

Ham Hum

December 2014



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



Next Meeting 6th December : Noon
Annual End-of-Year BBQ

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From the Editor

Latest about the NZART Conference is that accommodation may disappear quickly, so I'm repeating the message below

As I mentioned last month, accommodation can be tight over Queen's Birthday weekend. So I draw your attention to a list of accommodation options that the Conference Committee has gathered together at : http://z1ux.org.nz/conference_accommodation.html

As it says on that web page, Book Early, Book Now.

The last thing for the month is the Annual End-of-Year BBQ on Saturday 6th December at 12 noon. This will be a social occasion, so come along and enjoy having a yarn with your fellow Hams. The club will provide sausages, bread and coleslaw. You are welcome to add to that if you wish.

**Next Committee Meetings -
No meeting in Dec & 21st January**

The K7RA Solar Update

11/28/2014

It seemed to me that solar activity perked up again over the past week, but the numbers are about the same as last week's. Average daily sunspot numbers went from 98.9 to 97.4, but on Thursday, November 26 (our reporting week runs from Thursday through Wednesday), the sunspot number was 155, and the day before it was 177.

One new sunspot region appeared on November 20, another on November 23, three more on November 24, two more on November 26 and one (after the reporting week) on Thanksgiving day, November 27.

Average daily solar flux rose from 164.4 (in last week's bulletin) to 168.9. The day after the end of the reporting week solar flux was up to 178.8.

On November 24, the Penticton Observatory in British Columbia reported an unusually high solar flux number for the noon reading. As I recall, it was around 300 or higher, and when we see an outlier like this that is inconsistent with readings before and after that time, we always check the [NOAA archive](#).

NOAA changed it to 172. But then a few days later the Penticton reading at noon for November 24 was reduced to 144.4, which is far below readings near that time.

I'm not sure what all this means, but we're sticking with the NOAA estimate. These numbers are changed when the hardware at Penticton gets swamped with energy from a solar flare, so the flux reading is meaningless.

The 10.7 cm solar flux is measured in British Columbia three times per day, at 1800 UTC, 2000 UTC, and 2200 UTC, 10 AM, noon, and 2 PM local time, respectively). The local noon reading is always the official solar flux for the day.

On November 24 the morning reading at 1800 UTC was 170.1 and the 2200 UTC afternoon reading was 168.4, so the 172 estimate seems more likely than 144.4. You can see all of [these readings](#) and the flux values [table](#) (text) at the Natural Resources Canada site.

The latest solar flux prediction from Thursday, November 27 is 180 on November 28, 185 on November 29 through December 1, 180 on December 2, 170 on December 3-4, then 160 and 150 on December 5-6, 140 on December 7-8, 145 on December 9-10, 140 on December 11-13, 150 on December 14, and 155 on December 15-16. Flux values peak at 170 on December 18-20, then drop to 115 on

December 31 through January 2, 2015.

Expected planetary A index is 5 on November 28-30, 18 on December 1, 15 on December 2, 8 on December 3-4, 10 on December 5, 8 on December 6, 5 on December 7-10, then 10, 15 and 20 on December 11-13, 10 on December 14-15, then 8, 10 and 12 on December 16-18 and 10 on December 19-20.

Petr Kolman, OK1MGW, gives us his outlook for geomagnetic conditions. He says to expect quiet to unsettled conditions November 28-29, quiet to active November 30, active to disturbed December 1, quiet to active December 2, quiet to unsettled December 3-4, mostly quiet December 5, quiet to active December 6-7, quiet to unsettled December 8, mostly quiet December 9-10, quiet to unsettled December 11, quiet to active December 12-13, quiet to unsettled December 14-15, quiet to active December 16-17, quiet to unsettled December 18-20, quiet on December 21-23, and mostly quiet on December 24.

Petr expects increases in solar wind on November 30 through December 2 and December 11-13.

I received an email from Bil Paul, KD6JUI, of Dixon, California. He wrote, "Due to the high solar flux predictions I've been doing a little bicycle mobile work on 10 meters. Amazing what one can do with 5 W and a HamStick on 10. Had a couple 5-9 reports on the East Coast the other day. *Wow!* (Was using the metal guardrail as the radial or counterpoise.)"

"I have a ham friend in Germany, DL2MFJ, and I have tried a couple times to reach him on 10 at 10 AM Pacific Time with no luck. That's 1800 hours UTC. I guess I'm too lazy to do all the research on this, but here's a question you may be able to help me with: What band and at what time would you recommend trying to reach him?"

I replied, "Doesn't look too promising at this time of year, but it might be possible around 1630-1700 UTC on 10 meters. Also looks pretty weak a month from now (Christmas Eve) but possible around 1700 UTC. Three months from now looks a little better, 1700-2000 UTC. Around the first day of spring, 1600-2200 UTC has possibilities, with 1830-2000 UTC the best bet.

"For today, I think 15 or 17 meters would be much better. 15 meters around 1630-1730 UTC, and 17 meters (much better bet) 1530-1900 UTC. Get a 17 meter HamStick (I've used these) and clamp your ground on to that metal guardrail in the photo for a counterpoise. I've done this sort of thing in my car, but of course you cannot actually be moving when you do this."

There is nothing magic about those times and frequencies, just probabilities suggested by running the numbers with [W6ELprop](#).

Jon Jones, N0JK, in Kansas wrote on November 25, "It appears the winter sporadic E season has started this month. On November 22 and 23 there were extensive Es on 6 meters from the Midwest to Florida and Gulf Coast states.

"XE2JS DL68 Mexico was into Kansas November 24 UTC on 6 meters via Es around 0230 UTC. I worked Julian at 0240."

Jon also said CE2AWW worked the Pacific Northwest via Es-TEP/F2 links on November 24, and from 0219 UTC to 0241 UTC, XE2JS worked NW0W (EM47qu), W4HLR (EM56ic), [K2DRH](#) (EN41), and N0JK (EM17be).

Pete Corp, K2ARM, of Fort Edward, New York (FN33eg) wrote on November 26, "Tad, I finally had some Es on 6 meters. I have seen very few openings, if any since August. I know the South and West have been experiencing many, but it seldom gets to my location in the Northeastern part of New York. I am back to using a dipole because the leaves are gone and no longer hide my EDZ (Extended Double Zepp).

"On 11-17-14 there were good signals from the South and Southwest but few hams on the CW portion, many SSB signals for about 4 hours. Then on 11-21-14 it opened again but for only a couple of hours. On 11-22-14 it opened for a good 4 hours.

"What I have found when we start getting Es, it seems to occur every 5 days. Maybe the 27th will have some Es and turkey. This seemed to happen in the summer too. Thanks for the information you provide on propagation."

Jon Jones, N0JK, sent further info on the November 10 opening:

"Six meters opened from Colorado, Texas, and states further west to VK and ZL after the Hawaiian stations began fading out around 2300. In the Midwest, the band closed to Hawaii after 2215.

"The November 10, 2014, 6 meter F2 opening is reminiscent of the 6 meter F2 opening on November 9, 2013. (almost exactly a year ago!). There was a strong F2 opening from the Midwest and Gulf Coast states to the Caribbean and northern South America the morning of November 9, 2013. (1500-1600 UTC)."

Pat Dyer, WA5IYX, said of the 2013 November F2 opening: "The unexpectedly high F2 MUF from a rather minor amount of geomagnetic activity at the right time of the year with enough solar flux gave perhaps the first morning 50 MHz paths

from here to the Caribbean of this poor Cycle 24.

"A similar situation occurred on November 10, 2014. But instead of the Caribbean, 6 opened to the Pacific in the afternoon.

"This was not a single-hop F2 opening for many in North America. Single-hop F2 is usually out to about 4800 to 5000 km.

"KH6/K6MIO to EM28 Kansas is 6100 km, more than the usual one-hop distance. The Hawaiian stations worked even further east as far as W3 and W8. K7BV (FM04) in North Carolina heard KH6HI (BL01) at 2130 on the 10th."

And finally, it's back! See www.space.com/27834-monster-sunspot-solar-flares-video.html.

For [more information](#) concerning radio propagation, see the ARRL Technical Information Service, which also provides an [explanation of the numbers](#) used in this bulletin. An [archive](#) of past propagation bulletins is on this site. Carl, K9LA, offers [more good information and tutorials](#) on propagation.

Also see:

[Monthly propagation charts](#) between four US regions and 12 overseas locations.

[Instructions](#) for starting or ending e-mail distribution of ARRL bulletins.

Sunspot numbers for November 20 through 26 were 83, 68, 64, 66, 111, 120, and 170, with a mean of 97.4. The 10.7 cm flux was 168.1, 162.5, 166.6, 173.1, 172, 169.4, and 170.9, with a mean of 168.9. Estimated planetary A indices were 11, 15, 10, 10, 7, 5, and 5, with a mean of 9. Estimated mid-latitude A indices were 8, 10, 8, 9, 5, 4, and 4, with a mean of 6.9.

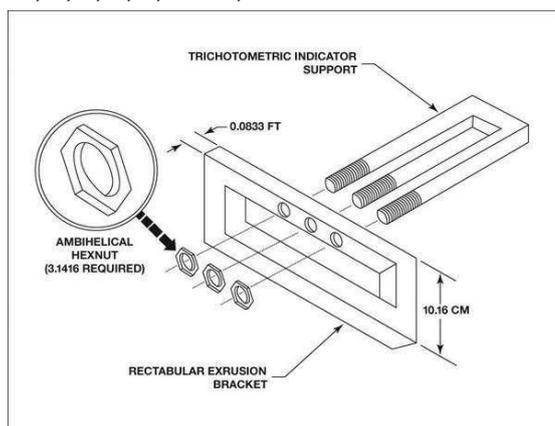


Image with thanks to Gippsland Gate Radio & Electronics Club Inc (Australia) magazine.

NZART AGM and CONFERENCE 2015

will be held in Hamilton

"Heart of the Waikato"

on Queen's Birthday Weekend 2015

29, 30 & 31 May

at the

Te Rapa Conference and Function Centre,
Te Rapa Racecourse, Ken Browne Drive, Te Rapa, Hamilton.

Further details will be available [HERE](#) as they come to hand.

BOOK EARLY! BOOK NOW!

AS ACCOMMODATION IS AT A PREMIUM OVER QUEEN'S BIRTHDAY WEEKEND

Click [HERE](#) for a list of hotel/motel accommodation.

Hendricks QRP Kits BitX20A

See <http://www.qrpkits.com/bitx20a.html>

If I (G3XBM) was looking for a simple, reliable QRP SSB rig for HF use in the coming years then the Hendricks QRP Kits version of Ashlan Farhan's BitX transceiver for 20m would be in the frame. They also do a version for 17m, but there is more chance of QSOs on 20m. The rig has a useful 5W pep output and looks straightforward to build for most people. The Ashlan Farhan design is well proven. Going from



100W down to 5W is only just over a couple of S-points. 5W will get you plenty of QSOs on 20m SSB. 5W is fun.

A 10m version would be fun, but sadly is not available, but likely to be less useful in the years to come, apart from summertime Es. A 10m design would need better MOSFET PA devices anyway I think.

- [Roger Laphorn, G3XBM](#), is a regular contributor to *AmateurRadio.com* and writes from Cambridge, England.



WIA and NZART ANZAC 100 actions

The Wireless Institute of Australia (WIA) plans for the ANZAC century in 2015 have been joined by the New Zealand Association of Radio Transmitters (NZART). Both will have commemorative callsigns and awards.

The major commemoration will start on April 25, 2015, which is when Australian and New Zealand Army Corp (ANZAC) troops landed at Gallipoli 100 years ago.

The WIA and the NZART are to be heard on air with ANZAC callsigns. Both will have specially designed QSL cards and Award certificates.

They will join Telsiz ve Radyo Amatrleri Cemiyeti (TRAC) of Turkey in the commemorations, with interest also shown in the United Kingdom, Philippines and Malaysia.

The WIA invites club registrations for the callsign use in 2015 between ANZAC Day April 25, when the landing occurred at Gallipoli Cove, and December 20, the day ANZAC troops left Gallipoli.

The NZART has ZL100ANZAC available for a month to clubs, as well as ZL1, ZL2,

ZL3, ZL4 ANZAC callsigns. It invites its branches and interested individuals to register.

A special pre-recorded opening 30 minute VK100ANZAC broadcast is to happen for ANZAC Day (April 24, 1300 UTC), with cooperation of the WIA, NZART and TRAC.

The WIA hopes to broadcast from a significant place in the Australian capital of Canberra.

At each of Australia's three time zones on the day the pre-recorded broadcast will be repeated by the WIA on a rostered basis. There will be plenty of occasions to hear it.

The WIA has already listed some club events on its website, including the 75th Anniversary of RAAF Secret Mission, Battle of the Somme, Battle of Kokoda Track, the WIA Remembrance Day, and the Evacuation of Gallipoli.

To commemorate ANZAC 100 a series of articles appear in Amateur Radio magazine. Here is a summary of one of them - Amateur Radio Activity During WWII - which was written by Jim Linton VK3PC.

Some three days before the official declaration of WWII on the 3rd of September 1939, an urgent telegram to all Australian radio amateurs ordered Amateur Radio immediately stop.

Many radio amateurs subsequently enlisted in the armed services with campaigns in Europe, the Mediterranean, North Africa, and the Pacific. This included those at the forefront of communications and its development.

After the war Amateur Radio resumed with many radio-related stories. One was that Father Maximilian Kolbe SP3RN was arrested in Poland by the Germans, who believed Amateur Radio was somehow involved in espionage.

Fr Kolbe volunteered in 1941 to take the place of a condemned man chosen in retribution for an escape of 10 from Auschwitz prison camp. His action resulted in the canonisation by Pope John Paul II on October 10, 1982, and was considered to be the saint of radio amateurs.

Research of the WIA Archive also found a letter that in early 1941, as a war measure, an Emergency Communications network began in Central Sydney. The idea was that if the phone system were disabled, a radio system would take over.

Other research found an Amateur Radio magazine column in November 1942 containing a little about Civil Defence preparations in Western Australia.

However, a newspaper report entitled ADELAIDE HAMS DID GREAT WORK IN WAR, was then followed by a second part headed CIVIL DEFENCE, and it read:

When Australia was threatened by invasion, the civil defence network of radio operators was organised.

The headquarters station worked on 1775 kilocycles and sub-controls on 3605 kilocycles. Regular exercises and surprise tests proved its efficiency. The Emergency Communications Network was disbanded in late 1945.

An editorial in Amateur Radio in April 1946 foreshadowed the establishment of the WIA Emergency Communication.

The activity of helping the community in times of disaster had been traced back to the relaying vital messages when a severe tropical cyclone struck north of Cairns Queensland in February 1927. Today, emergency communication still occurs throughout the world in times of disaster.

Read the full article, Amateur Radio Activity During WWII - in an edition of Amateur Radio magazine.

• (Jim Linton VK3PC)

NZART COUNCIL NOMINATIONS OPEN NOW!

Nominations are open for NZART Council 2015/2016. Nomination forms, and biographical details must be at NZART HQ by 31 December 2014

[More Info and nomination forms...](#)



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Antenna Form Factor	Vertical
Compliant Standard(s)	IEEE 802.11b IEEE 802.11g IEEE 802.11n
Form Factor	Vertical
Integrated Switch	4-port switch
Modem Included	Yes
Switching Protocol	Ethernet
Browser Based Management	Yes
Radio Frequency Band	2.4GHz
WPS Push Button Security	true
Data Transfer Rate	Up To 300Mbps
Max WLAN Connections	16
Ethernet ports	1xWAN, 4xLAN
Plug & Play	Yes

If interested, please contact Gavin Petrie at – Ph: 07 8430326 or Email: gavinwp@ihug.co.nz

Upcoming Happenings & Events

<i>Date</i>	<i>Happenings & Events</i>
1st December	HF Net, 3.575 MHz, 19:30
2nd December	VHF Net, 146.525 MHz, 20:00
6th December	Annual Club BBQ
6-7 December	NZART Field Day Contest
8th December	HF Net, 3.575 MHz, 19:30
9th December	VHF Net, 146.525 MHz, 20:00
12th December	NZART HQ-Infoline
15th December	HF Net, 3.575 MHz, 19:30
16th December	VHF Net, 146.525 MHz, 20:00
21st December	NZART Official Broadcast
22nd December	HF Net, 3.575 MHz, 19:30
23rd December	VHF Net, 146.525 MHz, 20:00
29th December	HF Net, 3.575 MHz, 19:30
30th December	VHF Net, 146.525 MHz, 20:00
31st December	Hamilton AREC Section Meeting

21st January 2015—Combined Business/General Meeting

28 Feb/1 Mar 2015—NZART Jock White Memorial Field Days

11-12 Apr 2015—NZART Thelma Souper Memorial Contest (WARO)

30 May/1 Jun 2015—NZART AGM & Conference (Br 12, Hamilton)

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

Club Information



Contacts :-

Business Meeting: 1930 First Wednesday of each month except January
88 Seddon Road, Hamilton

General Meeting: 1930 Third Wednesday of each month (except Jan)
88 Seddon Road, Hamilton

Homepage: <http://www.z1ux.org.nz>
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: Off air pending channel changes

Cover Photo: Operating from a beach in summer—M0UOO <http://www.qrz.com/db/M0UOO>

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