

Ham Hum

October 2011



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



Next General Meeting
19th October—19:30

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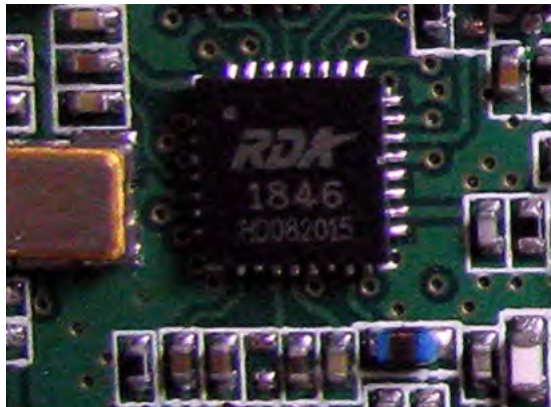
From the Editor

Next year we will be running the National System Award. We return to doing this in association with the New Zealand Historic Places Trust and their list of Category 2 Historic Places. This is a great way to promote the countries Cat 2 Historic Places, the National System and Ham Radio in general. See page 7 for more info.

If, like me, you are a user of the Ham Radio Deluxe/Digital Master 780 suite of programs, you will be interested in the following news. HB9DRV has announced that the suite that he developed with help from PH1PHSK and G4POP has been sold to a group of USA Hams (WA9PIE, K0CBH and W4PC). Simon HB9SRV will concentrate on SDR at sdr-radio.com

See www.ham-radio-deluxe.com/News/HRDSold.aspx for the announcement.

The cover picture shows the main circuit board from the Baofeng UV-3R, which is one of several handheld rigs out of China using the latest in microelectronic radio design. In this case the RDA 1846 chip which covers 134MHz to 174MHz and 400MHz to 500 MHz Rx and Tx. All in a 32pin QFN package that is 5mm x 5mm x 1mm. The only items external to this chip are mic, speaker, display, keyboard, power, the final PA and a memory control unit.



**Next Committee Meetings -
5th October & 2nd November**

SB PROP ARL ARLP038

ARLP038 Propagation de K7RA

Compared to the uneventful past few years, sunspot activity was truly remarkable this week. Daily sunspot number for September 16 was 173, a level that hasn't been reached since over six years ago, way back on July 5, 2005 in Cycle 23, when the sunspot number was 181.

Solar flux reached 150.1 on September 18. Just six months ago it was slightly higher - 153 on March 7 and 155 on March 8 - but prior to that the only higher number was 157.3 on August 22, 2005, about 7 weeks after the sunspot number of 181.

Average daily sunspot numbers for the past reporting week (Thursday through Wednesday, September 15-21) we up over 45 points from the previous week to 137, and average daily solar flux rose nearly 22 points to 144.

Currently the solar flux and planetary A index forecast from USAF/NOAA calls for solar flux of 155, 160, 165 and 170 on September 23-26, 175 on September 27-30, 130 on October 1, and 135 on October 2-5.

These flux values through September 30 are quite a bit higher than the values predicted a day earlier, and run in the ARRL Letter.

Planetary A index is predicted at 5 on September 23, 15 on September 24-25, 5 and 8 on September 26-27, 5 on September 28-30, 8 on October 1, and 5 on October 2-7.

Geophysical Institute Prague sees quiet conditions September 23-25, quiet to unsettled September 26-27, and quiet again on September 28-29.

At 2323 UTC IPS Radio and Space Services in Australia issue a warning of upcoming geomagnetic disturbance on September 24-25 due to a coronal mass ejection.

You can download the latest (October) edition of WorldRadio Online at <http://www.worldradiomagazine.com/> to read this month's Propagation column from Carl Luetzelschwab, K9LA, on pages 30-33. This month's effort uses ray tracings from the Proplab-Pro software (<http://www.spacew.com/proplab/>) to help explain refraction, absorption and polarization of radio signals.

Today is the Fall Equinox in the Northern Hemisphere. In fact I am writing these words at the exact time of the equinox, right at 0905 UTC on September 23.

Angel Santana, WP3GW of Trujillo Alto, Puerto Rico is excited about all the new solar activity right around the equinox. He wrote, "Almost two weeks ago I did not have much luck on the Work All Europe SSB contest. On 20 and 40 meters I only had 77 QSOs. But last Saturday September 17 at about 1500 UTC 10 meters exploded with European stations. Did someone say sunspot numbers over 100, and everybody got on the air?"

"First to work was F4EZJ, then OT4A who even asked if there were a contest, for the fast pace of the contacts. Even worked 5B4AIF and went to 12 meters and worked EA9IB. Returned to 10 and some even answered my call. Later at 2000 UTC went to 12 meters and worked another bunch of Europeans. If this is a preview of the upcoming contest period, we're in for a roll!"

Rob Steenburgh, KA8JBY says the Space Weather Prediction Center now has a Facebook page. Check <http://www.facebook.com/pages/NOAA-NWS-Space-Weather-Prediction-Center/232532740131296>. NW7US has a similar Space Weather and Radio Resources page at <https://www.facebook.com/spacewx.hfradio>.

Jeff Hartley, N8II of Shepherdstown, West Virginia wrote: "I knew it was probably going to be a good day (September 16) when 4W6A was the first signal heard on 21295 at around 1200Z; he was not workable, running EUs I couldn't hear. 20 sounded fair, logging BP100 (Taiwan) and BA8AG. Then a quick check of 15 at 1245Z showed 4W6A up to about S4-5 and looking for 'North America only'; after several tries, he was in the log; he was busy. By 1300Z, EU signals were loud on 15 and 12M was opening up to EU. On 12m, I logged 4K9W, OM5DP, and OE3GCU, then checked 10M at 1314Z to find YL2SM S7 running 4/4 Yagis and a KW; he was getting very few CQ answers. At 1416Z I found E21EJC in Thailand

signing with a station on 28005 CW. Kob was about S5-6 and gave me a '599, very loud' report, what a surprise! Eventually at 1418Z, I had a nice CW run of stations on 10M as far as the Ukraine and as far north as SP and HA and west as PA. After checking 12M to find good signals from RA3CQ and SK2AT. Starting at 1457Z I was able to run Europeans on 10M phone with some having S9+ signals as far west as EI3JS, north to DJ8CG, and east to 9A1HDE.

"After a long break, I returned to some of the best late day 12M conditions to EU I can ever remember. Between 1856 and 1933Z, I ran off about 25 EU SSB QSOs including SM5FQQ and six SQ/SPs. Everybody was loud; I never got down to the weak ones until right at the end. Then, a check of 10M yielded a SSB QSO with EC1KR at 1935Z who was S7.

"Saturday September 17, the Scandinavian Activity Contest CW started at 1200Z which is only about an hour after sunrise. By 1220Z when I fired up, OH9W is very northern Finland had a good signal on 15. OH was the best place to be in almost all of EU for a while; LAs were very weak and EU stations calling the OHs were much weaker than they were, pretty ideal conditions for the contest! By 1330Z, SMs and Las were much better and 10M was open over a scatter path beaming 90-120 degrees over southern Africa which persisted until past 1500Z. I managed to make 15 Scandinavian scatter path QSOs on 10; the loudest were good copy about S3-4, but most were right near the noise level. LN3Z and OH3MEP were the loudest. 20M at 1500Z was not very good and the K index was rising; it is 5 as of 2000Z! 40 and 80 were horrible to Scandinavia at 0130Z, but improved quite a bit by 0330Z. There were some loud northern Scandinavians on 20 at 0130Z and others reported 15M open as late as 2300Z."

Jimmy Mahuron, K9JWJ of Salem, Indiana and several other readers sent in a link to an article from NASA Science News titled "The Secret Life of Solar Flares." Read it at http://science.nasa.gov/science-news/science-at-nasa/2011/19sep_secretlives/.

Jon Pollock, K0ZN of De Soto, Kansas writes: "I was on 17 M this evening (September 18) and found signals were extremely strong to both E and W (I live just west of Kansas City) late into the evening. I worked WA2MDF at about 9:30 PM CDT and he was running well over S-9 with 100 W and a 170 ft. end fed long wire. About 30 min. later I worked K6GVG in San Diego at about 10:15 CDT. He was peaking 20 dB over S-9 at times! These are some of the strongest signals I have heard in a long time on 17 M at this hour of the night...and from both coasts

nearly simultaneously. The band was very quiet (low noise) which usually means very long skip. I also heard some weak JAs and VKs in the CW band. Antenna here is nothing fancy: a 128 ft. Center Fed Zepp at 40 ft. Conditions tonight reminded me of the 'good old days' (previous sunspot peaks)."

Fred Honnold, KH7Y of Ocean View, Hawaii (the SSW corner of the Big Island) wrote on September 18: "Wanted to let you know we have been having excellent TEP (Trans-Equatorial) openings on 6 meters the last two weeks. In the last week I worked FK8CP, E51USA, A35CT, many VK, JA, DU, VR2XMT, BA7s SI IO, and BD7OH. During last night's opening TV from china on 49.749 MHz was 40 dB over S9 at times. The 6 meter band was full of sync buzz for about three hours. A very exciting evening! Seems the openings start about 0600 UTC and can last till 1000 UTC just about every night here in Hawaii."

Reg Beck, VE7IG of Williams Lake, British Columbia (at 52.13 degrees north latitude) wrote: "I was up in the middle of the night and checked 12m around 0930Z on 17 Sept here in VE7. It was wide open over the North Pole into Europe and central Asia. I logged a lot of Europeans and some Asians in zone 17. I couldn't get through the big pileup to JT1DX but he was loud at times. The band was up and down with very loud signals suddenly dropping down then coming up with flutter then clearing then flutter again then weak, etc. The opening lasted past 1000Z then went out."

Julio Medina, NP3CW of San Juan, Puerto Rico wrote: "Today (September 16) we had a good opening to Europe with signals from 559 to 579 on 28.050 from 1445-1737 UTC. Stations worked: OH1ND, IK1RGK, SP1KQR, DF9KF, DL1KUR, DL7UAG, DL7HC, OK1DKO, 4X4FW, DL6DCD, DL1DAW, DJ3EF, DL5MGH, DJ2RG, DL/KJ4HFR, DJ1YU, G0TBD, DF8BY, DL6HRW, HB9US, F8GFA, F8PEU, DH8IAB, EI7CC, F6GVC, EA4RU/M, F5DM, M0BAU, G4GGZ, OK1BN, GU4HUY, M0CYR, and G4EVR."

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

Keep up to date with the latest radio spectrum news from MED/RSM

The Ministry of Economic Development's Business Update newsletter will be discontinued from October 2011.

A more focused Radio Spectrum Business Update will continue to provide you with news about licensing, compliance, policy, engineering and other spectrum issues.

[Please visit our website to subscribe to our new newsletter.](#)

<http://www.rsm.govt.nz/cms/tools-and-services/customer-support/subscribe-business-update>

NATIONAL SYSTEM AWARD

**Hamilton Amateur Radio Club Inc.
Branch 12 NZART**

Presents

Kordia National System Award 2012

in association with

New Zealand Historic Places Trust

Kordia National System Award 2012 - Historic Places, is presented by The Hamilton Amateur Radio Club Inc., Branch 12 NZART in association with the New Zealand Historic Places Trust. Based upon the original idea by Wellington VHF Group. This is a FUN award available to all amateurs to demonstrate the coverage and use of the National System, to promote our history and Category 2 Historic places.

The Award will run from **1 January 2012** to **6 February 2012**.

Thank you to all those who participated in the Award. Your participation has been greatly appreciated.

Whether you have only made **1** contact or **401** contacts and have the contact with ZL1UX, please enter your logs. All logs entered will receive a certificate.

Points will be allocated for:

1. Contact any Amateur in each NZART Branch area (excluding Branches in recess) via the National System. *Only Branches on the provided list are valid.* **1 point**
2. Contact ZL1UX, official station of Branch 12 via the National System. **3 bonus points**
3. Contact any Amateur, via the National System, operating from a Category 2 Historic Place (as listed in the [Historic Places Trust Register](#)). **1 point**
4. Contact any Amateur, via the National System, while operating from a Category 2 Historic Place (as listed in the [Historic Places Trust Register](#)). **1 point**

Points are cumulative and each site may only be listed once. Only one branch or historic site may be logged per contact. The log must record the registry number of the site, available from the [Historic Places Trust Website](#)

Participants are requested to note the following key points:

1. Safety is paramount, please be considerate of the safety of the field operator when making contact.
2. A number of the Historic Places are private property, these MUST be respected. **It is not necessary to enter any private property to log the contact.** Participants are expected to be in near proximity to the Historic Place, not on the site.
3. There are no definitive boundaries between branches, so participants need to determine which branch they are in, to log the point. This distance will vary for differ-

ent parts of the country. Only one branch can be logged per contact. *Only Branches on the provided list are valid.*

4. Participants are encouraged to learn about the NZART branches and the places that define our history through visiting the Category 2 Historic Places

Correspondence to:

The Award Custodian
Hamilton Amateur Radio Club
PO Box 606
HAMILTON 3240

Or E-mail <branch.12@nzart.org.nz> with NS2012 in the subject.

AWARD CUSTODIANS

Phil King - ZLIPK
and
Gavin Petrie - ZL1GWP

Send a log of contacts, with all details as per the standard log sheets provided, including a preferred award certificate format (electronic or hard copy) to:

The Award Custodian
Hamilton Amateur Radio Club
PO Box 606
HAMILTON 3240

Or E-mail <branch.12@nzart.org.nz> with NS2012 in the subject line.

Applications close: 6 March 2012.



Heathkit Announces Return to Kit Business

Heathkit says it is re-entering the kit business that it abandoned almost two decades ago, according to a report on *Amateur Radio Newsline*.

According to a posting on Heathkit Educational Systems' website <http://www.Heathkit.com>, the company has debuted a new line of do-it-yourself kits for common around the house items.

"Don't look for ham radio gear to be a top priority," the *ARN* report said, "even though the word on the street is that kits for the amateur radio market may be down the pike.

"Right now the company is starting off with more general interest kits with (its) first entry being a Garage Parking Assistant . . . (which) uses ultrasonic sound to locate a car as it enters the garage," helping the driver position the vehicle. "The system signals to the driver using LED lights mounted on the wall when the car is detected and in the perfect spot for parking.

"Next on the market will be a Wireless Swimming Pool Monitor kit," followed by many more items. (*ARN*)

Upcoming Happenings & Events

<i>Date</i>	<i>Happenings & Events</i>
1-2 October	NZART Microwave Contest
1st October	Oceania All Bands SSB Contest
3rd October	HF Net, 3.575 MHz, 19:30
4th October	VHF Net, 146.525 MHz, 20:00
4-10 October	World Space Week
8th October	Western Suburbs Junk Sale
8th October	Oceania All Bands CW Contest
9th October	NZART HQ Infoline
10th October	HF Net, 3.575 MHz, 19:30
11th October	VHF Net, 146.525 MHz, 20:00
17th October	HF Net, 3.575 MHz, 19:30
18th October	VHF Net, 146.525 MHz, 20:00
19th October	Hamilton General Meeting
23rd October	NZART HQ Infoline
24th October	HF Net, 3.575 MHz, 19:30
25th October	VHF Net, 146.525 MHz, 20:00
30th October	NZART Official Broadcast
31st October	HF Net, 3.575 MHz, 19:30

5th November—Papakura Sprints (Phone)
6th November—NZART Straight Key Night (CW)
6th November—NZART HQ Infoline
10th November—Break-In copy due
12th November—Papakura Sprints (CW)
16th November—Hamilton General Meeting
20th November—NZART HQ Infoline
27th November—NZART Official Broadcast
30th November—AREC meeting (AREC)
3-4 December—Bridge to Bridge Ski Race (AREC)
3-4 December—NZART VHF Field Day Contest
4th December—NZART HQ Infoline
18th December—NZART HQ Infoline
18th December—NZART Official Broadcast
4-5 February 2012—NZART DX Weekend Contest
25-26 February 2012—Jock White Memorial Field Days
10th March 2012—Colville Connection (AREC)
10th March 2012—WARO 50th Anniversary Celebration
April 2012—WARO Thelma Souper Memorial
7-8 April 2012—NZART Low Band Contest
19-20 May 2012—NZART Sangster Shield
August 2012—Hamilton Market Day
Easter 2013—NZART Technology Conference - Auckland

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

AREC Event Operators Page

WRC Rally NZ/ Possum Bourne Rally	June 2012	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	3-4 December 2011	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.	Malcolm St	
I.	Narows	
J.	Field Days	
K.	Between Pipe and F/Days	
L.	High Level Bridge	

Kairangi Hill Climb	Sunday September 2012		Organiser : ZL1IC
<u>Position</u>	<u>Operator</u>		
1.			
2.			
3.			
4.			
5.			
School C ycling	July 2012		Organiser : ZL1IC
<u>Position</u>	<u>Operator</u>	<u>Position</u>	<u>Operator</u>
1.		5.	
2.		6.	
3.		7.	
4.		8.	
Colville Connection	10th March 2012		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: Insides of a Baofeng UV-3R dualband handheld transceiver featuring a RDA Microelectronics RDA1846 chip. http://www.versatechmicro.com/file/RDA1846_datasheet_v1.2e.pdf

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