



The **NEWSCASTER**

The Official Publication of the Winnipeg Amateur Radio Club

<http://www.WinnipegARC.org>

May 2022

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VE4BB

Canadian Prairie QSO Party (CPQP) Info Session

Date: Tuesday, May 10, 2022

Time: 7:30 PM An **"In-Person"** Meeting

Windsor Park United Church

1062 Autumnwood Dr (at Cottonwood Rd.)

Find it on Google Maps - [Click Here](#)

Also available on Zoom

[https://us02web.zoom.us/j/88306044385?](https://us02web.zoom.us/j/88306044385?pwd=Wnp0MnBvQVBEYUcydHhxWlpFQVZpQT09)

[pwd=Wnp0MnBvQVBEYUcydHhxWlpFQVZpQT09](https://us02web.zoom.us/j/88306044385?pwd=Wnp0MnBvQVBEYUcydHhxWlpFQVZpQT09)

Other Important Dates:

News caster: Deadline June 2, 2022

WARC: Monthly Meeting Dates **2nd Tuesdays**
June 14, 2022 - TBA & Elections

ARES: Tuesday, May 17, 2022
General Meeting
Will likely be an **on-line** "Remote"
meeting Winnipeg ARES members will
be advised by e-mail

Other: May 15, 2022
Canadian Prairie QSO Party (CPQP)
<https://cpqp.ve6hams.ca/>

Check your WARC Membership Status at ...
<http://winnipegarc.org/join.html>

WARC Executive for 2021-2022...

President	Drew Kwartel	drewk1166@gmail.com
Vice-Pres.	David Latour	ve4dla@gmail.com
Treasurer	David Latour	ve4dla@gmail.com
Secretary	Scott Campbell	scottcampbell1978@hotmail.com
Membership	Jerry Volkens	jerryvolkers@hotmail.com
Education	Roberto Urrea	va4.rul@gmail.com
Director	Daniel Flather	VA4EEF
Director	Cary Rubenfel	VE4EA
Past President	John Romanec	ve4vjr@gmail.com
Public Information Officer....	Vacant	

WARC Hamfest 2022

The Winnipeg Amateur Radio Club is pleased to host WARC 2022 Hamfest. After a two year absence, once again we extend an invitation to Amateurs everywhere to spend a day of learning and excitement with your friends and peers in Winnipeg.

9:00am, Sunday, June 5th 2022 is when the flea market will open. Vendors are invited to apply for booth space by contacting Scott: info@WinnipegARC.org. Booth prices are unchanged at \$20.00/table, which includes one free admission to the WARC Hamfest.

Payments can be made by electronic funds transfer (EMT) to: payment@winnipegarc.org. There is also a Paypal link on the WARC website. Vendors will be admitted for setup starting at 8:00am

Once again, we will have prizes, draws, special offers and educational sessions, beginning at 9:30am and running through the day. Beverage and food service will be available.

Location: Dakota Community Centre, 1188 Dakota St., Winnipeg, MB
Admission is \$10.00 in advance, or \$15.00 at the door.
Advance payments to: payment@winnipegarc.org.

Come early and bring a friend to the

WARC HamFest 2022

Hamfest 50/50 Draw

"We will be holding a draw for a giant 50/50 draw (LGCA 5179-RF-37712) at the Hamfest on June 5. A max of 500 tickets will be sold at \$10 each meaning you can be holding up to \$2500 in prize money.

You do not have to be present to win and tickets can be purchased ahead of time or at the hamfest by contacting info@winnipegarc.org Stay tuned for a payment option through the WARC website also!"

Our Vision

To increase public awareness and respect for Amateur radio; to provide education and support in all aspects of the hobby to our members in a social atmosphere

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WARC General Meeting Minutes
April 12, 2022

Call to Order

Meeting called to order by Club President Drew Kwartel at 19:40

In Attendance

15 members

Minutes

Approved as posted in Newscaster

Previous Business

Hamfest planning ongoing, updates given to members regarding location, prices and events.

Field day planning is ongoing. Some interest in a Fox Hunt

Treasurer's Report

	Paypal	Bank	Rainy	Books
Start	\$ 489.38	\$ 4,586.53	\$ 6,529.27	\$ 5082.62
In	\$ 232.70	\$ 20.00	\$ 1.78	\$ 254.48
Out	\$ 554.21	\$ 106.32	\$ 0.00	\$ 669.08
End	\$ 159.32	\$ 4,500.21	\$ 6,531.05	\$ 4,668.02
Total Cash on Hand	\$ 11,190.58			

Main expenses from P.P. were charitable donation and tools

Membership Report

84 members (83 paid, 1 new)

Programs

Homebrew night - Paul Reisdorf presented the ultimate antenna slingshot featuring a line retrieval system and was awarded his prize. (Only entrant)

Announcements

Michele Kaiser VE4DKC from the MRS membership committee announced AGM with details posted on MRS website and IC-2300H giveaway.

Education

Sold 10 books, 8 left. WSC had an advanced course over the winter and all passed. Contact WSC for the next upcoming advanced course. WARC basic course to be held in the church to allow more students and accessibility.

ARES

Jeff Dovyak VE4MBQ

Spring Flood 2022 Focus

As the Acting SEC for Manitoba ARES, I represent ARES on the Manitoba EMO Interagency Emergency Preparedness Committee (IEPC). Typically IEPC meets monthly except no meeting in JUL or AUG unless necessary. This morning IEPC went to a daily up-

date meeting.

No snowmelt likely until 20 APR. The Red River has peaked everywhere, as of 20 APR water levels are not expected to go any higher (like when incoming precipitation melts).

We have Wpg ARES members on stand-by to operate VE4EMO 0800-1900h daily thru 18 APR and are now booking 19-30 APR stand-by. Thru Derek VE4HAY and Paul VE4AMS we have made arrangements for use of VE4WSC in case stand-by members are unable to access relevant rural repeaters of interest from their home stations – MECC is operating virtually, the provincial EOC is not currently staffed.

If and only if, in case of mass public sandbagging campaign in Winnipeg and if the City asks for Amateur Radio support we will register volunteer operators via the WARC web-site very similar to what's done for MB Marathon volunteers – thanks to Drew VE4DRW and the WARC Executive for their support and permission; Mark VE4MAB and Dave VE4DJS for their help on this.

MANITOBA MARATHON

Volunteer radio operator recruitment is on-going, we still need > 40 volunteer operators.

RAC

None

DX Report

David VE4DLA reported digital modes better than others. His station reported the following: 4% Europe, 1% Oceania, 12% South/Latin America and balance North America

New Business:

Grand Forks to hold Hamfest on April 30 with details posted on the WARC FB page.

John let members know about the KV5J Elecraft K3 upgraded display option.

WARC to formally invite Yori to Hamfest and provide a testing table.

Adjourn

Meeting adjourned at 20:34

**Winnipeg ICOM Dealer...
Micro-HighTech Communications Ltd.**

2217 Henderson Hwy, East St. Paul, MB
(Just south of perimeter Hwy)

Ph. (204)-783-1885 Fax (204) 779-7522
Contact George Hill, VE4GDH

or

E-Mail Steve at Steve@microhightech.ca

Manitoba Marathon
Jeff Dovyak VE4MBQ
ve4mbq@rac.ca

The 2022 Manitoba Marathon will be SUN 19 JUNE. We still need Amateur Radio volunteer operators. We only pair a new Amateur with someone who has worked the Marathon previously.

http://winnipegarc.org/marathon_volunteer_form.html

Winnipeg ARES
Jeff Dovyak VE4MBQ
ve4mbq@rac.ca

Our April General Meeting was held virtually 19 APR.

Thanks to Richard VE4KAZ for not only laundering our "loaner" ARES vests after Klondike Derby but the carrying bag as well!

In mid-MAR we were advised by the City of Winnipeg Emergency Program that due to the Flood Forecast at the time, the City of Winnipeg would not likely require our services for 2022 Spring Flood season. In mid-APR however a conversation was had with a City of Winnipeg Emergency Management Officer with regard to possible ARES role at sandbag worksites in the event a mass public volunteer sandbagging campaign was initiated. To that end, with the support of Drew VE4DRW and the WARC Executive we secured permission to utilize the WARC website for volunteer operator recruitment, if required, in a manner similar to how volunteer operator registration for the Manitoba Marathon is managed. Thanks to Mark VE4MAB for building the necessary form and Dave VE4DJS for agreeing to look after the database.

To be prudent, with rural flood operations starting up, we had a volunteer operator on stand-by for 0800-1900h daily 08-30 APR for VE4EMO in the Manitoba Emergency Coordination Centre (MECC) – the provincial EOC in other words. Since MECC is operating virtually and not all of our volunteers can access relevant rural repeaters from their home station we arrange with Derek VE4HAY and Paul VE4AMS that if activated, a VE4EMO operator could use the radio facilities at Winnipeg Senior Citizens Radio Club (WSCRC) if they could not access the relevant rural repeaters from their home station. That stand-by was in two segments, 08-18 APR and 19-30 APR. We just recently started a third phase of stand-by operators for 01-13 MAY. Thanks to our volunteer operators:

- I VE4s RCA, VD and GWN
- II VE4s HAZ, RCA, HK and VD.

Our next General Meeting will be TUE 17 MAY, likely held virtually, Winnipeg ARES members will be advised by e-mail.

D-Star and DMR in Winnipeg

Are you looking for crystal clear communications with simple and reliable linking to other systems worldwide? Well, enjoy crystal clear digital communications on cutting edge digital technology!

Join the Winnipeg Digital Repeater Group Inc. and feel freedom of worldwide communications on crystal clear networks...

The future is digital! <http://www.ve4wdr.org>

Have you ever been to Hamvention?
Submitted by Derek, VE4HAY

Hamvention is a at the very least a once in a lifetime experience and for some it is a yearly pilgrimage.

Hamvention will be held May 20, 21 and 22, 2022 at the Greene County Fairgrounds and Expo Center.

But how can you attend?

Well if you act now and email VE4HAY@gmail.com he has two VENDOR passes (with early admittance) to give away **FREE**

Plus He will throw in an Outdoor Flea Market vendor pass, where you can park your vehicle, sell your old gear and pick up new gear.

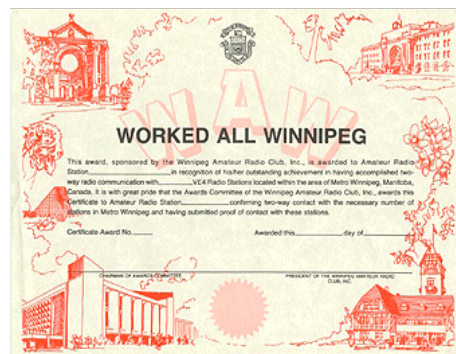
Click here for more information on <https://hamvention.org/>

Winnipeg Senior Citizens Radio Club

The Winnipeg Senior Citizens Radio Club is looking for Duty Officers and Net Controllers.

If interested please contact Calvin VE4AJ at ve4aj@rac.ca

Get Your Worked All Winnipeg Award



For details visit <http://winnipegarc.org/awards.html>

SARL VHF/UHF Digital Contest	0300Z-0500Z, May 21 (6m) and 0500Z-0700Z, May 21 (2m) and 0700Z-0900Z, May 21 (70cm) and 0300Z-0500Z, May 22 (6m) and 0500Z-0700Z, May 22 (2m) and 0700Z-0900Z, May 22 (70cm)
UN DX Contest	0600Z-2100Z, May 21
YOTA Contest	0800Z-1959Z, May 21
NZART Sangster Shield Contest	0800Z-1100Z, May 21 and 0800Z-1100Z, May 22
EU PSK DX Contest	1200Z, May 21 to 1200Z, May 22
His Maj. King of Spain Contest, CW	1200Z, May 21 to 1200Z, May 22
Arkansas QSO Party	1400Z, May 21 to 0200Z, May 22
Feld Hell Sprint	1600Z-1759Z, May 21 and 2000Z-2159Z, May 21
Baltic Contest	2100Z, May 21 to 0200Z, May 22
K1USN Slow Speed Test	0000Z-0100Z, May 23
QRP ARCI Hootowl Sprint	0000Z-0100Z, May 23
ICWC Medium Speed Test	1300Z-1400Z, May 23
OK1WC Memorial	1630Z-1729Z, May 23
ICWC Medium Speed Test	1900Z-2000Z, May 23
Worldwide Sideband Activity Contest	0100Z-0159Z, May 24
ICWC Medium Speed Test	0300Z-0400Z, May 24
RTTYOPS Weeksprint	1700Z-1900Z, May 24
SKCC Sprint	0000Z-0200Z, May 25
Phone Weekly Test	0230Z-0300Z, May 25
A1Club AWT	1200Z-1300Z, May 25
CWops Test	1300Z-1400Z, May 25
Mini-Test 40	1700Z-1759Z, May 25
Mini-Test 80	1800Z-1859Z, May 25
CWops Test	1900Z-2000Z, May 25
CWops Test	0300Z-0400Z, May 26
CWops Test	0700Z-0800Z, May 26
QRP Minimal Art Session	1400Z-2200Z, May 26
RTTYOPS Weeksprint	1700Z-1900Z, May 26
RSGB 80m Club Championship, CW	1900Z-2030Z, May 26
EACW Meeting	1900Z-2000Z, May 26
NCCC RTTY Sprint	0145Z-0215Z, May 27
NCCC Sprint	0230Z-0300Z, May 27
K1USN Slow Speed Test	2000Z-2100Z, May 27
CQ WW WPX Contest, CW	0000Z, May 28 to 2359Z, May 29
K1USN Slow Speed Test	0000Z-0100Z, May 30
ICWC Medium Speed Test	1300Z-1400Z, May 30
QCX Challenge	1300Z-1400Z, May 30
OK1WC Memorial	1630Z-1729Z, May 30
RSGB FT4 Contest	1900Z-2030Z, May 30
ICWC Medium Speed Test	1900Z-2000Z, May 30
QCX Challenge	1900Z-2000Z, May 30
Worldwide Sideband Activity Contest	0100Z-0159Z, May 31
ICWC Medium Speed Test	0300Z-0400Z, May 31
QCX Challenge	0300Z-0400Z, May 31
RTTYOPS Weeksprint	1700Z-1900Z, May 31
June 2022	
Phone Weekly Test	0230Z-0300Z, Jun 1

A1Club AWT	1200Z-1300Z, Jun 1
CWops Test	1300Z-1400Z, Jun 1
Mini-Test 40	1700Z-1759Z, Jun 1
VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jun 1
Mini-Test 80	1800Z-1859Z, Jun 1
CWops Test	1900Z-2000Z, Jun 1
Walk for the Bacon QRP Contest	0000Z-0100Z, Jun 2 and 0200Z-0300Z, Jun 3
CWops Test	0300Z-0400Z, Jun 2
CWops Test	0700Z-0800Z, Jun 2
RTTYOPS Weeksprint	1700Z-1900Z, Jun 2
NRAU 10m Activity Contest	1700Z-1800Z, Jun 2 (CW) and 1800Z-1900Z, Jun 2 (SSB) and 1900Z-2000Z, Jun 2 (FM) and 2000Z-2100Z, Jun 2 (Dig)
EACW Meeting	1900Z-2000Z, Jun 2
SKCC Sprint Europe	1900Z-2100Z, Jun 2
PODXS 070 Club Three Day Weekend Contest	0000Z, Jun 3 to 2359Z, Jun 5
FISTS Royal Platinum Jubilee Weekend Celebration	0001Z, Jun 3 to 2359Z, Jun 5
NCCC RTTY Sprint	0145Z-0215Z, Jun 3
NCCC Sprint	0230Z-0300Z, Jun 3
HA3NS Sprint Memorial Contest	1900Z-1929Z, Jun 3 (40m) and 1930Z-1959Z, Jun 3 (80m)
K1USN Slow Speed Test	2000Z-2100Z, Jun 3
PRG CQ Pride Contest	0000Z-2359Z, Jun 4
10-10 Int. Open Season PSK Contest	0000Z, Jun 4 to 2400Z, Jun 5
DigiFest	Cancelled for 2022
KANHAM Contest	0600Z, Jun 4 to 0600Z, Jun 5
Wake-Up! QRP Sprint	0600Z-0629Z, Jun 4 and 0630Z-0659Z, Jun 4 and 0700Z-0729Z, Jun 4 and 0730Z-0800Z, Jun 4
Tisza Cup CW Contest	1200Z, Jun 4 to 1159Z, Jun 5
Kentucky QSO Party	1300Z, Jun 4 to 0100Z, Jun 5
UKSMG Summer Contest	1300Z, Jun 4 to 1300Z, Jun 5
RSGB National Field Day	1500Z, Jun 4 to 1500Z, Jun 5
IARU Region 1 Field Day, CW	1500Z, Jun 4 to 1459Z, Jun 5
ARRL Inter. Digital Contest	1800Z, Jun 4 to 2400Z, Jun 5
Cookie Crumble QRP Contest	1700Z-2200Z, Jun 5

*Confessions of a Casual Contester
Vol. 2 Issue 10
from the shack of DavidVE4DL*

I am not now, nor ever have been, a Contester. I don't see myself becoming a Contester either, if one defines the term to include round-the-clock operations, intravenous fluids and diapers, and frequent relays of cold, one-hand meals. Not my thing, at all. BUT.....

I protest that I am not a Contester – but spend time contesting nonetheless. It is true, I cannot deny it. But there is certainly more to amateur radio than contesting.

Continued

Some part of every week is spent in the digital portion of the bands, pursuing my oldest interest in HF radio. These elder-statesmen modes are not as popular as they were on the way into Solar Minimum, having been replaced in the hearts of hams by the various FT and JS modes that require so much less effort to make a contact.

To me, the effort is what it's about, though. To tease out a signal that makes sense to the mind, to compose a reply, to twiddle dials and scratch away at effervescent call signs – this is work, and by working hard, a reward is obtained. A reward obtained by hard work and cunning manipulation is more valuable than one picked by clicking a scrolling wish-list. I think my age is showing.

These days I concentrate on three – PSK31, my first love; Olivia, my favourite in-the-noise mode; and Feld-Hell-105, which I stumbled on quite recently and became addicted. It's unique, as it ABSOLUTELY REQUIRES human eyes and mind to be engaged for it to work. And it is far older than any of the others save CW. RTTY is strictly for contesting, it seems. While these modes are not as popular as before, they do have weekly nets to be worked, and I check into at least one every week. The 40m Hell Net is growing in popularity, you should try it out.

In this same vein of effort rewarded, is the pursuit of DX. As in D-Expeditions, not merely Timbuktu (which I worked a few months ago, for my first Continental Africa!) I had not thought much about this niche of the hobby before this week. I thought my modest station unsuited to the pursuit of the snark, but apparently, I am wrong. Earlier this year I worked Aland Islands all unknowing. Then this week I saw Svalbard Island pop up in the telnet list. Friends were all agog at working the call. I couldn't hear it then, but something about their interest drew me to keep monitoring each time it popped up. Then to start calling each time I could just hear it. To learn how my radio does split operations (three ways, apparently). To twiddle dials in an attempt to both evade and to overmatch the hungry kilowatt DX hunters that abound on the air. And succeed with a 100W and wire! USB on a noisy 20m band, over the pole, in daylight!!!! A rush!!!!!! The heroin of ham radio, I am instantly addicted. There is another showing up several times a day on the telnet, from the antipodes – Austral Island in the South Pacific, about halfway between Argentina and Australia. Three days later, in conditions next to impossible at my end, CW on 17m with only 3 calls. Cue the dance party.

It seems there is an online list of these expeditions, where I can start stalking them intelligently instead of stumbling across them by accident. I see a new branch of interest growing from the trunk of this robust and endlessly engaging hobby. Now I have to figure out how to entice a QSL card from these prizes....

But it isn't contesting.

Nope. Not at all.

Antenna + Arduino = Antuino *By Gerry VE4GKS*

I recently purchased a device called an "Antuino" by HFSignals in India. It arrived today (Friday, April 22). These are first impressions.

So, what is an Antuino? It is primarily and basically a multi-function antenna instrument. It can measure SWR and frequency response. It is also a field strength meter. You can measure front-to-back ratios on beams. It can measure coax loss and velocity factor. The velocity factor can be useful if you want a quarter wave stub for an impedance conversion. I haven't done the math to figure out if it can find a short in a length of coax.

But, it can do more than this. It can allow you to check your signal and see if you have any splatter from over modulation or drive. It can plot the frequency response of a filter. It can be used as a signal generator, albeit with a square wave output.

Enough of what it can do. What is it actually like? It's a black box, 183 millimeters wide, 84 millimeters high, and 46 millimeters deep, not counting a large knob on the front and a pair of SMA connectors on the right hand side. A couple of adapters are included to convert SMA to the more useful BNC. I don't know just why SMA was used to start with, but there may have been a reason, possibly space on the circuit board. Measuring over the knob, and with the BNC adapters installed, the width increases to 206 millimeters and the depth to 66 millimeters. The front panel, coincidentally, is the same size as the uBITX V6 transceiver. With the BNC adapters fitted, but without the internal batteries, it tips the scales at 454 grams, or exactly one pound, according to my kitchen scales (accurate to within ±1 gram).

There is a coaxial power connector on the right side of the top. There was no mention of this on the HFSignals web site. The site info left me with the impression that the unit is powered by 6 AA penlight cells. I followed up with an email inquiry and was informed that the unit may be powered either by an internal set of cells or an external power supply. However, when I attempted to open up the case, I found two of the screws almost impossible to remove, and I couldn't remove a third one.

The display is a monochrome LCD. It displays black data on a yellow-green backlight. I don't know what the resolution is – it isn't stated in the documentation. There is no provision to turn the backlight off or adjust its brightness. I don't know if the LCD panel has a bias (contrast) adjustment. If it does it is not accessible (see my earlier remark about opening the case). The contrast is OK as it is. These two items may not seem relevant, but I have ham equipment where they are. The display on the uBITX is 320x240, and the Antuino's is a bit bigger.

Continued

There are a couple of calibration adjustments on the unit. One calibrates the oscillator so it is on frequency, and the other is the return loss calibration. The procedure is documented on the web site.

The unit has a primary operating frequency range up to the top of the 2 meter band. It is usable on its third harmonic, with reduced sensitivity, up to the top of 70 centimeters.

The unit has a delivered price of \$175.00 Canadian, after paying HFSignals (\$109.00 US, this covers the shipping cost) plus the exchange, customs brokerage, and government import fees. The exact cost, to the penny, will vary a few cents, depending on the exact exchange rate. I placed my order on April 14 (Maundy Thursday), later in the day, so it would have been Good Friday early in the small morning hours in India. It was shipped the following Tuesday in India (the small hours of the morning here). India is 10½ hours ahead of us right now. I got the delivery on Friday 22, just before 11:30 in the morning. This isn't a ham radio item, but perhaps DHL (the courier company) should give the postal system a few lessons on how to make fast deliveries.

I tried a quick use of the SWR function to check the unit out, using a 2-meter roll-up J-pole. At first, I couldn't get the unit to operate properly. An email inquiry brought back the reply that I was using the wrong port. I was using RF OUT – it should have been RF IN. The change made and all is well. The plot has a small cursor that can be moved with the control knob across the frequency being swept, and the SWR at that frequency read out. Depending on the sweep range selected, the resolution can be very good. One thing I don't know is if the SWR display will change if a tuneable antenna is adjusted and the PLOT function is not manually recycled. Perhaps this is asking too much, but it would be nice if it is.

My overall opinion: what's the cost of replacing blown RF output transistors if you're working with an untested antenna system and it's not properly matched? The Antuino avoids this, and I believe in insurance. The only negative thing I can say about it is the issue with opening the case to access the internal battery holder. I have several QRP (or close to QRP) transceivers, but the only one that can readily have its power turned down is a Xiegu G90. I do have an Emtech ZM2 QRP antenna matching unit. This has an SWR indicator in it. The issue with the indicator is that it uses a Wheatstone bridge. The maximum SWR that the transmitter will see is 2:1, but the bridge resistors have a very limited power handling capability. Under worst-case, one of the resistors could end up dissipating 2/3 of the transmitter's power. The resistors have to be carbon composition so that they appear as a pure resistance, and these are only readily available in low-power versions.

VHF Nets

MRS Nets

**VE4WPG 147.390 Mhz + (127.3) &
VE4VJ 443.500 Mhz + (127.3)
(WPG is normally hot linked to VJ)**

This net covers Winnipeg and the MRS linked repeater system, and includes various announcements on amateur radio activities and "Dick's Swap & Shop"

**The Morning Net 147.390 Mhz+
Weekdays at 9:00 am**

This net covers Winnipeg and hams of all ages are welcome to join in this net which is always a lot of fun!

**The Saturday Morning Net 147.390 Mhz+
Saturdays at 10:00 am**

A Net for all Hams to participate and learn about Ham radio and get on the air! PLUS a presentation of The History of Amateur Radio by Dick VE4HK

D-Star Nets on the VE4WDR System using

**UHF 444.575+ DV Port B and/or
VHF 145.490- DV Port C**

TransCanada D-Star Net - Fridays at 8:00 pm
On "Free Star" Reflector 5 (XRF103BO)
Also on VE4DMR Timeslot 2 Talkgroup 302050

HamNation D-Star Net - Wednesday at 9:15pm
On "DPlus" Reflector 14 (REF014CL)

Ozark Mtn. D-Star Net - Sundays at 8:00 pm
On "DPlus" Reflector 1 (REF091CL)
More nets <http://www.dstarinfo.com/nets.aspx>

DMR Nets on the VE4WDR System ...

Astronomy Net
Wednesday @ 20:00 local time
Time Slot 2, 31012

HF Nets

**MB Evening Phone Net - 3747 Khz
Daily at 7:00 PM Local Time (CT)**

**Prairie Traffic Net (CW) 3660 Khz
Daily at 0130 UTC**

**Aurora Net (Afternoon) 7055 Khz
Daily at 2330 UTC
Aurora # 2 Net (Evening) 7055 Khz
Daily at 0230 UTC**

**MB Wx Net 3743 Khz
Daily at 8:30 Local Time (CT)**

The Newscaster is the Official Publication of **Winnipeg Amateur Radio Club**
Please send your submissions/comments to the editor Mark VE4MAB at ve4mab@outlook.com