to be held in Hamilton, Easter 2009. Stay Tuned.

New crew, civilian space traveller arrive at ISS

(Apr 10, 2007) -- The Expedition 15 crew of Russian cosmonauts Fyodor Yurchikhin, RN3FI, and Oleg Kotov, and space flight participant, software pioneer and aviator Charles Simonyi, KE7KDP, arrived at the International Space Station Monday at 1910 UTC and greeted the Expedition 14 crew not long after opening their hatches at 2030 UTC. Yurchikhin, Kotov and Simonyi launched in a *Soyuz* spacecraft (photo) two days earlier from Baikonur Cosmodrome in Kazakhstan.

A Hungarian-American flying under contract with the Russian Federal Space Agency, Simonyi will speak with four schools via Amateur Radio while he's in space, including one in his native Hungary, under the auspices of the Amateur Radio on the International Space Station (ARISS) program. In addition, Simonyi plans to do some maintenance on some of the ham radio gear on the ISS. He'll conduct some testing to isolate an antenna problem and reprogram a second unit to correct a configuration problem.

Simonyi also will conduct some research before returning home April 20 with the Expedition 14 crew of Michael Lopez-Alegria, KE5GTK, and Mikhail Tyurin, RZ3FT, who have been in space since last September. Suni Williams, KD5PLB, who has served as an Expedition 14 crew member since December, will become part of Expedition 15. She is scheduled to return home this summer on the shuttle *Endeavour*.

You May be Addicted to Ham Radio If?
by Martin Brossman - KI4CFS

For fun and maybe some healthy reflection I asked hams in eHam.net to answer the question “When is ham radio an constructive hobby and when is it an addiction?” This has lead to both humorous and part-serious responses that I will let you sort out. Here they are:

You might be addicted to ham radio if?

When you get up at 03:00 AM for a DX schedule on 75 meters; net control every Wednesday evening and checks in every day of the week; radios in the airplane, his car and even my car; back yard looks like

Frankenstein's lab; friends keep asking why the roof is full of aluminum tubes and wire; and calls people on the phone and talks about passing radiograms.

When you notice that the wife and kids have left you, you place a personal ad something like this, divorced male, hardcore ham radio operator, secure job, seeks female ham operator send pictures of radios, amplifiers, towers and antenna farm.

When you have to get your 'ham' fix at all costs and ignore the more important things in your life such as your job, your family and your health.

When you are ecstatic about getting a 200 or 300 watt soldering iron to do up PL 259s the RIGHT way--And, your wife asks you what its doing in your bed.

When your reaction to a solar flair bringing down the entire electric in the country is that the bands will tank for a week or more.

When you look at a full moon and wonder how much antenna gain you'd need.

When you know Antarctica is a continent and you know penguins range as far north as the Galapagos Islands.

When you think ceramics classes teach how to make antenna insulators.

When someone mentions post and beam construction and you envision a tower with a tri-bandier on top.

When you are bored, you tap out CQ.

When someone asks for directions, you pause, wondering if long or short path would be best.

When you can look at a globe and be able to point to your antipode (when you know what an antipode is).

When you can name three countries completely surround by Italy.

When you know how many ports are on Pitcairn Island, what the most common last name is there, and why it is the most common last name.

When one would rather ”entertain", a contest, rather than your wife/girlfriend...or husband/boyfriend, whatever your scenario is.

My your wife says “You wake up at 3am on your days off because you say the 'iono-whatever is right. When it rains, walk into the back yard. The antennas are so dense they act like an umbrella'".

When your dogs are learning CW. My WYF and kids know what ITU region we are in and understand the GMT offset.

3. When your car has more antennas than the local TV station mobile news van--including the microwave dish!

4. When you see a porcupine constantly hanging around your car night after night.

6. When you have a heavy duty trailer hitch installed just to pull your enclosed small utility trailer/mobile ham setup.

8. When your neighbors demand you fully enclose your yard with a fence and put 'Danger Radio-Active' and 'Caution--microwave radiation' signs on it.

You notice more antennas than road signs when your driving your car.

If your radio equipment has a more advanced processor than your PC.

If you think a fish finder is a piece of radio equipment.

You hear about a pileup on the local news and you run to your radio equipment and start calling CQ.

If you hear about a couple who is a perfect match for one another and you proceed to ask about their VSWR.

If you love the smell of generator gas during field day.

If the UPS man rings your door bell, and you start wondering to yourself how in the world he knows how to send the letter "A" over and over again.

If you install ferrite beads and place shrink tubing on your toaster appliance cords.

If you ever tried to figure out the operating frequency of your microwave oven.

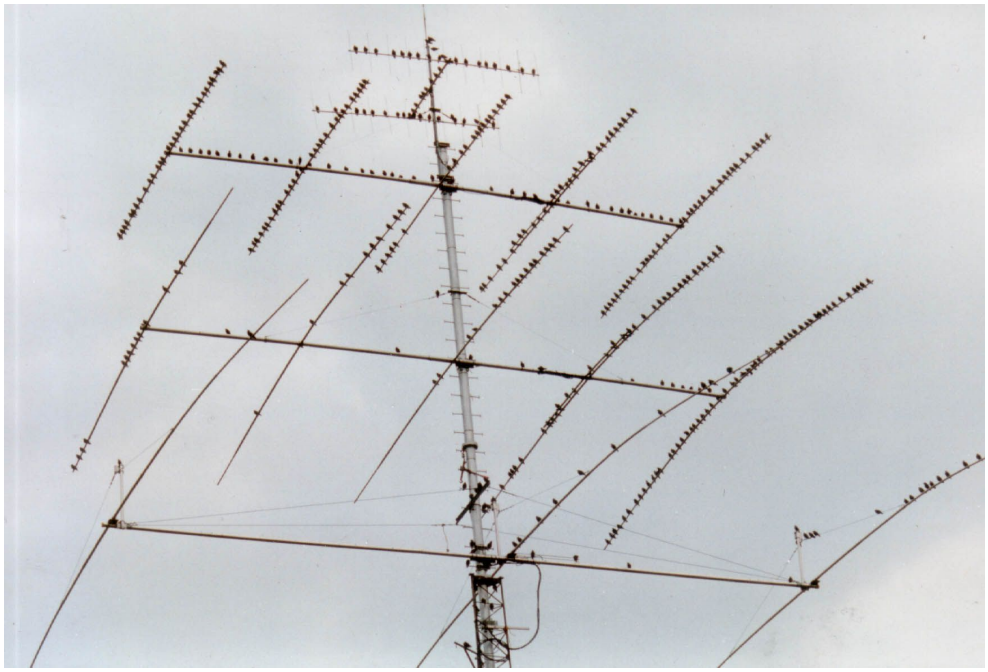
If your wife tells you to "cut the grass" and you thought she said, "can you pound brass."

If someone asks, "What time is it?" and you proceed to answer them as ... "At the tone, it will be XX:00 hours, and XX:00 minutes - Coordinated Universal Time.... BEEP!"

If you spend too much time posting on eham.net and then writing article from the posting!

So what is your story? What would be your answer to, you might be addicted to ham radio if? I want to thank all the Ham's that contributed to this "inquiry"

Martin Brossman - KI4CFS and his wife KI4GMU (her name is Barbara).



This picture shows my mate Brian's (VE3XA) antenna system. That's 3el on 40M, 5el on 20M and 15M. He is situated on a high ridge just north of Toronto. As the birds fly south for the winter they use his antenna as a stopover.

Tips for Driving Ground Rods by Jeff N3JBH

I have heard many different ideas on how to drive a ground rod into the ground. And I assure you there is several different ways to accomplish this task as well. But being the sort of fellow I am I always like to find the easy way out. Ok so I can hear you now easy way pay some kid to do this. Well that probably is the simple thing but i want suggest a few ways for the do it your self types here.

The first method.
I call the barbarian method. Please let me explain.

We take ground rod in hand and place it in the location of are picking and then with are free hand we strike it with a hammer or other blunt instrument. Results? Well usually you never get that ground clamp on. Secondly you probably have several banged up parts all over your upper appendages. And finally you'll get disgusted and saw it off long before you have it deep enough to do any real benefit. This is the hard and wrong method.

The second method.
is simply an improved version of the above where we fashion a covering device such as section of iron pipe with a cap screw on. And pound it in the same fashion. End result about same as above.

The third method.
Now this will get you all wet that I promise you. But here we go. We construct are own piece of machinery here folks. So get ready to visit your local hardware store. You will need a piece of ¾ inch steel conduit 10 feet long if you doing an 8-foot rod add 3 feet for 12-foot rods. I like EMT for this. You'll need 1 bronze hose adapter and lastly a garden hose. Now to assemble are parts. You need to have the conduit thread with national standard pipe thread on one end. This is where you screw the bronze adapter on.

Connect water hose and insert rod in to conduit. Place the unit over where you want the rod and turn on the water. You may want to install a ball cock valve on conduit between bronze adapter and conduit to start and stop water flow. Now you simply what the water rushing out the pipe dig your hole for you. I like this method it is not fast and don't work in rocks. But hey you have the tool left for whom ever May want use it. And they think your pretty darned smart to have made this gizmo.

My fourth and final method.
I like this the best. Now we need to take a trip to our local tool rental center. What we want is an electric jackhammer around a 30 ponder is perfect.

Now before we get to far a point I must raise if you tell the guys your going drive ground rods with this they may frown and not rent it. So get a bit any bit tell them your bust block wall with it.

Now you have the jackhammer what you need is to place the ground clam loosely over the ground rod so it will slide to bottom easily. Place jack hammer over the ground rod and drive it home. This method works in rock soil darned near any place. It is fast simple. And cost around $20.00 to rent the hammer all day. Best part is no sweat no bumps or bruises. And you'll have the rod down faster then our beer. Not that I would dare think a ham would drink beer during work oh no. Well again as always folks I like to thanks you and the great staff of eham for permitting me to do this littlie how to thing.

73, Jeff - N3JBH

Some interesting facts about 025

- The network was 'switched on' on 10 August 1987

- The first 025 phone cost in excess of $5,000 and weighed 5kg. Contrast this with today's Samsung W531 which costs $299 and weighs 128grams

- The first handheld 025 phones gave approximately an 8 hour standby time and just 20-30 minutes of talk time. By comparison the Samsung W531 of today gives up to 9 days of standby time up to 4 hours of talk time

- The 025 network was built to take 10,000 customers – we achieved that goal within one year and had to immediately start building capability for 100,000 customers

- 025 was up with the minute when it was launched - the 025 system also supported Telecom "Flightphone" service, whereby passengers could make calls from a special cordless phone during flight. Both Ansett and Air New Zealand had a trial system fitted. The Flightphone system was a world first but difficulties with billing and distributing the phone to passengers during short flights reduced its effectiveness

- But not any more - only 10% of 025 phones were text capable and we know NZers like to text! Last Christmas Day New Zealanders sent over 18 million texts on their 027 phones

- The first phone was an OKI CDL410. This was initially sold as a carphone and could be converted into a "suitcase" phone for easy transport … though the phone's size didn't leave much room in the suitcase for papers let alone lunch!

- In all, over 240 different models of 025 mobile were marketed in NZ

- Simon Cooke-Willis currently works for Telecom as a Compliance Manger in the Risk Services Team. He has been with the company in one or other of its forms for 38yrs. Simon made the first ever mobile phone call while working with Ericsson engineering staff setting up the Wellington test system. The first call was just a few minutes long and at the time seemed like business as usual. The first words spoken over the network were, "Good grief it works".

Thanks to Dave Walker ZL2DW

And Thats Breakout for April 2007

73. de Lee ZL2AL