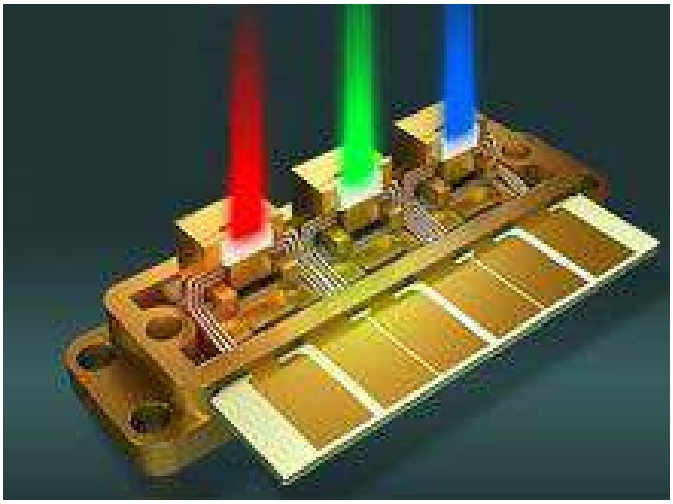
Ham Hum

March 2008

The official newsletter of
The Hamilton Amateur Radio Club Inc
Branch 12 of NZART - ZL1UX
85 years young



Next General Meeting

Team from AMSAT-ZL on Kiwisat

19 March 2008

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2m net—**Vacant**			

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From the Committee

Club Webpages

The club has a new Internet Presence. It is located at

http://zl1ux.tripod.com/

Save this page as a link in your browser.

One way to check up what is happening in the club is to check the webpages. These will be updated when there is something to update.

AREC

The Branch has the following events on its books:

Kona Colville Connection – March 8 2008

Hawkes Bay Rally – Saturday 26 July 2008

Rally NZ – Thursday 28 to Sunday 31 August 2008

Lighthouse Weekend

Our club is participating in this weekend event from Cape Egmont Lighthouse. We will be away from Friday 15 to Monday 18 August 2008. The team so far is David, ZL1TCE; Jono, ZL1UPJ and Tony, ZL1UD. We will be active on 80M, 40M, 2m and 70cm. We are looking for one more person for the team.

Next Committee Meeting - 2 April 2008

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SB PROP ARL ARLP006

ARLP006 Propagation de K7RA

After a solid week of sunspots (January 29 to February 4), the following three days have been blank. February 2 was an activegeo magnetic day, with a solar wind stream spewing from a coronal hole near sunspot 982.

Another solar windstream from a coronal hole is expected to strike Earth on Sunday, February 10, causing unsettled conditions. The predicted planetary A index for February 8 through 15 is 8, 12, 15, 10, 10, 10, 10 and 5. That was from NOAA and the U.S. Air Force, and Geophysical Institute Prague predicts unsettled conditions February 8, unsettled to active February 9-10, and unsettled again on February 11-14. The Australian Space Forecast Centre's geomagnetic forecast expects mostly unsettled to active conditions with storm periods possible at high latitudes on February 9, and mostly unsettled with isolated active periods and storm levels at high latitudes on February 10.

Following this weekend, NOAA predicts the next active conditions around February 28-29. Their prediction for solar flux is flat at 70 for each of the next 45 days, and this probably indicates little or no sunspot activity.

Bob Leo, W7LR of Bozeman, Montana and IS0/YO3RA (Sardinia) have been trying for several years to make contact on 160 meters. Bob claims 228 countries on 160, but says Sardinia seems to be "a black hole", even though both have what he calls "reasonable stations" for that band. With some acreage for antennas, Bob runs full power, has various receiving antennas pointed toward different directions, and even a two-element transmit array toward Europe with 4.5 db gain.

He asked what time would be best to work Sardinia on 160, and frankly, I didn't know, except I would expect darkness at both ends of the path when successfully making contact. The propagation modeling programs generally don't work below 3 MHz. I noted that this weekend darkness should extend over both locations from 0036-0629z, or at least the sunset in Bozeman will be 0036z and sunrise in Sardinia is at 0629z. Bob emailed back, and said he finally heard YO3RA at 0510z. He hopes to work him this season before YO3RA departs Sardinia on

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February 15.

Several readers wrote to ask about the recent sunspot mentioned in last week's bulletin, hoping it was a cycle 24 spot. Alas, sunspot 982 had cycle 23 polarity. Any cycle 24 spots in the near future will be reported here.

Stan Tacker, N5OHM of Tulsa, Oklahoma writes that the absence of sunspots and geomagnetic activity is great for 160 meters, but creates problems for AM broadcast stations. He operates one in Northeast Oklahoma on 1.57 MHz (which is 191 meters), and that is a portion of the AM broadcast band where stations run low power, sometimes 250 watts during the day, and as little as 6-8 watts at night. There is also a Mexican "border blaster" station on this frequency, and his station is experiencing QRM well into mid to late morning, hours after sunrise. Stan's station is running 1 KW, and broadcasting in the daytime only.

Chuck Zabriskie, KE5HPY in Houston, Texas wrote on February 2 that the 60 meter shortwave broadcast band (4.4-5.1 MHz) was jumping on January 29-31 from 0300-0500z. He heard African stations "that rarely rise above the noise at this QTH". He copied Angola, Madagascar, Chad, South Africa, Swaziland and Botswana, all as loud as Midwest AM broadcast stations.

Regarding the 60 meter ham band, check out a web page devoted to that band at http://www.60meters.info/.

Antenna VSWR Testing. Part II

{This is the second part of the VSWR article from last month. I suppose automatic formatting isn't always a good thing.—Editor}

It's all a bit of gamble if only one transmit frequency is used. Essentially the aerials are generally supplied slightly too long and will need a little cut off them if the SWR is too high. Only remove a tiny bit at a time. Measure the SWR after each cut, if the SWR is rising stop immediately, if it is decreasing continue until either you are happy with the figure or it

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starts to rise. The attained SWR should be similar to that specified by the manufacturer.

If only two transmit frequencies are used, compare the SWR on the highest frequency with the lowest frequency. If the SWR is higher on the highest frequency the aerial is a little long, so it is safe to cut a little off the aerial. If the SWR is higher on the lowest frequency, do not cut the aerial. Ideally you should have similar SWR's on both frequencies after tuning.

The best is when a number of frequencies are used. You will need 3 to test with. Obviously the minimum and maximum frequencies, and one as close as practical to the centre of the range of frequencies the transmitter operates on. We'll call these the minimum, maximum and centre frequencies. Measure the SWR on all three frequencies. If the lowest SWR is on the centre frequency leave the aerial alone (ideal length). If the lowest SWR is on the highest frequency also leave the aerial alone (this signifies the aerial is short, cutting it would make things worse). Only if the SWR is lower on the Lowest frequency would you cut the aerial. If cutting the aerial, the ideal is when the lowest and highest frequency have similar SWR's and the centre frequency has the lowest SWR.

Some aerials (usually only CB) have a moveable tap on a loop or coil than can be moved. Follow the above procedure, then move the tap whilst observing the centre frequency, adjust for minimum SWR. Double check the top versus bottom after doing this as another adjustment may then be necessary.

Hopefully the information above may help you attain acceptable SWR and allow your radio to obtain reasonable performance.

Remember, it is important not to transmit (unless absolutely necessary) if the SWR is above 3:1

-ZL1TAJ

Contesting, DXing, etc 2m and above.

An Introduction

For those who only have FM capability, then the upgrade to multimode SSB/CW need not be too costly. Most operators have limitations on equipment cost, due to either their retired or married status, or financial burdens such as mortgages.

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Certainly it would be nice to have a all singing and dancing rig, and a fair number of operators use FT817 (HF thru 70cm). Higher power rigs increase the cost.

A number of stations use, what would be called "boat-anchors" (which are about ready to be tipped over the side) and are very successful at contest and DX operations. Despite their age, this older equipment can be worked on to add other features, such as internal keyers, and optimising performance.

Steve ZL1TPH has a number of older transceivers...

From 50 MHz thru to 432 MHz multimode transceivers (singleband and multiband) can be found. (They sometimes appear on trademe and vkham sites). Just watch out that you may be bidding with other members of this reflector. If you are after a multimode rig, then ask on this reflector as someone may have one for sale or as a loaner.

Some stations also use HF transceivers and add transverters (up and down converters) to cover these bands.

For higher bands, such as 1296 and above (sorry, 925 MHz is a less active band, and wasn't included there) transverters are usually the dominant way of becoming active. There are kits available from overseas, 2nd hand equipment and also equipment available as loaners. Some ops build equipment (at their own cost, or just loan) to help promote growth on the higher bands, and I thank everyone who supports this.

A lot of hands would go up, if people were asked if they used loaned equipment. So, don't be afraid of asking questions. Some of us have access to test equipment which can help in home construction or repair.

Enjoy the VHF,UHF DX and contesting facet of the hobby. DX is a relative term, and I am quite happy working someone in the next town, or some VK (which I haven't done yet)

Overseas VHF DX doesn't happen too often, although Meteor Scatter and Digital modes make it more frequent (ZL3TY and others). One can also work Satellites.

Sometimes DX openings (such as inside NZ) appear on the higher bands and then close and because of low VHF, UHF numbers no contacts result. I think DX openings are more frequent, such as early morning or dusk enhancements, but its a numbers game. One could use this reflector or the

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VK/ZL logger to set up skeds / alert others of your activity.

Anyway, enough waffle from me.

Kevin, ZL1UJG, (NZART BI VHF Scene columnist)

As posted to the ZLVHFCONTEST Yahoo group

OTC

Congratulations to ZL1WW for attaining his 50 year certificate in the Old Timers Club.

Propagation

BAND	THE QUIET SUN	THE ACTIVE SUN
80M	Seldom has skip propagation	Seldom has skip propagation
40M	Open around the clock	Open around the clock
30M	Open daylight hours	Open around the clock
20M	Open daylight hours	Open around the clock (usually)
15M	Dead - no skip propagation	Open - daylight hours only
10M	Dead - no skip propagation	Open - daylight hours only

-NA5N

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Club Dinner:

Monday April the 7th

7:00 pm

Valentines

(on the corner of Clarence Street and Anglesea Street)

$19.95 per person not including Drinks

The Club Dinner will replace our normal April Club meeting. There will be no meeting at the Clubrooms owing to lack of access during the V8's.

The club encourages members to bring their partners to this dinner. The more – the merrier. The venue and date have been chosen to keep prices down, and quantity and quality up.

Please phone Tony ZL1UD on 850-5218 to give the numbers attending by Saturday March 29th. We need to book tables.

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Upcoming Happenings & Events

Date	*Happenings & Events*
1st March	**Paengaroa Junk Sale**
1-2 March	**ARRL International SSB Contest**
3rd March	HF Net, 3.575 MHz, 19:30
4th March	VHF Net, 146.525 MHz, 20:00
8th March	**Kona Colville Connection**
8-9 March	**RSGB Commonwealth Contest (CW)**
9th March	**HQ Infoline due**
10th March	**Closing date March/April Break-In**
10th March	HF Net, 3.575 MHz, 19:30
11th March	VHF Net, 146.525 MHz, 20:00
15th March	**Wellington Radio Expo**
17th March	HF Net, 3.575 MHz, 19:30
18th March	VHF Net, 146.525 MHz, 20:00
23rd March	**HQ Infoline due**
24th March	HF Net, 3.575 MHz, 19:30
25th March	VHF Net, 146.525 MHz, 20:00

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30th March—NZART Official Broadcast, 20:00

5-6 April—Thelma Souper Memorial WARO Contest

5-6 April—Low Band Contest

7th April—Club Dinner

12th April—Boat Anchor Sprint

10th May—VK/Trans-Tasman Contest

14th May—Remit Night

17-18 May—Sangster Shield QRP CW Contest

30th May-2nd June—NZART Conference

7-8 June—Hibernation Contest

18th June—Conference Report

2-3 August—Brass Monkey Contest

16-17 August—International Lighthouse/Lightship Weekend

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Motorola Completes Tender Offer for Yaesu's Parent Company

On Wednesday, January 16, Motorola, Inc announced that its subsidiary, MI, Inc, has successfully completed its tender offer to acquire a controlling interest in Vertex Standard, parent company of Yaesu. The tender offer period expired on January 15 with approximately 5.4 million shares tendered and accepted. On November 5, 2007, Motorola launched the tender offer, in cooperation with Tokogiken (a privately held Japanese company controlled by Vertex Standard's president and CEO Jun Hasegawa) with the intention of forming a joint venture to develop and sell Vertex Standard products and develop select Motorola products. All regulatory clearances required for the completion of the transaction have been obtained.

Starting on January 22, Motorola will have a total ownership stake of approximately 78 percent of Vertex Standard on a fully diluted basis (excluding certain stock acquisition rights that are scheduled to be cancelled), following the settlement of the tender offer for approximately 12 billion Yen (almost $112 million US dollars) in cash. Through a subsequent restructuring process, Motorola will own 80 percent of Vertex Standard, while Tokogiken will retain a 20 percent stake.

"We are extremely pleased to team with Motorola, a global technology leader that has been a leading provider and pioneer in 2-way radio communication solutions," Hasegawa said. "With Motorola, Vertex Standard will be stronger and better positioned to deliver new and innovative 2-way radio solutions for professionals and consumers."

According to Motorola, "[t]he joint venture is expected to expand and develop a comprehensive suite of products to address the rapidly growing demand for 2-way radio solutions. Vertex Standard's strength in the amateur, marine and airband (avionics) segments provides Motorola with access to new business opportunities. In addition, Vertex Standard's solutions are highly complementary with Motorola's products and add greater depth and breadth to Motorola's Government and Public Safety business. The venture also provides additional engineering talent for Motorola." -ARRL

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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.

Kona Colville Connection 2008

8th March 2008
Contact ZL1UD if you want to help. Using HF & 2m (simplex & repeater).
ZL1AVR (reserve), ZL1CNM, ZL1DGK, ZL1IC, ZL1KK, ZL1KN, ZL1LD, ZL1PK, ZL1TCE, ZL1TNO, ZL1TXQ (reserve), ZL1UD, ZL1UPJ, ZL2TW already booked in.

Twin Rivers Water Ski Race 2008

12th April 2008.
Ngatea to Paeroa.

WRC Promo Day

29 June 2008, Mystery Creek

WRC Rally 2008

29-31 August 2008, Mystery Creek
Names of primary operators to ZL1UD via eMail. Reserve your spot quick. Possibly moving from checkpoints every 5km to every 3km.

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

Tony Case ZL1UD zl1ud@nzart.org.nz

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Club Information

Contacts :-

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HF Net:	3.575MHz LSB 1930 Mondays
VHF Net:	146.525MHz simplex 2000 Tuesdays
STSP Repeaters:	145.325MHz -600kHz split 438.725MHz -5 MHz split
ATV Repeater:	615.250 Ch39

Cover Photo: Mitsubishi's Laser TV

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

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