## Ham Hum

#### November 2012







# Next Meeting: Prof. Bill Redman-White (G3XSH) "Mixers as used in IC Radios"

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. All rights reserved.

	Cor	ntact Details 2012	2
Patron:			
Fin Bruce	ZL4HI (SK)		
President:			
"Jono" Jonassen	ZL1UPJ		zl1ux@nzart.org.nz
Vice Presidents:			<u> </u>
Ray mond McNickle	ZL1RGM	827 0304	
Gav in Petrie	ZL1GWP	843 0326	zl1gwp@nzart.org.nz
Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
Secretary:		•===	
Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
AREC Section Leader		047 1020	ZITDR@TIZUIT.OIG.TIZ
Mike Sanders	ZL2MGS		
Deputy Section Leade	ers:		
Treasurer:			
Tom Powell	ZL1TJA	834 3461	zl1tja@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	zl2mgs@nzart.org.nz
Ham Hum Editor:			
David King	ZL1DGK	847 1320	zl1dgk@nzart.org.nz
Ham Hum Printer:			
John Nicholson	ZL1AUB	855 5435	
ATV Co-ordinators:			
Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
Robin Holdsworth	ZL1IC	855 4786	
Market Day Co-ordina	tor:	harcmday@nzai	rt.org.nz
Robin Holdsworth	ZL1IC	855 4786	
Webmaster:	= · · · <del>·</del>		
Gav in Petrie	ZL1GWP	843 0326	zl1gwp@nzart.org.nz
BBS Team:			, p C
Phil King (sysop)	ZL1PK	847 1320	zl1pk@nzart.org.nz
Alan Wallace	ZL1AMW	843 3738	zl1amw@nzart.org.nz
Doug Faukner	ZL4FS	855 1214	and the same of th
Gav in Petrie	ZL1GWP	843 0326	zl1gwp@nzart.org.nz
Club Custodian:	2210111	0.10.0020	Zi i griperi i zarti orginiz
Alan Mowry	ZL1UGM	847 7868	
Equipment Officer/Qu		0.17 7000	
Colin McEwen	ZL2CMC	849 2492	
QSL Manager:		3.0 L 10L	
Sutton Burtenshaw	ZL4QJ	856 3832	suttonb@slingshot.co.nz
Net Controllers:		550 000L	Cattorio Goningo Hoto Othic
80m net—Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
2m net—Phil King	ZL1PK	847 1320	zl1pk@nzart.org.nz
NZART Examiners:	ZL1IC, ZL1PK		ZETPR@TIZALLOIG.TIZ
INZALI EXAMINICIS.	ZLIIO, ZLIFK	& ZLIIVA	

#### From the Editor

We are running a brief session of Morse Proficiency Training at most General Meetings. A handout sheet is available at the meeting. The Gary Bold ZL1AN Morse practice programme is available from the NZART page at <a href="http://www.nzart.org.nz/assets/exam/instal-teach4.exe">http://www.nzart.org.nz/assets/exam/instal-teach4.exe</a> This programme will send any text file in morse at the speed and character spacing that you select.

The next General meeting on 21st Nov will feature Professor William (Bill) Redman-White (G3XSH) from the Department of Electronics and Computer Science at the University of Southampton. Bill is currently a visiting professor at Waikato University in the School of Science and Engineering. He will be talking to us about mixers as used in IC radios. A brief biography of his work can be found at <a href="http://www.ecs.soton.ac.uk/people/wrw">http://www.ecs.soton.ac.uk/people/wrw</a>

Should be a very interesting talk, and don't let his title scare you off attending.

Next Committee Meetings - 7<sup>th</sup> November & 5<sup>th</sup> December

## SB PROP ARL ARLP044 ARLP044 Propagation de K7RA

Solar activity quieted this week. Average daily sunspot numbers were down nearly 37 points to 58.4. Average daily solar flux dedined 27 points to 116.9.

Predicted solar flux values are 100 for November 2-3, 105 on November 4-5, 110 on November 6-9, 120 on November 10-11, 125 on November 12-13, 130 on November 14, and peaking at 135 on November 15-20, then 130, 125 and 120 on November 21-23, and 115 on November 24-26. It then drops to a minimum of 100 on November 29 through December 1, then back to a high of 135 by mid-December.

The predicted planetary A index is 10 and 8 on November 2-3, 5 on November 4-5, 7 on November 6-7, then 10, 12 and 15 on November 8-10, 5 on November 11 through December 4, and 10, 20 and 15 again on December 5-7, followed by a quiet 5 again through December 16.

A coronal mass ejection hit Earth's magnetic field at 1530 UTC on October 31. This sparked aurora and contributed to the planetary and mid-latitude A index of 17 on November 1, with the college A index (in Alaska) at a stormy 48. The activity is subsiding, with a declining A index through the weekend.

This will be important to domestic HF contesters, as the ARRL November CW Sweepstakes is this weekend. Conditions should be pretty good for the contest.

The geomagnetic forecast from OK1HH says quiet to unsettled activity November 2-3, mostly quiet November 4, quiet to active November 5-6, quiet to unsettled November 7-8, quiet to active November 9, active to disturbed November 10, quiet to active November 11, mostly quiet November 12-14, quiet November 15-18, mostly quiet November 19, quiet November 23-24.

Last weekend (October 27-28) was the SSB portion of the CQ World Wide DX Contest. The CW weekend is right after Thanksgiving, November 24-25. Jeff Hartley, N8II in West Virginia reports: "I operated 10 meters single band in the contest, but the band was nearly closed as expected at the start, so I migrated down for a few 20 meter Qs. 20 was open nearly world wide for the first 2 hours with excellent conditions over the pole from just west of JA all the way across to northern Europe; there were also a few very southwestern Europeans workable and the Middle East was loud as usual at that time of day. I worked many Russians including all call areas. RT4RO was S9+25-30 dB. BA, YE2, A7, VU, EY were all logged along with some very loud Africans (C5A, D4C, 5Z4EE). VK1CC called in via long path around 0100z, unusual to work that path so late. This was probably the best 20 meters has ever been at the contest start in my many years of contesting.

"The solar flux averaged around 120 over the weekend with Saturday being slightly better. This allowed excellent conditions to all of Europe and fairly long openings to Russia including zone 17 UA9s. But propagation was very limited to central Asia (worked two UNs with good signals Sunday) and the Far East (none logged) beyond JA; conditions were better to there last year. Good European conditions and activity allowed me to make over 2,150 QSOs with 1,000 in the log by 1715Z Saturday! There was activity up to above 28.8 MHz during the peak time to Europe. Even stations with poor antennas and running QRP were easy to work for hours. Conditions to the south Pacific were rather poor (worse than expected) except from 2300-2330z the last day; mid afternoon to late afternoon. Sunday was pretty much dead that direction except for KH6. KH2/KH0 stations were extremely loud from 2100z until 2300z, much louder than the JAs, about 10 stations were logged total from those 2 countries."

Steve Brunt, K6AAB of Fresno, California reports, "Conditions this weekend were fabulous! 10 meters was open until 0200z on the West Coast. Could have worked 10 single band, but didn't. 15 meters was also great with worldwide openings. 20 meters was open, but odd propagation. I could hear lots of Eastern Europeans, but couldn't work them. I completely missed Zone 15 on 20."

Jon Jones, NOJK in Kansas reports, "Sunday afternoon there were great conditions in the CQ WW SSB contest to the Far East. Many Japanese stations were 20 over S9 on 10 meters just before sunset Sunday afternoon. I worked AH2, AH0, Japan, China, and Hawaii with 100 watts and a CB mag-mount whip. Most stations worked on first or second call."

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

For more information concerning radio propagation, see the ARRL Technical Information Service web page at, <a href="http://arrl.org/propagation-of-rf-signals">http://arrl.org/propagation-of-rf-signals</a>. For an explanation of the numbers used in this bulletin, see <a href="http://arrl.org/the-sun-the-earth-the-ionosphere">http://arrl.org/the-sun-the-earth-the-ionosphere</a>. An archive of past propagation bulletins is at <a href="http://arrl.org/w1aw-bulletins-archive-propagation">http://arrl.org/w1aw-bulletins-archive-propagation</a>. Find more good information and tutorials on propagation at <a href="http://myplace.frontier.com/~k9la/">http://myplace.frontier.com/~k9la/</a>.

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

Sunspot numbers for October 25 through 31 were 58, 71, 59, 55, 75, 56, and 35, with a mean of 58.4. 10.7 cm flux was 130, 130.7, 121.7, 117, 108.4, 106.3, and 104.2, with a mean of 116.9. Estimated planetary A indices were 4, 4, 4, 3, 3, 2, and 5, with a mean of 3.6. Estimated mid-latitude A indices were 3, 4, 3, 3, 2, 1, and 5, with a mean of 3.

## SB SPACE ARL ARLS005 ARLS005 Space Station Deploys Five CubeSats

Five research Cube Sats - all with Amateur Radio communication systems - were successfully deployed from the International Space Station beginning around 1430 UTC today (5th October). The satellites were launched from the Kibo station module using a specially equipped robotic arm.

#### The group includes:

TechEdSat, a collaboration among NASA's Ames Research Center; San Jose State University; the Swedish National Space Board (SNSB) and the Japan Aerospace Exploration Agency (JAXA), will be sending AX.25 packet telemetry at 437.465 MHz. The TechEdSat team is asking for assistance from amateurs in decoding and relaying data. Follow the mission on their Twitter page at, http://twitter.com/TechEdSat. More information about decoding and submitting packet data is available on their website.

FITSAT-1, designed and built at the Fukuoka Institute of Technology, Japan, will test the feasibility of high-speed microwave data downlinks in low Earth orbit. It will transmit telemetry on 437.445 MHz and 5.84 GHz. They welcome signal reports from amateurs at their website at, <a href="http://turing.cs.fit.ac.jp/~fitsat/">http://turing.cs.fit.ac.jp/~fitsat/</a>.

WE WISH, from the Meisei Electric Company Radio Club, Japan, will send CW telemetry and occasional SSTV images at 437.505 MHz.

RAIKO, designed and built by students at Wakayama University, Japan, will transmit high-speed data at 2.2 and 13 GHz.

F-1, built by students at FPT University in Hanoi, Vietnam will send telemetry at 145.980 and 437.485 MHz using 1200-baud packet and CW. Amateurs are asked to monitor and submit reports. More information can be found at, <a href="http://fspace.edu.vn/?page\_id=27">http://fspace.edu.vn/?page\_id=27</a>.

#### **Phasing out of International Reply Coupons**

I have just received the following response from Royal Mail to my enquiry about the rumoured phasing out of IRCs

"Due to declining international mail volumes and electronic substitution, customer demand for International Reply Coupons has been falling dramatically over the last few years. Overall sales of International Reply Coupons have been very low indeed - on average just 4 per annum bought from each Post Office branch. Therefore, it was no longer commercially viable to maintain the sale of coupons and Royal Mail has taken the decision to withdraw them from sale.

International Reply Coupons have not been withdrawn globally from sale. Under UPU regulations Royal Mail through Post Office Counters is obliged to redeem International Reply Coupons presented having been purchased overseas, but we are not obliged to sell them. However, I can confirm that customer have up to December 2013 to redeem IRCs."

This seems to be much more in line with the Royal Mail's responsibilities under their UPU membership. Looks like they're safe until 31st December 2013. It may be that the UPU will change their rules after that date (which would be no bad thing IMHO).

73 for now
Phil Whitchurch
G3SWH and AD5YS
www.g3swh.org.uk

#### **Silver Fern Rally**

Open Invitation.

This is an invitation for any person interested in doing so from the Hamilton region to visit or maybe spend an hour or two helping at Rally HQ.

As a guest you will be able to witness the goings on of Rally control and the back

office of a major event.

Please respect the operations while visiting and follow all directions of the HQ manager.

To attend, please call ZL6HQ on 146.950 MHz/145.675 MHz or phone / text John on 027-2303642

If you are able to assist for a longer period please let me know via reply email.

Regards, Warren Harris ZL2AJ 021-649284

#### Radio Hams 1997 Hurricane Sandy Drill

Radio amateurs ran a dill for **Hurricane Sandy** hitting the East Coast **15 years ago** in October 1997.

The Simulated Emergency Test (SET) was carried out by members of the American Radio Relay League (ARRL) in Westchester County, New York. They envisaged that a fictional Hurricane called Sandy would take a path that brought it through northern New Jersey and New York State.

The 1997 Hurricane Sandy Drill was based on a real hurricane that occurred in 1938.

The original web pages from the Hurricane Sandy drill are still available online at <a href="http://www.weca.org/SET/">http://www.weca.org/SET/</a> as well as in the Internet Archive at <a href="http://www.archive.org/">http://www.archive.org/</a>

Read the New York Observer story "The First Hurricane Sandy" <a href="http://observer.com/2012/10/the-first-hurricane-sandy/">http://observer.com/2012/10/the-first-hurricane-sandy/</a>

-SouthgateARC

#### Ready for the IARU Region 3 conference

Delegates are prepared for the International Amateur Radio Union Region 3 conference being held in Ho Chi Minh City, Vietnam.

The 15th triennial conference, hosted by the Vietnam Amateur Radio Club, is themed 'emergency communications' and reflects the frequent disasters that involve amateur radio. Several papers on that theme are to be discussed.

In seeking to standardise privileges and licensing, the Directors have asked that consideration be given to one of their papers, which explores issues facing societies in working with their administration in the 21st century.

There are reports from the IARU Region 1 and 2, member societies, Amateur Radio Direction Finding, Monitoring Service, Beacons, Satellites, the Award and STARS or Support of The Amateur Radio Service in Region 3 program. The delegates will also talk about regional finances and the constitution.

The IARU Region 3 conference is in the Kimdo-Royal Hotel, Ho Chi Minh City from November 5 to 9.

Jim Linton VK3PC

### BBC Radio 4 - Tuning In, history of early radio in Britain

Tuning In, a history of early radio in Britain, will be broadcast at 8 PM Saturday, November 3, on BBC Radio 4

The press fulminated, the enthusiasts were frustrated, and the radio manufacturers fumed. Despite the fact that Marconi had invented radio before Queen Victoria had celebrated her Diamond Jubilee in 1897, radio in Britain took another 25 years to begin an official service to listeners. But when, on November 14th 1922 the British Broadcasting Company's station at Marconi House radiated to an awaiting nation "This is 2LO calling" for the first time under the company's name, it marked the start of the first and most distinguished public-service radio station in the world.

As part of the celebrations to mark nine decades of the BBC, historian Dominic Sandbrook explores the long and involved pre-BBC history of radio in Britain, how Britain's broadcaster got going and developed into an institution dedicated to enter-

tainment, education and information, discovers why Australian diva Dame Nellie Melba was involved, and how the improbably-named Captain Plugge made his first British commercial broadcast from the roof of Selfridges department store in London. From Marconi to Savoy Hill via an old army hut in Essex, the story of the early radio in Britain.

You will be able to listen to the show on the web via <a href="http://www.bbc.co.uk/programmes/b01nnw8t">http://www.bbc.co.uk/programmes/b01nnw8t</a>

Thanks to Mike Barradough for spotting this item

#### AmateurLogic.TV 46 is Released:

peter berrett (VK3PB) on October 28, 2012

AmateurLogic.TV 46 is now available for download.

AmateurLogic.TV is celebrating our 7th Anniversary. Because we couldn't fit it into one hour, join us for part 2 of the highlights and the backstory on some of our favorite scenes. To our loyal viewers, here is a chance to win a FREE complete HF Amateur Radio Station. Watch the show for complete details.

If you laughed during part 1, you will bust a gut on this one...

01:00:03 of AmateurLogic history.

Now in HD where available!

The best way to watch Amateurlogic is to subscribe at Itunes but you can also:

- download in a variety of formats from our website at http://www.amateurlogic.tv,
- watch on the Amateurlogic Roku channel (to add this private channel use the code 'ALOGIC') or
- watch on Youtube

-VK3PB

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: Thursday 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 <a href="mailto:relation-net.nz">relation-net.nz</a> 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 <<a href="mailto:relation-number-

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**

Date	Happenings & Events
2th November	NZART HQ Infoline
4th November	NZART Straight Key Night
5th November	HF Net, 3.575 MHz, 19:30
6th November	VHF Net, 146.525 MHz, 20:00
10th November	Break-In copy deadline
10-17 November	Silver Fern Rally-North Island (AREC)
12th November	HF Net, 3.575 MHz, 19:30
13th November	VHF Net, 146.525 MHz, 20:00
16th November	NZART HQ Infoline
19th November	HF Net, 3.575 MHz, 19:30
20th November	VHF Net, 146.525 MHz, 20:00
21st November	Hamilton Club General Meeting
25th November	NZART Official Broadcast
26th November	HF Net, 3.575 MHz, 19:30
27th November	VHF Net, 146.525 MHz, 20:00
30th November	NZART HQ Infoline

1-2 December—N	VZART VHF+	<b>Field</b>	Day
----------------	------------	--------------	-----

2nd December—NZART HQ Infoline

16th December—NZART HQ Infoline

18th December—NZART Official Broadcast

19th December—Hamilton Club General Meeting

2-3 February 2013—NZART DX Weekend Contest

23-24 February 2013—NZART Jock White Memorial Field Days

30-31 March 2013—NZART Technology Conference - Auckland

6-7 April 2013—NZART Low Band Contest

13-14 April 2013—NZART Thelma Souper Memorial

20th April 2013—KDMG RTTY 80m

27th April 2013—KDMG RTTY 40m

3rd May 2013—NZART Sangster Shield

1-3 June 2013—NZART Conference—Masterton

8-9 June 2013—NZART Hibernation Contest

1st July 2013—NZART Memorial Contest

27th July 2013—Waitakere Sprints SSB

3rd August 2013—Waitakere Sprints CW

3-4 August 2013—NZART Brass Monkey Contest

2nd September 2013—NZART Doug Gorman Memorial Frequency Measurement Contest

5-6 October 2013—NZART Microwave Contest

7th September 2013—SPAM Nostalgia Night

1st October 2013—NZART/WIA Oceania Contest SSB

2nd October 2013—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 Sect	on Leader with your teaminformation and	he will pass it on to Auckland.

Rollo's Marin e Bridge to Bridge W ater-Ski Race	26-28 October 2012		Organiser : ZL1UPJ
<u>Position</u>		Saturday Operator	Sunday Op erator
Base			
Start Boat			
Rescue Boat			
X-Band			
A.	Ng aruawa hia/T au piri		
	Start/Finish at Point		
B.	Ngaruawa hia Ramp		
C.	Ngaruawahia W/S		
D.	Horotiu		
E.	Pukete Ramp		
F.	Days Park		
G.	Fairfield Bridge		
H.	Malcolm St		
l.	Narows		
J.	Field Days		
K.	Between Pipe and F/Days		
L.	High Level Bridge		

Kairangi Hill Climb	September 2013		Organiser : ZL1IC
<u>Position</u>	<u>Operator</u>		
1.			
2.			
3.			
4.			
5.			
School C yeling	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	March 2013		Organiser : ZL1PK
<u>Position</u>	Primar y Op erator	Secondary Operator	Other Operator
Base			
StonyBay			
Fletcher Bay			
Hill 1			
Hill 2			
Fantail Bay			
Stand By			

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

#### **Club Information**

Contacts :-

Business 1930 First Wednesday

**Meeting:** of each month

88 Seddon Road, Hamilton

General 1930 Third Wednesday of

**Meeting:** each month (except Jan)

88 Seddon Road, Hamilton

Homepage: <a href="http://zl1ux.tripod.∞m">http://zl1ux.tripod.∞m</a>

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: Silver Fern Rally logo

Sender Hamilton Amateur Radio Club (Inc)

PO Box 606 Hamilton 3240