

Ham Hum

May 2008



The official newsletter of
The Hamilton Amateur Radio Club Inc
Branch 12 of NZART - ZL1UX
Supporting the community for 85 years



Next General Meeting
Remit Night—21 May 2008
Bring your Break-In

Disclaimer: The Hamilton Amateur Radio Club (Inc) accepts no responsibility for opinions expressed in this publication. Where possible, the articles source details will be published. Copyright remains with the author or HARC.

Contact Details 2007-2008

President:			
Robin Holdsworth	ZL1IC	855 4786	zl1ux@nzart.org.nz
Vice Presidents:			
Gavin Petrie	ZL1GWP	843 0326	zl1gwp@nzart.org.nz
Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
Secretary:			
David Nation	ZL1TCE	843 0108	david.nation@xtra.co.nz
David King	ZL1DGK	847 1320	zl1dgk@nzart.org.nz
AREC Section Leader:			
Tony Case	ZL1UD	850 5218	zl1ud@nzart.org.nz
Deputy Section Leaders:			
David Nation	ZL1TCE	843 0108	david.nation@xtra.co.nz
"Jono" Jonassen	ZL1UPJ		zl1upj@nzart.org.nz
Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
Treasurer:			
Tom Powell	ZL1TJA	834 3461	zl1tja@nzart.org.nz
Committee:			
"Jono" Jonassen	ZL1UPJ		zl1upj@nzart.org.nz
Terry O'Loan	ZL1TNO	824 7561	zl1tno@nzart.org.nz
Tony Case	ZL1UD	850 5218	zl1ud@nzart.org.nz
Patron:			
Fin Bruce	ZL4HI	843 9634	
Ham Hum Editor:			
David King	ZL1DGK	847 1320	zl1dgk@nzart.org.nz
Ham Hum Printer:			
John Nicholson	ZL1AUB	846 7477	
ATV Co-ordinators:			
Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
Robin Holdsworth	ZL1IC	855 4786	
Market Day Co-ordinator:			harcmday@hotmail.com
David Nation	ZL1TCE	843 0108	834 4637
Publicity Officer:			
David Craig	ZL1CDO		
Webmaster:			
Tony Case	ZL1UD	850 5218	zl1ud@nzart.org.nz
BBS Team:			
Phil King (sysop)	ZL1PK	847 1320	zl1pk@nzart.org.nz
Alan Wallace	ZL1AMW	843 3738	zl1amw@nzart.org.nz
Doug Faulkner	ZL4FS	855 1214	
Gavin Petrie	ZL1GWP	843 0326	zl1gwp@nzart.org.nz
Club Custodian:			
Alan Mowry	ZL1UGM	847 7868	
Equipment Officer:			
Colin McEwen	ZL2CMC	849 2492	
QSL Manager:			
Sutton Burtenshaw	ZL4QJ	856 3832	suttonb@slingshot.co.nz
Net Controllers:			
80m net—David King	ZL1DGK	847 1320	zl1dgk@nzart.org.nz
2m net—David King	ZL1DGK	847 1320	zl1dgk@nzart.org.nz

From the Committee

The Annual Club Dinner was a huge success. Everyone enjoyed themselves, enjoyed the good company and had a wonderful time socialising with good people. All the work done by Tony (ZL1UD) was very much appreciated as it made the evening go very smoothly for ourselves and the restaurant.

One side effect of the V8 Supercar race in Hamilton, besides the security fence between the clubrooms and our tower, and the second security fence down the middle of Seddon Rd has been the extra, ummm, security. There are several patrols in Hinemoa Park and surrounding areas maintaining 24/7 security which of course includes our clubrooms. Our thanks go to those who bought tickets to the event who all helped pay for this service.

The Hamilton AREC Section has meetings on the months that have 5 Wednesdays (e.g. 30 April 2008).



Next Committee Meeting - 4 June 2008

Page 2

Wanganui Junk Sale (Branch 48)

3rd May 2008

Doors open 7:30am, Auction begins 10:00am

Wanganui Intermediate School Hall

.....

Recycling

With the success of the recent recycling efforts at the Hamilton Club, David Nation (ZL1TCE) has offered to become our recycling coordinator. So, if you have any Copper, Aluminium, Brass, Steel or Batteries (car, SLA) please contact ZL1TCE (david.nation@xtra.co.nz) and he will arrange for it to disappear and become a donation to the club. Any offers to help collect and sort are welcome.

.....

VHF Convention 2009

The 2009 VHF Convention will be jointly hosted by The Hamilton Amateur Radio Club (Branch 12) and The Waikato VHF Group (Branch 81). A planning group has been formed with members from both branches and they will be co-opting others when needed.

.....

Wind Up Torches

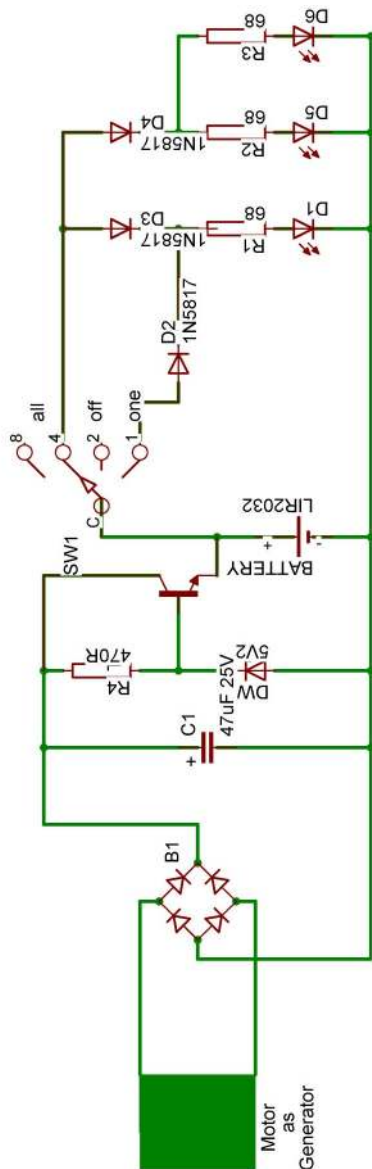
In case you have wondered what is in those torches, G8MNY has sent out on the packet network the following information on one that they examined.

How it works

A small motor is spun via a 4 gear chain from the crank handle. The

motor generates over 5V and feeds a silicon bridge rectifier, which I guess is there in case the direction of rotation is reversed. This DC feeds C1 and connects to the 5V2 zener (DW) via R4 of 470 ohm. The voltage difference from the 3.6V Lithium Ion rechargeable button cell causes the transistor to

conduct and charge the cell until the cell voltage rises and cuts off the transistor and thus the charge current. With normal winding speed this takes only 30-60 seconds.



A 4-way push action rotary switch connects the 2V6 Hyper-Bright white LEDs, either one or all 3 through low voltage drop steering diodes D2 to D4 and the 68 ohm current limiting diodes. The battery can light all 3 LEDs for more than 30 minutes on one charge. The light output is quite feeble compared to a normal torch of the same size, but it is quite enough to read at night etc.

- G8MNY

(with thanks to ZL1PK for the circuit)

Wind-up Torch modifications

G8MNY has also posted some modifications onto the packet BBS system to improve the

performance of the wind-up torch.

Constant current to the LEDs. This sets up almost constant LED current until the battery fails by using 3 small PNP transistors. The 47k and 100k resistors in the bases depend on the transistor gain to give the right LED currents of 10mA maximum, values in the range 22k to 220k may be needed.

Replace the 3 LED 68 ohm with wire links and replace the 3 Schottky diodes with the PNP transistors mounted right down to give minimum head-room, add the base resistors to nearby grounds.

Remove bridge losses. Replace the 4 silicon diodes with one of the 1N5817 Schottky diodes. Make sure the generator is wired up for your favoured rotation direction. Swap one of the +ve rail diodes for a 1N5817 and solder the motor -ve to the -ve rail. Note the free unloaded generator action if wound in the reverse direction.

Battery Charged LED. First I found the original zener diode to be too high a voltage and the regulator never came in as a new 3V6 battery would not reach 4V5 to stop the current flow, so I replace the zener with a 4V7 one selected on test and also doubled the supply R to 1k. Then I added a green LED with a 220 ohm to monitor the generator voltage with the original zener. In use it lights up when the handle is cranked hard and then easily when the battery is charged.

- G8MNY

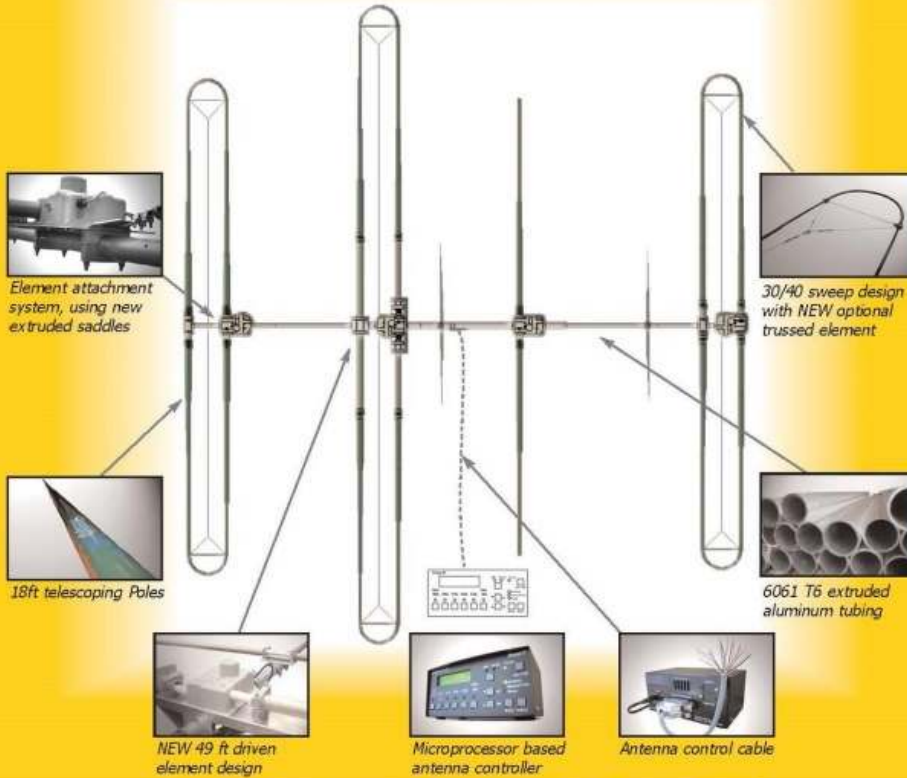
.....

For Sale

Yaesu FT-897 in good order. Hardly used by Hamilton Search & Rescue.
Contact Barry (ZL1BNP) Ph: 7-849-1189

SteppIR™ Antennas

INTRODUCING THE DREAM BEAM 36



THE FIRST ANTENNA IN THE DREAM BEAM SERIES The DB-36 YAGI

- NEW Innovative, patent pending design, is 60% of full size on 40M and 30M, but virtually equals the performance of an identical full sized Yagi.
- All DREAM BEAM antennas will have gain on 40M and 30M by using shortened elements that deliver performance that is only a few tenths of a dB below full size elements.
- 80M fully tunable dipole option is available. Automatically tunes the entire 3.5Mhz to 7 Mhz range with 1:1 SWR. Nearly equal in performance to a full sized dipole with no additional wind load.
- The Dream Beam series will offer antennas for both space limited Hams as well as the "Big Guns" who have the space and want the very best.

Weight 160 pounds
Wind Load 17.5 sq feet
Turning Radius 26 feet
Introductory Price \$ 4295.00

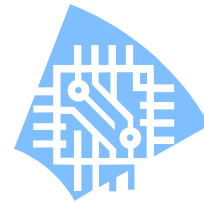
2112 116TH AVE NE SUITE 5, BELLEVUE WA, 98004 **WWW.STEPPIR.COM** TEL: (425)-453-1910 FAX: (425)-462-4415
SteppIR™ Antennas

The Hamilton Market Day



9th August 2008

Claudlands Event
Center



Heaphy Tce



Put this important
date in your diary now

Entry is free for buyers. Refreshments provided.
Prior vendors will receive registration details by mail.

SB SPACE ARL ARLS004

ARLS004 Ten New Satellites in Orbit

Ten satellites reached orbit April 28 aboard an Indian PSLV-C9 rocket launched from the Satish Dhawan Space Center. The primary payloads were India's CARTOSAT-2A and IMS-1 satellites. In addition to the NLS-5 and RUBIN-8 satellites, the rocket carried six CubeSat research satellites, all of which communicate using Amateur Radio frequencies. All spacecraft deployed normally and appear to be functional at this time.

The SEEDS satellite is designed and built by students at Japan's Nihon University. When fully operational, SEEDS will download telemetry in Morse code and 1200-baud FM AFSK packet radio at 437.485 MHz. The satellite also has Slow-Scan TV (SSTV) capability. Several stations have reported receiving SEEDS CW telemetry and the team would appreciate receiving more reports from amateurs at their ground station Web page.

AAUSAT-II is the creation of a student team at Aalborg University in Denmark. It will downlink scientific telemetry at 437.425 MHz using 1200 or 9600-baud packet.

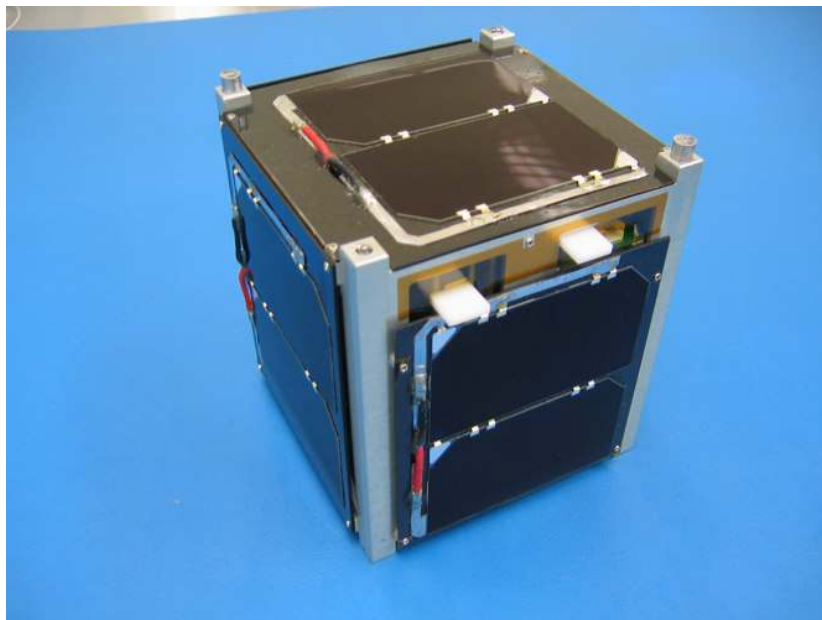
Can-X2 is a product of students at the University of Toronto Institute for Aerospace Studies, Space Flight Laboratory (UTIAS/SFL). Can-X2 will downlink telemetry at 437.478 MHz using 4 kbps GFSK, but the downlink will be active only when the satellite is within range of the Toronto ground station.

Compass-One was designed and built by students at Aachen University of Applied Sciences in Germany. The satellite features a Morse code telemetry beacon at 437.275 MHz. Compass-1 will also provide a packet radio

data downlink, which will include image data, at 437.405 MHz.

Cute 1.7 + APDII is a satellite created by students at the Tokyo Institute of Technology. This satellite will not only provide telemetry, it will also offer a 9600-baud packet store-and-forward message relay with an uplink at 1267.6 MHz and a downlink at 437.475 MHz.

Delfi-C3 was designed and built by students at Delft University of Technology in the Netherlands. It includes an SSB/CW linear transponder. The satellite will be in telemetry-only mode for the first three months of the mission, after which it will be switched to transponder mode. Delfi-C3 downlinks 1200-baud packet telemetry at 145.870 MHz. The linear transponder, when activated, will have an uplink passband from 435.530 to 435.570 MHz and a corresponding downlink passband from 145.880 to 145.920 MHz.



Upcoming Happenings & Events

<i>Date</i>	<i>Happenings & Events</i>
3rd May	Rotorua Marathon
3rd May	Wanganui Junk Sale
4th May	NZART HQ Info-Line
5th May	HF Net, 3.575 MHz, 19:30
6th May	VHF Net, 146.525 MHz, 20:00
10th May	Closing date May/June Break-In
10th May	VK/Trans-Tasman Contest 80m Phone
12th May	HF Net, 3.575 MHz, 19:30
13th May	VHF Net, 146.525 MHz, 20:00
17-18 May	Sangster Shield QRP CW Contest
18th May	NZART HQ Info-Line
19th May	HF Net, 3.575 MHz, 19:30
20th May	VHF Net, 146.525 MHz, 20:00
21st May	General Meeting (Remit Night)
24th May	VK/Trans-Tasman Contest 80m CW
25th May	NZART Official Broadcast
26th May	HF Net, 3.575 MHz, 19:30
27th May	VHF Net, 146.525 MHz, 20:00
30th May-2nd June	NZART Conference

1st June—NZART Official Broadcast
7-8 June—Hibernation Contest
8th June—NZART HQ Info-Line
14th June—Boat Anchor Sprint
18th June—General Meeting (Conference Report)
22nd June—NZART HQ Info-Line
29th June—NZART Official Broadcast
5-6 July—NZART Memorial Contest 80m CW & SSB
5th July—VK/Trans-Tasman Contest 160m Phone
16th July—General Meeting
19th July—VK/Trans-Tasman Contest 160m CW
26th July—Hawkes Bay Rally
26th July—Waitakere Sprints 80m Phone
2nd August—Waitakere Sprints 80m CW
2-3 August—Brass Monkey Contest
9th August—The Hamilton Market Day
16-17 August—International Lighthouse/Lightship Weekend

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

AREC

Hello All,

I am presently looking for 16 operators for the Bridge to Bridge Water-ski Classic although dates have not been announced yet. I am also looking for names for primary operators from the Hamilton area for Rally NZ held on 29 to 31 August 2008. Please phone me on 850-5218. The Bridge to Bridge is a primary operation for the Hamilton Branch and Section, and therefore you are needed.

Dave, ZL1TCE is looking after our Section's involvement with SAR. This will be a softly-softly approach to start with, and will probably involve just Dave and myself to get the feel of things.

There will be a training course coming up shortly for AREC. See me if you are interested.

Finally, are there any operators who wish to go to Wairoa for the Hawkes Bay Rally on July 26th? Phone me 850-5218. It's fun.

Tony Case ZL1UD/ZK1EC



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.

WRC Promo Day

29 June 2008, Mystery Creek

Hamilton Section Meeting

30 July 2008



39th WRC Rally New Zealand 2008

11th round WRC, 6th round PWRC, 5th round NZRC

29-31 August 2008, Mystery Creek

Names of primary operators to ZL1UD via eMail. Reserve your spot quick. ZL1IC, ZL1TCE already booked in.

25th Annual Rollos Bridge to Bridge

Water Ski Classic 2008

16 operators needed

ZL1DGK, ZL1GWP, ZL1IC, ZL1PK, ZL1UD, ZL1UPJ, ZL2CMC
already booked in.

Kona Colville Connection 2009

14th March 2009

Using HF & 2m (simplex & repeater).

ZL1IC, ZL1PK, ZL1TCE, ZL1UD, ZL2TW 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
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

STSP 145.325MHz -600kHz split
Repeaters: 438.725MHz -5 MHz split
ATV Repeater: 615.250 Ch39 (off air)

Cover Photo: A recent crowd outside the Hamilton Amateur Radio Club clubrooms

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