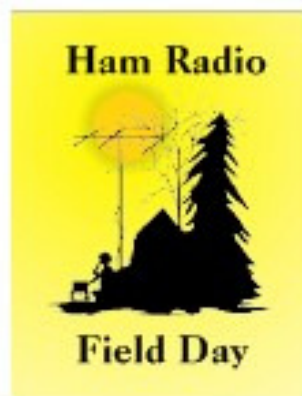


Ham Hum

February 2013



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



Next Meeting :

Club AGM

20th February : 7:30pm

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Contact Details

Patron:
Fin Bruce ZL4HI (SK)

President:
"Jono" Jonassen ZL1UPJ z1ux@nzart.org.nz

Vice Presidents:
Raymond McNickle ZL1RGM 827 0304
Gavin Petrie ZL1GWP 843 0326 z1gwp@nzart.org.nz
Phil King ZL1PK 847 1320 z1pk@nzart.org.nz

Secretary:
Phil King ZL1PK 847 1320 z1pk@nzart.org.nz

AREC Section Leader:
Mike Sanders ZL2MGS 855 1612 z2mgs@nzart.org.nz

Deputy Section Leaders:

Treasurer:
Tom Powell ZL1TJA 834 3461 z1tja@nzart.org.nz

Committee:
Sutton Burtenshaw ZL4QJ 856 3832 suttonb@slingshot.co.nz
Robin Holdsworth ZL1IC 855 4786
Gary Lodge ZL1GA
Cameron Mumford ZL1CNM
Mike Sanders ZL2MGS 855 1612 z2mgs@nzart.org.nz

Ham Hum Editor:
David King ZL1DGK 579 9930 z1dkg@nzart.org.nz

Ham Hum Printer:
John Nicholson ZL1AUB 855 5435

ATV Co-ordinators:
Phil King ZL1PK 847 1320 z1pk@nzart.org.nz
Robin Holdsworth ZL1IC 855 4786

Market Day Co-ordinator: harcmday@nzart.org.nz
Robin Holdsworth ZL1IC 855 4786

Webmaster:
Gavin Petrie ZL1GWP 843 0326 z1gwp@nzart.org.nz

BBS Team:
Phil King (sysop) ZL1PK 847 1320 z1pk@nzart.org.nz
Alan Wallace ZL1AMW 843 3738 z1amw@nzart.org.nz
Doug Faulkner ZL4FS 855 1214
Gavin Petrie ZL1GWP 843 0326 z1gwp@nzart.org.nz

Club Custodian:
Alan Mowry ZL1UGM (SK) 847 7868

Equipment Officer/Quartermaster:
Colin McEwen ZL2CMC 849 2492

QSL Manager:
Sutton Burtenshaw ZL4QJ 856 3832 suttonb@slingshot.co.nz

Net Controllers:
80m net—Phil King ZL1PK 847 1320 z1pk@nzart.org.nz
2m net—Phil King ZL1PK 847 1320 z1pk@nzart.org.nz

NZART Examiners: ZL1IC, ZL1PK & ZL1TJA

From the Editor

In this issue we advise that ZL1UGM is now Silent Key. As you'll see on page 1, Alan has served as our club custodian for many years. His funeral was held in Whakatane on 31st Jan.

The next meeting will be the club AGM. On 20th February at the clubrooms starting at 7:30pm. Various officers will be presenting reports of the years activities, and there will be time for questions and answers for all of these. Nominations and any required elections will also occur. And I'm sure suggestions or even volunteers for Patron and Custodian will be very welcome. Come along and have your say about the future of our club.

The annual Jock White Memorial Field Days happens this month on Sat 23rd and Sun 24th. As usual this will be held at our clubrooms on Seddon Rd in the centre of the city. Lots of help needed to pound the key or engage in some SSB communications. Starts at 3pm sharp on Saturday till midnight. And then 6am on Sunday till 3pm. You don't need to be a contesteer to help, just a willingness to learn from others and help out.

**Next Committee Meetings -
6th February & 6th March**

Propagation de K7RA

2 February, 2013

ARLP005

Sunspot numbers and solar flux barely changed in the past week. Average daily sunspot numbers were 55.7, down slightly from 56.4 the previous week, and average daily solar flux was 98.7, down from 110.7. Geomagnetic conditions continued their quiet spell.

The most active day was Saturday, January 26, when both the mid-latitude and planetary A index was 18, and Alaska's college A index was 46.

The predicted solar flux is 100 for February 1, 105 on February 2-5, 110 on February 6-7, 120 and 125 on February 8-9, 120 on February 10-11, then 115, 110 and 105 on February 12-14, 110 on February 15-18, 105 on February 19-23, 95 on February 24-25, 110 on February 26, and 125 on February 27 through March 1. Flux values peak again at 140 on March 3-4.

The predicted planetary A index is 5 on February 1, then 12, 18, 15 and 8 on February 2-5, 5 on February 6-8, 8 on February 9-10, 5 on February 11-18, 8 on February 19, 5 on February 20-21, then 15, 10 and 8 on February 22-24, 5 on February 25 through March 7, and 8 on March 8-9.

OK1HH believes we will see quiet conditions on February 1-3, quiet to unsettled February 4, mostly quiet February 5, quiet to active February 6, mostly quiet February 7, quiet to unsettled February 8, quiet to active February 9-10, quiet to unsettled February 11, mostly quiet February 12, quiet to active February 13-14, active to disturbed February 15, quiet to unsettled February 16, quiet on February 17-21, active to disturbed February 22, quiet to unsettled February 23 and quiet February 24.

Regular readers know we've been tracking a three-month moving average of sunspot numbers for several years now. The average daily sunspot number for the three calendar months ending January 31 was 82.8, better than last month, but nothing like the numbers we saw over a year ago in fall 2011.

The three-month averages for the past year, the months ending in February 2012 through January 2013 were 83.3, 73.7, 71.2, 87.3, 91.5, 96.5, 91.9, 89.9, 81.2, 82.3, 74.4 and 82.8.

The one month average sunspot number for January was 98.9, the highest monthly average since May and July of last year.

Not much news in reports from readers this week, but N8II of West Virginia re-

ported last Friday, January 25, "Today was pretty decent considering the now double digit SFI and K of 2. I worked RC4HAA on 15 meter CW who was S6-9, and 12 meters opened well to Europe from 1400-1440Z I got in on the tail end of it with QSOs with SV3, HB9, OM0 and G4.

"Last night at 0200Z I caught T6LG in Afghanistan on 80 CW for a new band/country. He was about S3-S6 and not hearing the USA stations calling him that well (about 10 callers when I was there)."

Glenn Axelrod, N6INM/9 in Mundelein, Illinois wrote: "Are SFI and conditions going to improve by the Spring/Summer? Are we ever going to see numbers again like in '58 in my lifetime? I am 48 years old."

By SFI, Glenn means solar flux index. We have no way of knowing when this cycle will peak, or even if it may have already peaked, but peaks of solar cycles become easier to predict later in the first part (the upswing) of any cycle.

Until recently experts predicted this cycle would probably peak in Spring of 2013, which begins in less than seven weeks. But later predictions moved it out to Fall of 2013, with slightly lower numbers. We had a period of higher solar activity in November and December of 2011, which led some to believe that perhaps the cycle had peaked early. Others believe we may see a double-peak in this cycle, as we have in some earlier solar cycles.

But we should see seasonal improvements in HF conditions in the Spring and again in the Fall. By seasonal, I mean that even if we saw no change in solar activity, just due to the season and position of the Sun relative to us, we see better conditions on the higher frequencies in Spring and Fall than we tend to see in Summer and Winter.

In September through December 2011 the monthly averages of daily sunspot numbers were 106.4, 123.6, 133.1 and 106.4. The previous four months (May through August) saw averages of 61.5, 55.5, 67.2 and 66, so the final third of 2011 showed a dramatic jump in activity. But the next year the numbers dropped back again. The average daily sunspot number for all of 2012 was 82.3. The average for all of 2011 was only 29.9, so that jump at the end of the year was exciting, and convinced many of us that the cycle was starting to really ramp up. The January 2013 average was a little less than 100.

There is a hypothesis which posits that we may see a grand minimum, decades of depressed sunspot numbers, but of course that cannot be proven by observation in the next decade or two. I hope it isn't true. I hope we see future activity which is strong and surprises everyone, but I wouldn't count on it. I was licensed during the low point between Cycle 19 (the biggest in history) and Cycle 20, and along with many others have been wishing for decades to see another like Cycle 19. But Cycle 19 turned out to be a rarity. But just like Cycle 19 surprised many people, I hope we can be surprised again.

If you would like to make a comment or have a tip for our readers, mail the author at, k7ra@arrl.net.

For more information concerning radio propagation, see the ARRL Technical Information Service at <http://arrl.org/propagation-of-rf-signals>.

For an explanation of the numbers used in this bulletin, see <http://arrl.org/the-sun-the-earth-the-ionosphere>.

An archive of past propagation bulletins is at <http://arrl.org/w1aw-bulletins-archive-propagation>.

Find more good information and tutorials on propagation at <http://myplace.frontier.com/~k9la/>.

Monthly propagation charts between four USA regions and twelve overseas locations are at <http://arrl.org/propagation>.

Instructions for starting or ending email distribution of ARRL bulletins are at <http://arrl.org/bulletins>.

Sunspot numbers for January 24 through 30 were 60, 44, 55, 60, 52, 63, and 56, with a mean of 55.7. 10.7 cm flux was 103.4, 100.5, 99.4, 97.7, 97.6, 95.4, and 96.6, with a mean of 98.7. Estimated planetary A indices were 1, 6, 18, 6, 4, 2, and 2, with a mean of 5.6. Estimated mid-latitude A indices were 1, 7, 18, 5, 3, 2, and 2, with a mean of 5.4.



Ham Radio Satellite Explorer App

Tom Doyle W9KE has made available an amateur radio Satellite Explorer app for Windows 8 devices.

Satellite Explorer is a Windows 8 app that runs on Intel based tablets, laptops and desktops as well as Windows RT tablets like the Microsoft Surface. It is available in the Windows Store - search for 'Satellite Explorer'.

Tom says the app is of course free but if you find it of value please contribute something to your favourite AMSAT project.

Watch Satellite Explorer - Available in the Windows Store - best viewed full screen HD

App available at

<http://apps.microsoft.com/windows/en-US/app/satellite-explorer/4214d956-fa53-4f92-8845-f5ff2c1c73ee>



Taranaki Vintage Radio Group

The Taranaki Vintage Radio Group is to hold an auction on 09.02.2013 of old radio's that are part of Tarry Martin's (ZL2KV) collection. Due to finding a large number of older amateur radio parts and equipment the group has decided to include these in the auction with the assistance of members of the New Plymouth Amateur Radio Club.

Parts include valves, some hard to find; one equipment rack with gear; aerials and masts; and much more.

The goods will be available to view from 0900 hours and the auction will start at 1100 hours.

One important item to mention is the fact that there will be NO food and drink on site so remember to pick up some lunch etc. on the way.

The auction will not stop for lunch.

Depending on weather parking will be available on site. So far the forecast looks good for the day.

All goods purchased must be paid for and removed on the day of the sale unless special arrangements are made and agreed to.

Look forward to seeing you at the auction at 1778 Mountain Rd, Inglewood.

Taranaki Vintage Radio Group

NZART to review 70 centimetre band plan

The Council of New Zealand's national society, **NZART**, has decided a review of the current 70 cm Bandplan is desirable as a conflict with the IARU Region III Bandplan has been identified by a number of formal complaints to both NZART and Radio Spectrum Management (RSM).

Council considers it part of its responsibilities to amateur radio that it reviews the Bandplans when significant changes occur in the use of the spectrum.

This proposed review is now on the agenda of the Council Face to Face (FTF) meeting in February and it is hoped that submissions will be called for shortly afterwards. The review is also planned to be a discussion topic at the Technology Convention in Auckland, where it is anticipated it will be presented as a Draft Final Recommendation for comment, before being presented to NZART Council.

Due to the discrepancy between the NZART 70 cm Bandplan and the IARU Region III Bandplan, the review will give consideration to concerns regarding the operation of Amateur Television. It will also consider interference received from UHF Low Interference Potential Devices – LIPD's by equipment we operate such as 70 cm repeaters (the National System was re-engineered to be resistant to this some time ago).

NZART Council will seek feedback from existing operators on the 70 cm band. We are interested in any interference presently being received or perceived may occur in the future whilst operating on this band.

NZART will soon be inviting comment from parties interested in providing submissions to a Committee appointed at the Council FTF to do this review. Submissions from 70 cm Band users on the current 70 cm Bandplan and any issues perceived with it, or suggestions to improve it will be most useful.

Neill Ellis ZL1TAJ and **Stephen Hayman ZL1TPH**
For NZART Council

www.nzart.org.nz



United Nations Radio - World Radio Day Stamps

The *Dxers Guide* blog reports that postage stamps are being issued to celebrate **World Radio Day** which takes place February 13.

World Radio Day is observed on February 13, which marks the day when the United Nations Radio was launched in 1946. Since its establishment, UN Radio has used its multilingual programmes carried by media outlets around the globe to tell the story of the international community's efforts to meet the challenges of building a better world.

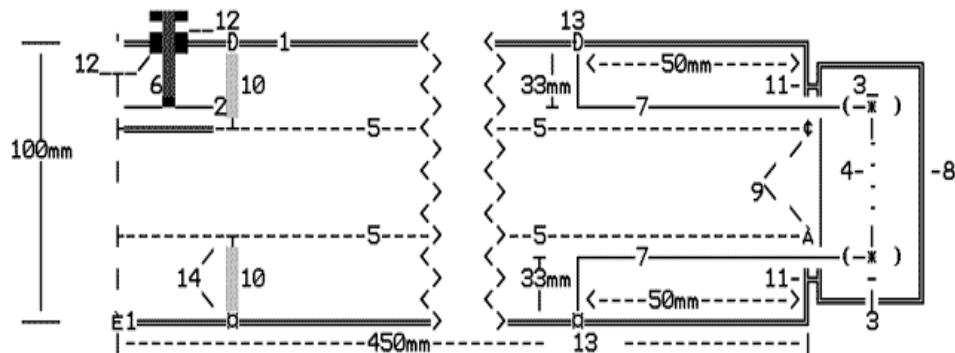
The United Nations Postal Administration (UNPA) will issue a series of stamps depicting scenes from the history of the United Nations Radio.

Read the full story at

<http://dxersguide.blogspot.in/2013/01/un-radio-world-radio-day-stamps.html>

2-meter band cavity filter

Here's a cheap way to build your 2 meter band Cavity filter. VK2DKW sent to packet a diagram for a cavity filter made of dog food cans, with which he successfully eliminated heavy pager interference at his site on 2m.



- 1 Dog Food Cans. 2 (Empty!) hihi, with Hole for Copper pipe
- 2 round steel plates, 30mm. Lower one, soldered on copper pipe
- 3 UHF Socket SO239 Hole Mount.
- 4 Coil 1mm wire 9 windings inside - 10mm
- 5 Copper pipe, - 3/4in also 450mm long.
- 6 5mm screw with steel plate soldered to bottom end.
- 7 wire, Copper or Brass - 2mm

- 8 Aluminium Bracket.
- 9 Copper pipe soldered to bottom end of Can
- 10 Plastic spacer
- 11 Pop rivets - 3mm
- 12 2 5mm Nuts Soldered to outside and inside of can.
- 13 Wire no 7 soldered to outside of can.
- 14 Silicon to keep plastic spacer in place.

Please direct any queries to George, VK2DKW@VK2WI.#SYD.NSW.AUS.OC

73 De John, G8MNY @ GB7CIP

{While I'm sure this can be persuaded to work, I don't think any quality repeater installation would consider such an arrangement—Editor}



**There is only one
NEW ZEALAND ASSOCIATION
of
RADIO TRANSMITTERS.**

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levels.

*It deserves our full support
if we are to continue to have
the frequencies and operating privileges
we currently enjoy.*

**The Association
is what you and I make it.**

Whichever way you look at it



**New
Zealand**

is a great place to live !

Introducing ...

KORDIA NATIONAL SYSTEM AWARD 2013 **Cities, Suburbs & Towns**

A fun event, for all Amateurs. All who submit a log will receive a Certificate.

Starts: Tuesday 1 January 2013 - Closes: midnight Sunday 3 February 2013.

The BIG challenge, how many cities, suburbs and towns can you contact. Simple rules.



- + Contact an Amateur in any City via the National System - Both sender and receiver log 1 Point
- + Contact an Amateur in any Suburb of any City via the National System - Both sender and receiver log 1 Point
- + Contact an Amateur in any Town via the National System - Both sender and receiver log 1 Point
- + Contact a National System Trustee, (refer to Call Book Page 7-4 for list), log five Bonus Points



Cities, Suburbs and Towns may be logged only once. "Town" means any named community.

Logs must be in the hands of the Custodian no later than 28 February 2013, and may be submitted either attached to an E-mail to z12wa@clear.net.nz with KNSA 2013 in the subject line, or post to,

Kordia National System Award
Wellington VHF Group Inc
PO Box 12259
Thorndon
Wellington 6144



Copies of the Promotion and Log forms are available in PDF (portable document format), from our website at www.vhf.org.nz, or from the Award Custodian, via E-mail z12lgq@paradise.net.nz.

The Kordia National System Award 2013 is proudly presented by Wellington VHF Group Inc for the enjoyment of all Amateurs, to emphasize the coverage of the National System, and to recognize the contribution to Amateur radio made by Kordia.

Upcoming Happenings & Events

<i>Date</i>	<i>Happenings & Events</i>
1st February	NZART HQ Infoline
2-3 February	NZART DX Weekend Contest
4th February	HF Net, 3.575 MHz, 19:30
5th February	VHF Net, 146.525 MHz, 20:00
9th February	Taranaki VRS Auction
11th February	HF Net, 3.575 MHz, 19:30
12th February	VHF Net, 146.525 MHz, 20:00
15th February	NZART HQ Infoline
18th February	HF Net, 3.575 MHz, 19:30
19th February	VHF Net, 146.525 MHz, 20:00
20th February	Club General Meeting (AGM)
23-24 February	NZART Jock White Memorial Field Days
24th February	NZART Official Broadcast
25th February	HF Net, 3.575 MHz, 19:30
26th February	VHF Net, 146.525 MHz, 20:00

1st March—NZART HQ Infoline
2nd March—Paengaroa Junk Sale (Te Puke, Br 53)
9th March—Colville Connection (AREC)
15th March—NZART HQ Infoline
20th March—Club General Meeting
30-31 March—NZART Technology Conference - Auckland
31st March—NZART Official Broadcast
6-7 April—NZART Low Band Contest
13-14 April—NZART Thelma Souper Memorial
20th April—KDMG RTTY 80m
27th April—KDMG RTTY 40m
3rd May—NZART Sangster Shield
4th May—Wanganui Junk Sale
1-3 June—NZART Conference—Masterton
8-9 June—NZART Hibernation Contest
1st July—NZART Memorial Contest
27th July—Waitakere Sprints SSB
3rd August—Waitakere Sprints CW
3-4 August—NZART Brass Monkey Contest
2nd September—NZART Doug Gorman Memorial Frequency Measurement Contest
5-6 October—NZART Microwave Contest
7th September—SPAM Nostalgia Night
1st October—NZART/WIA Oceania Contest SSB
2nd October—NZART/WIA Oceania Contest CW
3rd November 2013—ZL1AIH Straight Key Night

AREC Event Operators Page

WRC Rally NZ/ Possum Bourne Rally	June 2013	Organiser : ZL1DK
Please contact the Section Leader with your team information and he will pass it on to Auckland.		

Rollo's Marine Bridge to Bridge Water-Ski Race	October 2013	Organiser : ZL1UPJ
<u>Position</u>	<u>Saturday Operator</u>	<u>Sunday Operator</u>
Base		
Start Boat		
Rescue Boat		
X-Band		
A.	Ngaruawahia/ Taupiri	
	Start/Finish at Point	
B.	Ngaruawahia Ramp	
C.	Ngaruawahia W/S	
D.	Horotiu	
E.	Pukete Ramp	
F.	Days Park	
G.	Fairfield Bridge	
H.		
I.		
J.		
K.		
L.		

Kairangi Hill Climb	September 2013		Organiser : ZL1IC	
<u>Position</u>	<u>Operator</u>			
1.				
2.				
3.				
4.				
5.				
School C ycling	July 2013		Organiser : ZL1IC	
<u>Position</u>	<u>Operator</u>	<u>Position</u>	<u>Operator</u>	
1.		5.		
2.		6.		
3.		7.		
4.		8.		
Colville Connection	9th March 2013		Organiser : ZL1PK	
<u>Position</u>	<u>Primary Operator</u>	<u>Secondary Operator</u>	<u>Other Operator</u>	
Base				
Stony Bay				
Fletcher Bay				
Hill 1				
Hill 2				
Fantail Bay				
Stand B y				

For Details about and to help w ith these events, contact the person indicated as the organiser for the event. See Page 1 for their contact information.

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://z1ux.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: Acquired from
www.zazzle.co.nz

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