



The **NEWSCASTER**

The Official Publication of the Winnipeg Amateur Radio Club
<http://www.WinnipegARC.org>

April 2016

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VE4BB

Home Brew Night

Date: Monday, April 11, 2016

Time: 7:30 PM

Place: Dakota Collegiate - Theatre *See you there!*
661 Dakota Street (At Beliveau Rd.)

Other Important Dates...

Newscaster: Deadline April 27, 2016

WARC: Monthly Meeting Dates...
May 9, 2016 - TBA
June 13, 2016 - Field Day Primer
September 12, 2016 - Welcome Back

WSC: 2nd Thursday of month
Breakfast - Garden City Inn

ARES: Tuesday, April 19, 2016
Sir Wm Stephenson Library
765 Keewatin Street -
Manitoba Hydro Storm Response

Other: -WARC Spring Flea Market
Sunday, April 17, 2016
-Worked All Winnipeg Award
QSO Party Weekend
Friday to Sunday April 15 to 17, 2016

WARC Executive for 2015-2016...

President	David Latour	ve4dla@gmail.com
Vice-Pres.	Rolf Bandlow	rolban@mymts.net
Treasurer	Bob Jacobs	rcjacobs@hotmail.ca
Secretary	Gerry Sherman	ve4gks@outlook.com
Membership	Ross Gibson	rossg@prefixservice.com
Programs	Peter Toth	ve4th@gmail.com
Director	Chris Dickens	dickens67@hotmail.com
Past President	Garth Blumm	ve4gwb@gmail.com
Public Information Officer....	Kurt Sargent	kurtsargent@gmail.com

From the President's desk ...

Welcome to April! Always an exciting month, we have a number of activities planned for new and experienced hams.

First, we welcome a new graduating class from BSC11. Well done, all of you, and I hope we see many of you at our meetings and events.

Crowded into this month are the HF Experience Day, co-sponsored with Radio Sport Manitoba; Home-Brew Night at our usually monthly meeting spot; and a fox-hunt in St. Vital Park later in the month, look for notices.

The Club is looking for worthwhile projects to put some of our hoarded cash into. All ideas in writing, please, to info@winnipegarc.org.

73,
David Latour VE4DLA
President

WARC's Spring Flea Market

Sunday, April 17, 2016
Heritage Victoria Community Centre
950 Sturgeon Road, Winnipeg, MB

Doors open for coffee and EyeBall contacts at 9:30

Vendor Setup will begin at 9:45

Doors open for the flea market at 10:30

Prize Draws will be held at 11:30

Admission to the Flea Market is \$5.00 per person.
Please bring exact change, preferably a \$5.00 bill

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

WARC Meeting Minutes*March 14, 2016**Taken by Gerry VE4GKS*

Meeting called to order 00:36 UTC at Shaftesbury High School.

Introductions as usual**Treasurer's Report -**

\$11597 bank balance

Education -

Planning for advanced & CW courses in the fall or next spring.

ARES -

VE4HK reported on Klondike days. Still need Marathon operators. Canwarn course this week-end.

RAC -

RAC is presenting a \$1200.00 cheque to Shaftesbury for A.R.I.S.S. - reported by VE4HAY.

DX -

VE4SN reports DX is picking up. A Russian Antarctic station has been heard.

Events -

Cary has organized an HF seminar for April 2, the Saturday after Easter Sunday. This is in association with Radiosport Manitoba.

VE4DLA made an announcement about name badges.

VE4GKS made an announcement about the mag loop antenna project.

Meeting adjourned 01:12 UTC

50/50 draw \$19.50 to Hamish.

This was followed by a tour of the Shaftesbury amateur radio station facilities

Correction: From the minutes from February 2016. Door prize winner VE4VB should have read VE4VZ (Rolf)



Notice of Annual General Meeting

The Manitoba Repeater Society will be holding its Annual General Meeting on ...

Sunday, April 17, 2016

Heritage Victoria Community Centre
950 Sturgeon Road, Winnipeg, MB

The Manitoba Repeater Society Inc. Annual General Meeting will begin at noon, immediately after the WARC Flea Market.

The meeting will include a technical report on the state of our repeaters, along with financial information, and the budget for the upcoming year. The executive will answer any questions our members may have.

Our bylaws require that any motions must be presented, in writing, to any member of the executive, prior to the meeting. This is so it can be added to the agenda, and dispersed to the membership.

The AGM will conclude with election of officers for 2016-17. If you wish to run for the executive, please contact Dick Maguire VE4HK dmaguire@mymts.net, no later than April 12.

All members of MRS, prospective members, and interested amateurs are invited to attend the meeting. We will accept membership payments during the Flea Market, and at the meeting.

The Manitoba Repeater Society operates and maintains a linked repeater system across southern Manitoba, including Winnipeg.

Memberships are the primary source of funds for MRS. These funds cover the costs of upkeep and purchasing new equipment.

All users of our repeater system are encouraged to become a member of the Society.

info@mb-repeater-society.ca

<http://www.mb-repeater-society.ca/>

<http://www.facebook.com/ManitobaRepeaterSociety>

For The Record -***WARC Minutes from ..******November 2015 and January 2016***

(As read at the March 2016 meeting. No minutes were recorded for December 2015)

November 9, 2015

Meeting called to order 01:33 UTC

VE4DLA unable to attend – VE4VB acting president.

Introductions –

VE4DRO & VE4RI new members.

October minutes passed as recorded.

Financial report -

\$11549.

Membership -

68 members.

Education –

Next course is February/March next year.

RAC report –

VE4HAY reports possible 15 khz. allocation on the 60 meter band. Possible changes at 15 Mhz. & also re-alignment of the Region 1 160 meter band.

DX report –

VE4SN reports from ARRL as he has no rig.

Possible fox hunt in the spring (late April).

50-50 draw – VE4OAK won \$18.00.

Meeting adjourned 02:18 UTC

January 11, 2016

Meeting called to order 01:39 UTC

VE4DLA president chairing meeting.

Introductions

No December minutes.

Financial report -

\$10929.

Membership -

94 members, no SKs.

Education –

Basic course is February/March.

ARES –

Recruiting for Manitoba Marathon & Klondike Derby

RAC Report –

Need replacement for RAC president, also VE4HAY must resign his position at end of this year.

DX Report –

VE4SN reports DX is poor.

50/50 draw – VE4DMF won \$20.00.

Meeting adjourned 02:00 UTC by VE4HAY

This was followed by a presentation on digital radio by VE4HAY

D-Star's "D-Tip" Of The Month

By, Garth VE4GWB

For a book full of tips visit the WDRG table to purchase the Nifty EZ Guide to D-STAR at the spring flea market.

They are available for \$18 and are the newest current edition #3.

Winnipeg Senior Citizens Radio Club
By Gil VE4AG

We are back in the Clubrooms, finally, and enjoying putting it back into full business.

We have changes that you should know - thanks to the efforts of Derek, VE4HAY, we now use LES.NET for our telephone and internet communication services.

Our Club phone number is now 204-666-8435, our website URL is now www.ve4wsc.ampr.org, and our e-mail address is ve4wsc@gmail.com

We are trying to get a full complement of duty officers so that we can be open from 9 a.m. until about 2 p.m. each weekday (Monday thru Friday).

If any club members would like to volunteer, please get in touch with Alf, VE4ALF. Even a morning or afternoon shift would be welcome.

The mail-drop is again available for WARC & MRS.

Gil Frederick,
Vice-President

ve4ag@rac.ca

April Newscaster Education Report

By Rob Striemer VE4SHS

BSC11 Concludes

WARC's Basic Short Course 11 concluded Saturday March 19th at Shaftesbury High School with the writing of the final exam. Thirteen earned their call signs. Congratulations to all the successful students and thank you to all the volunteer instructors and our examiners, Adam Romanchuk and Bob Jacobs. Thanks also to Bill Fleury and the Manitoba Amateur Radio Museum which provided each student with a passes to the MARM and the Manitoba Agricultural Museum in Austin.

March WARC Meeting Held at Shaftesbury



The Winnipeg Amateur Radio Club (WARC) held its March meeting at Shaftesbury High School. The business portion of the meeting was held in the library.

Afterwards, a special presentation was made by students in the satellite tracking station. Amateur radio classes, the Global Space Balloon Challenge, HF and satellite QSOs, and the ARISS Telebridge (VE4ISS) were highlighted.

Finally, Derek Hay, representing the Radio Amateurs of Canada (RAC) presented the students with a cheque for \$1200 to continue work on the station. Thank-you RAC!

Fort Richmond Collegiate - Finalists in Samsung's Solve For Tomorrow Competition

It's Voting Season!

Please support Fort Richmond Collegiate's Team in the Samsung Solve for Tomorrow Challenge. The Fort Richmond team has made it to the final round of the national school competition. A win would be a huge boost to the school's engineering projects. Jared Kozak (VA4CAN) and Pardeep Mathode (VA4PWM) were students in BSC10 last fall (Jared, below and Pardeep, below-right of the eagle in the photo above right).



Pardeep is now in control of the school's new Kenwood TH-D72A and was heard on the morning net during spring break. The team is managed by physics teacher Jennifer Piasecki (VE4JPI).

FRC is one of five Winnipeg high schools including Shaftesbury that are using amateur radio in their engineering projects. SHARP has been working with the FRC team on high altitude ballooning, amateur radio and related projects for a couple of years.

All five high schools (Shaftesbury, St. James, Garden City, Maples and FRC) will again launch HABs this spring as part of the Global Space Balloon Challenge.

Please check out their video on the Samsung website below. Fill in the short form and vote for Fort Richmond Collegiate.

Let's see if we can help them win the final round! The voting link is ...

<http://pages.samsung.com/ca/solvefortomorrow/>

What have you done to "promote amateur radio this week"

That line we credit to an old News stalwart, Peter Parker with using in his old VK1 and VK3 casts many years ago and it still stands true -WIA

Winnipeg ARES
Jeff Dovyak VE4MBQ
ve4mbq@rac.ca

Fourteen (14) ARES members and affiliates provided volunteer Amateur Radio communications 5, 6 MAR at Camp Amisk during Klondike Derby. Thanks to Bob Poole VE4MAQ for Coordinating this event and thanks to volunteer operators:

- VA4AJG
- VE4s MAQ, KAZ, FDM, DXR, WX, JAH, TRO, CIB, KEH, GWB, CDM, CLK and TTH.



Klondike Derby Net Control
Garth VE4GWB and Craig VE4CDM
Photo Credit Bob Poole VE4MAQ



Klondike Drive Ken Pritchard & Bob VE4MAQ
Photo Credit Bob Poole VE4MAQ

Our MAR meeting featured Cameron Buchanan VE4CWB, Regional Manager Public Safety Canada, speaking about The Role of Public Safety Canada in Emergencies. We now have a new impetus or challenge to get VE4PSC organized so that any Amateur should be able to walk in and run the radios (although only ARES members are allowed access).

CANWARN Spotter Training was held SAT 19 MAR at Union Station in the Citizenship Court. Twenty-Eight (28) folks were in attendance for the presentations by Warning Preparedness Meteorologist Natalie

Hasell VE4NAT and ARES Coordinator Jeff Dovyak: VE4s DJS, WTZ, DLA, PH, PEH, WAL, GMT, VD, WZ, YYL, GWN, WX, JNF, DTF, GKS, MMW, GIS, DWG, FDM, GLS, MHZ, RCA, CDM, and MBQ VA4s AJG, MAC and Tyler Bruneau.

Thanks to Jim VE4SIG for assistance setting up.

Door Prize winners were VE4s DWG, RCA, GMT, DTF and VA4AJG.

-Thanks to Natalie from Environment & Climate Change Canada and Tiffany Taylor from CoCoRaHS for the door prizes.

-Thanks to Jim VE4SIG and Winnipeg ARES for supplying the Wallet Cards and Spotter Badges.



Photo Credit Garry Frankel VE4VD

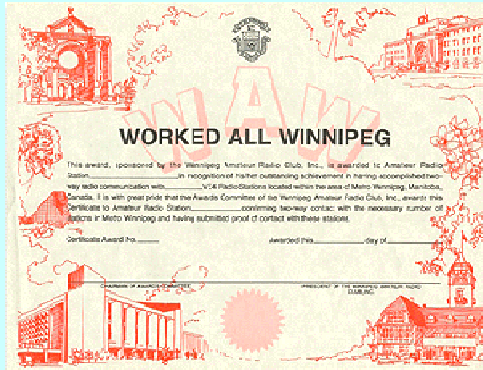


Our current Spotter Badges
Photo Credit Garry Frankel VE4VD

Continued...

WORKED ALL WINNIPEG AWARD QSO Party Weekend

Friday to Sunday April 15 - 17, 2016



There was a planned activation for the Manitoba Emergency Coordination Centre (MECC) TUE 22 MAR, VE4EMO was activated by VE4s SIG and MBQ.

The next Winnipeg ARES General Meeting is TUE 19 APR 1900h at Sir Wm Stephenson Library 765 Keewatin Street. Manitoba Hydro Emergency Coordinator Bob Schkawritka will be giving us a presentation on Manitoba Hydro Storm Response.

Manitoba Marathon
Jeff Dovyak VE4MBQ
ve4mbq@rac.ca

The 2016 Manitoba Marathon will be SUN 19 JUNE. We still need approximately twenty (20) additional volunteers. If you are a new Amateur we will pair you up with someone who has done the event previously.

Please register on-line asap thru the form that WARC Web-Master Mark VE4MAB has set up at:

<http://winnipegarc.org/marathon.html>

We currently have 65 volunteers, with registration forms from:

VA4s AJG, CAT, DON, KET, RWT.
VE4s EH, GZ, HK, HQ, QB, PH, SE, VZ, WX, ACX, AIN, AJO, ANF, BOY, CDM, DAE, DBV, DJS, DTF, DWG, EAR, ESA, ESX, GIS, GKS, GLS, GWN, HAY, JAH, JAL, JBL, JDH, JLO, JNF, LIT, LYN, MAB, MBQ, MHZ, MMD, MMG, MMW, MWH, NCH, PDD, PEH, RDO, SBS, STL, STS, SYM, TCH, TRO, TSY, TTH, WDZ, XYL, YYL.

The mandatory 2016 Amateur Radio Group Volunteer Briefing is TUE 14 JUNE 1900h Norwood Community Club 87 Walmer (Map 17 C8 in the Sherlock Map Book), material distribution begins at 1815h.

Worked All Winnipeg Award QSO Party - April 15 to 17, 2016

Coming up on flea market weekend from Friday April 15th to April 17th WARC will be promoting a Worked All Winnipeg weekend on 146.520 simplex. Get away from the repeater and see what simplex can do. Trying different antennas to boost your signal from a 17" Nagoya on the HT, mag mount on the balcony railing or driving around mobile to and from the market. Got a tape measure beam? Try that too. The contest is not limited to VHF. You can use UHF, HF, FM, Digital voice on one of the many DV modes. As long as it is not through a repeater and the stations worked are within the Perimeter.

The Rules:

- 1) Stations within Manitoba, including the City of Winnipeg, must work at least 25 different Winnipeg stations to qualify.
- 2) Stations outside Manitoba, but within North America, must work at least 15 different Winnipeg stations to qualify.
- 3) Stations outside North America must work a minimum of 10 different Winnipeg stations to qualify.
- 4) Any band and any mode may be used, but all contacts between two individual stations must be direct contacts. (repeater contacts are not allowed)
- 5) All contacts from January 1, 1956 are acceptable.
- 6) QSL cards are not required. A certified COPY of your log book, with the signatures of two other Hams who have checked your log, is all that is necessary. This copy should be mailed, along with \$2.00 to cover the cost of the certificate and postage to:

"WORKED ALL WINNIPEG AWARD"
Custodian, Dick Maguire VE4HK
c/o Winnipeg Senior Citizens Radio Club Inc.
598 St. Mary's Road
Winnipeg, MB
R2M 3L5

We are looking for former winners of the Worked all Winnipeg Award, to complete our records. If you have won the award, please e-mail Dick VE4HA at ve4hk@rac.ca, with your name, your certificate number, and the date on the certificate.

To view our list of past winners of the Worked all Winnipeg Award visit ...

http://winnipegarc.org/waw_awards.html

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QRP Magnetic Loop Antenna Project
Final Decisions
Submitted by Gerry VE4GKS

General overview: This is a loop antenna designed as a portable antenna for QRP work. It is designed to be easily disassembled for transport. It is not designed to be exposed to outdoor weather conditions. The radiating element uses the outer conductor of a length of RG-8U coaxial cable. Toroidal feed is used. VE4WSC has approved the use of the space at 598 St. Mary's as a workshop area for this project.

Bands covered: 10 – 60 meter bands. This size loop is impractical on 80 meters, as the capacitance to tune it is over 600 pf. at 4.0 Mhz. and almost 800 pf. at 3.5 Mhz.

Power handling capacity: This antenna will handle between 8.5 & 20.5 watts, depending on the band. This is based on the voltage rating of the loop tuning capacitor. These antennas develop very high voltages across the tuning capacitor – several hundred volts at QRP power levels. The tuning capacitor used is designed to handle 1200 volts. Power handling capacity is based on this voltage.

Bandwidth: These antennas are narrow band antennas, particularly at lower frequencies relative to the loop diameter.

Directional Effects: The loop transmits & receives in the plane of the loop, with nulls off its flat sides. Directional effects are more pronounced as the operating frequency is lowered.

Feed impedance: These antennas have a very low feed impedance, often under one ohm.

Loop Diameter: 36" (3')

Conductor Diameter: calculations are based on 0.400". For a small increase in diameter (to 0.44") the following changes have been calculated:

- The loop Q will increase. This will result in a reduction in the bandwidth.
 - The capacitance required to tune the loop to resonance will increase.
 - The voltage across the capacitor will drop. This will result in an increase in power handling capacity.
- At a practical level, these changes are insignificant.

Main Tuning Capacitor: Surplus Sales of Nebraska (CAV)RC273. This capacitor has 3 sections – 2 are 21-235 pf. & 1 is 11-44 pf., all at 600 volts. The 11-44 pf. section is not used. Connection is made to the stators of the remaining 2 sections, placing them in series and giving an effective capacitance of 10.5-117.5 pf. at 1200

volts. This is done to avoid passing current through the wiping rotor contact and increasing power losses. The integral reduction drive provides an 8:1 reduction, or 4 turns to tune the capacitor over its range; ~1400° of rotation for 107 pf. change of capacitance, ~13°/pf.

Calculated Performance Versus Operating Frequency

10 Meters (28.0 – 29.5 Mhz.)

- 3 db bandwidth at resonance – 141–171 Khz
- feed impedance – 1160–1405 milliohms
- efficiency – 90 %
- power handling capacity – 15.75–17.00 watts

12 Meters (24.94 Mhz.)

- 3 db bandwidth at resonance – 93 Khz
- feed impedance – 770 milliohms
- efficiency – 85 %
- power handling capacity – 13.00 watts

15 Meters (21.225 Mhz.)

- 3 db bandwidth at resonance – 55 Khz
- feed impedance – 450 milliohms
- efficiency – 75 %
- power handling capacity – 10.5 watts

17 Meters (18.093 Mhz.)

- 3 db bandwidth at resonance – 34 Khz.
- feed impedance – 281 milliohms
- efficiency – 64 %
- power handling capacity – 9.00 watts

20 Meters (14.175 Mhz.)

- 3 db bandwidth at resonance – 19 Khz
- feed impedance – 157 milliohms
- efficiency – 43 %
- power handling capacity – 8.25 watts

30 Meters (10.125 Mhz.)

- 3 db bandwidth at resonance – 11 Khz
- feed impedance – 92 milliohms
- efficiency – 19 %
- power handling capacity – 9.5 watts

40 Meters (7.15 Mhz.)

- 3 db bandwidth at resonance – 8 Khz
- feed impedance – 67 milliohms
- efficiency – 7 %
- power handling capacity – 13.5 watts

60 Meters (5.375 Mhz.)

- 3 db bandwidth at resonance – 6.5 Khz
- feed impedance – 56 milliohms
- efficiency – 2.5 %
- power handling capacity – 20.5 watts

Figures given are for the middle of the band except for the bandwidth, feed impedance, and power handling capacity on the 10 meter band. These three figures vary sufficiently that they are given at either end of the band. Other figures do not vary significantly across a band.

Continued ...

All required calculations, based on design dimensions, have been carried out using the "Small Magnetic Loop Calculator Version 1.22a" Excel spreadsheet prepared by Steve Yates, AA5TB. This spreadsheet will function using the Libre Office suite.

Operation At Increased Power:

Operation at power levels beyond QRP will entail using a loop tuning capacitor having a higher breakdown voltage. A very nice one would be Surplus Sales of Nebraska (CVV)USLS45-DR. This is a Jennings vacuum capacitor with a range of 5-465 pf. and a breakdown voltage of 5 Kv. It also includes the drive and turns counter. This one costs \$399.00 (US). There are a few others having the same minimum capacitance with a slightly higher maximum and a similar price range. Using this value with a 5' diameter loop would cover 10-80 meters. The other thing to consider is what power the toroid can handle without overheating. I have not done any calculations here – you are on your own in this area.

Materials- Frame

- ½" PVC Pipe, 10' length – 1
- ½" PVC 5-way Branch – 1
- ½" PVC Tees – 2

Pipe fittings have been purchased from Lee Valley Tools as the 5-way is a special item.

Tuning Assembly

Main tuning capacitor, with knob, mounting hardware & dial – 1

Box, plastic – 1

40 meter padder capacitor – 1, 150 pf,

60 meter padder capacitor – 1, 250 pf.

These capacitors are 1200 volt micas.

Padder switch – 1.

Switch is single pole double throw, centre off non-return

SO-239 Connectors, with mounting hardware –

2

½" Pipe Straps, with mounting hardware – 2

Braid (or very heavy wire) to connect components in tuning box

Feed Assembly & Loop

Toroid core – 1

Band switch, with knob – 1.

Switch is single pole, 8 throw, rotary, to change taps on the toroid winding

SO-239 Connector, with mounting hardware – 1

Switch support plate – 1*

Large cable ties – 3

Small cable ties – 3

RG-8U cable, length as required – about 9'.

PL-259 Connectors – 2

Wire to wind toroid & to connect toroid to bandswitch and feed connector.

Solder-



Are you a
RAC member??

<http://www.rac.ca>

* The support plate is a piece of insulating material (fiberglass, Perspex or whatever is handy) big enough to mount the toroid bandswitch and the coax feed connector on. I have a piece of ¼" Lexan that can be cut to make several plates. I will also provide the cable ties.

Tools needed:

Screw drivers, nutdrivers/wrenches, drills, soldering iron, wire cutter, PVC pipe cutter, hacksaw (to cut bandswitch shaft to length – it is 6" long), file.

Estimated total cost:

About \$100.00 (Canadian). The tuning capacitor is \$30.00 (US).

RAC/ARES NATIONAL EMCOMM FREQUENCIES		
SSB	Frequency	Tactical
75M - LSB	3.675 MHz	Alfa
40 M - LSB	7.135 MHz	Bravo
20 M - USB	14.135 MHz	Charlie
17 M - USB	18.135 MHz	Delta
15 M - USB	21.235 MHz	Echo
10 M - USB	28.235 MHz	Foxtrot
CW	Frequency	Tactical
80 M	3.535 MHz	Golf
40 M	7.035 MHz	Hotel
20 M	14.035 MHz	India
17 M	18.075 MHz	Juliette
15 M	21.035 MHz	Kilo
10 M	28.035 MHz	Lima
Digital	Frequency	Tactical
80M	3.596 MHz	Mike
40 M	7.096 MHz	November
40 M	7.096 MHz	November
20 M	14.096 MHz	Oscar
17 M	18.096 MHz	Papa
15 M	21.096 MHz	Quebec
10 M	28.096 MHz	Romeo

VA4WAN HSMM Amateur Radio "Wi-Fi" Project Update By Colin VE4CST

This spring/summer will be a busy time for our project as we've gotten a better idea of what we want to do, how to do it and what resources we have.

Network and Project Overview:

* We've settled on upper 2.3Ghz mostly for user access (5 or 10mhz channels, currently Wi-Fi protocol) and 5.9Ghz mostly for backhaul point-to-point links between tower sites (20mhz channels, either Wi-Fi protocol or the more efficient, Mikrotik-proprietary NV2 protocol). These are in ham frequencies where there should be little interference, and we can use outdoor 2.4 / 5.8Ghz Wi-Fi equipment, mostly Mikrotik or Ubiquiti radios, that can often be easily modified to run at these frequencies.

* Most sites will have one 2.3Ghz ~12dbi omnidirectional antenna and two 5.9Ghz ~24dbi directional antennas linking to other sites. Longer links may use spatial diversity and/or bigger antennas e.g. the 3ft, 32dbi dish for the 36mile shot from 55N to Woodlands.

* Every site will have a Mikrotik router on which we can configure our heart's content of IPs and subnets, VLANs, VPNs in/out, OSPF, MPLS, traffic queues and graphing like <http://44.135.120.252:40080/graphs/> ("Alpha" router at 55N)

* The 38-story 55Nassau is our main site, server location and internet feed; there is a backup server at the WSC seniors club (automatic backups of the Virtual Machines are still being configured) and we are trying to setup UofM site as backup internet feed

* St. James site is up, connected to 55 Nassau only via 2.3Ghz for now

* Woodlands site is up, connected to the main network via a temporary VPN (through the internet connection of a cottage near St. Lauren) until the 5.9Ghz link to 55Nassau is up.

* at the moment there's a half-dozen hams connected to the network, mostly on 55N

* we hope for more yearly memberships for the project... <http://www.ve4wdr.org/membership.html> select "HSMM" in middle box.

* this winter was lots of planning and speaking with site owners (we may actually need to find a 6ghz+ spectrum analyzer for the amount of detail needed to co-

locate next to a cell site). During this spring/summer, those of us who can find time will spend a number of weekends upgrading/building sites and helping the hams that want to get online do so.

55 Nassau - Main VA4WAN site

* Coverage on 2.3Ghz is mostly South and West; the East and North sector antennas are having sensitivity issues, either the radios are bad (these were used and I made the mistake of not testing their RF before installing) or the ~4Kilowatts of low-frequency RF output on that rooftop are frying these not-very-shielded radios. We're looking at swapping them out / more shielding, need to do it soon.

* 55 Nassau has 5.9Ghz panel/dish antennas for direct links to the seniors radio club (online, replacing their internet/phone line) and also to Woodlands silo, UofM site, Dugald street and the city of Selkirk, all of which are still being organized and not up yet.

We have many other small jobs to do on 55 Nassau, trying to schedule them together so as to not wear out our welcome there:

* 1-2 radios seem to have Ethernet issues (more at 100mbit speeds than 10mbit) which may be due to the first generation of cable we used being lower grade and not-as-outdoor-as-marketed.

* Need to create better mounts using galvanized angle iron and pipe for more precise aiming of panel antennas.

* The 5.9ghz panel antenna link to WSC was on the WDR mast that broke/fell and the panel was upside down, water got in and fried the RJ45 connector. Hopefully the Ethernet transformer/chip are OK so I can just resolder a new connector and it'll be working again. We put up a temporary, lower-gain Nanostation5 radio but it's a USA model that we haven't yet been able to hack to the 5.9ghz amateur band, it's running in unlicensed 5.2ghz for now where there's interference and somewhat slower speeds.

Woodlands silo

* Still needs work done at both 55Nassau and the silo to install new equipment and aim the antennas so that this site is connected to the main network.

* The 3ft 32dbi dish was dented by the falling WDR antennas so it may be more of a 20-30dbi dish now :-)

Continued....

New sites:

* We are working with a few wireless ISPs and owners of tall buildings/towers to finalize sites soon at the UofM, St. Vital area and Dugald Street. Also working on sites in the cities of Steinbach and Selkirk (backhauled to UofM and 55 Nassau respectively; these are longer shots that would use 28dbi antennas or larger if we can find them cheap and if wind load isn't a limitation).

* We are looking for options around west Winnipeg, north Winnipeg and in Portage La Prairie (the latter backhauled to Woodlands, too far for a link to Winnipeg).

* I think it'd be really impressive to get a link all the way out to Brandon, but from my RF planning that may require 2 intermediary hops between it and Portage La Prairie (unless we can get on a site in Brandon that's high enough - 120meters / 400feet by my calculations - to get to MRS-Bruxelles and hope to survive the likely huge thermal ducting on that path, or blast the 120km of dirt that's in the way to PIP; see Radio Mobile path profiles below). If anyone knows of 80ft+ silos or grain legs that we could use on the way to Brandon please let me know. The Manitoba Amateur Radio Museum in Austin tower is on the way but may be too low to get to PLP on 2.3/5.9ghz.

Equipment

* We are getting more antennas / radios / Mikrotik routers / UPSes / enclosures / spare parts / etc donated and buying some where we can find great deals (eBay), so that we'll have enough gear to build many sites. The parts that are rarely donated - shielded outdoor cat5e, new UPS batteries, surge suppressors - are bought through donations for which we are very grateful.

* We just have a few radios for new user installs right now (preferably not N or E of 55N yet), getting more is on the to-do list but we have to make sure they're not the locked-to-unlicensed-band USA models.

Plans and Education

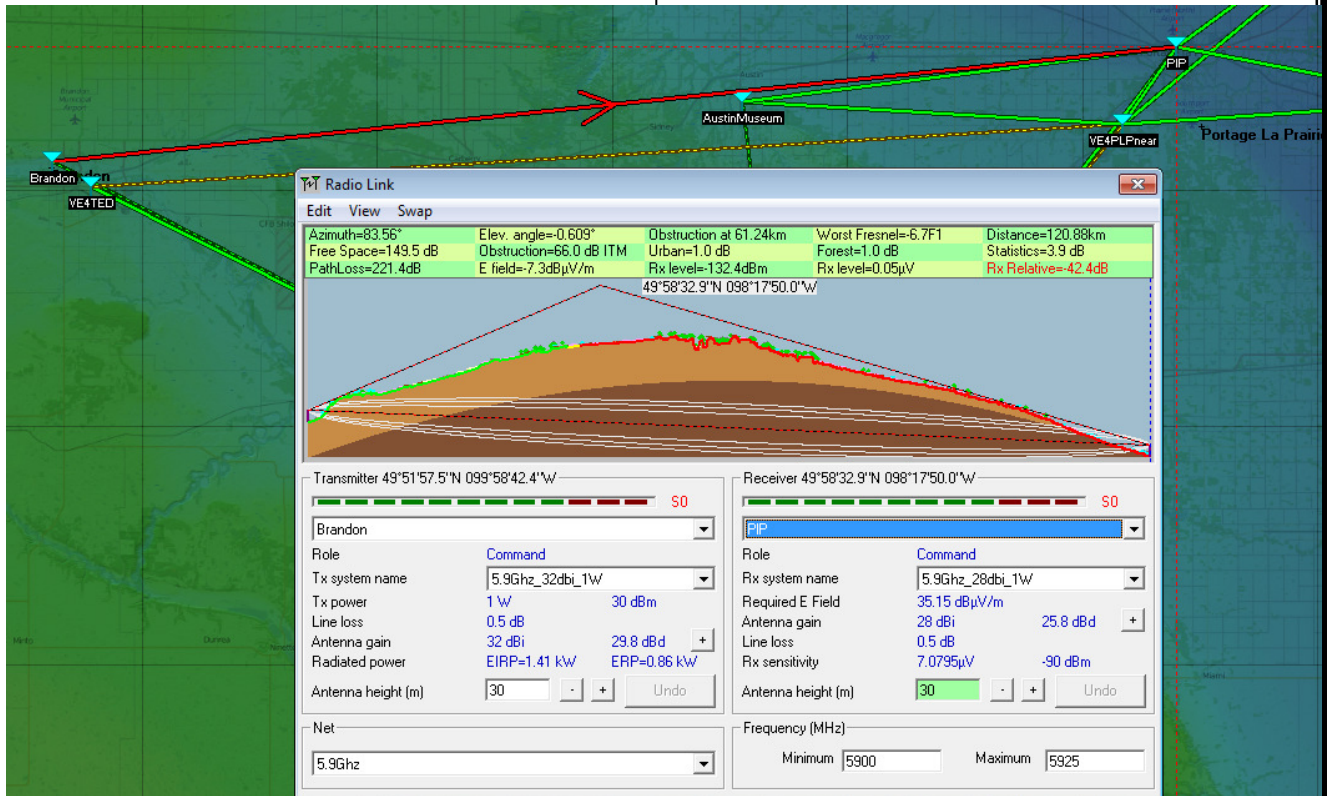
* There's plans being made for routing network design, more services like chat / forums / VoIP / etc, and more documentation and pictures on our main website.

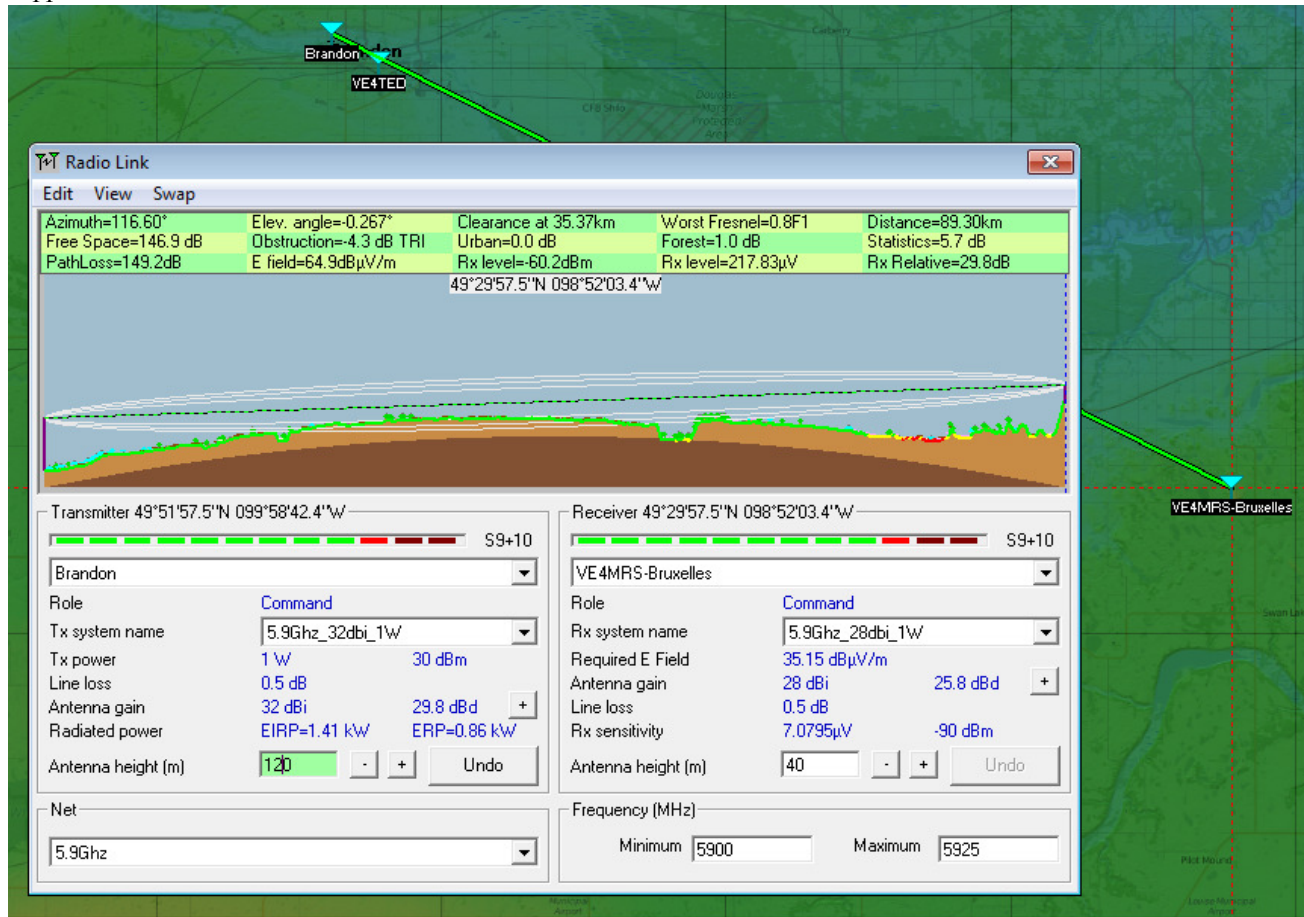
* Derek did a nice presentation at WARC about our concept and we may be doing more soon.

* We may do a general open meeting / update around May?

Thank you everyone for your support in this project, we'll speak with you (on the air?) soon!

(2nd graphic on next page...)





Winnipeg Digital Repeater Group Update by Mark VE4MAB

Following the March WARC meeting Garth VE4GWB and I were chatting on Port B of the VE4WDR D-Star repeater and getting too much "R2D2" so we figured something wasn't right. The issue continued into the week.

A few days later on Wednesday, March 16, William VE4VR attended the site to have a look and found the mast supporting the 4 bay UHF dipole had snapped just above the mounting plate taking along with it one of the HSMM antennas. We further learned that Bert VE4AND had been on the phone, which is using the HSMM network, at WSC when it suddenly died the previous Saturday. This explained it.



That evening with Garth, William and Colin VE4CST we attended the site with a new mast. Turns out the original mast had a previously unseen screw hole in it that had weakened it. After 4 and a half years of standing in the wind it finally gave out.



Braving the cold and almost dark with blowing snow Garth and William work on installing the UHF dipole on a new mast while Colin works at repairing the damaged HSMM antenna.

Although we lost several feet in height VE4WDR Port B was back on the air that evening!

Contest Calendar

Extracted From

<http://www.hornucopia.com/contestcal/>

For April ...

ARS Spartan Sprint 0100Z-0300Z, Apr 5
 Phone Fray 0230Z-0300Z, Apr 6
 CWops Mini-CWT Test 1300Z-1400Z, Apr 6
 and 1900Z-2000Z, Apr 6
 and 0300Z-0400Z, Apr 7
 UKEICC 80m Contest 2000Z-2100Z, Apr 6
 SARL 80m QSO Party 1700Z-2000Z, Apr 7
 NRAU 10m Activity Contest 1800Z-1900Z, Apr 7 (CW)
 and 1900Z-2000Z, Apr 7 (SSB)
 and 2000Z-2100Z, Apr 7 (FM)
 and 2100Z-2200Z, Apr 7 (Dig)
 NCCC RTTY Sprint 0145Z-0215Z, Apr 8
 NCCC Sprint 0230Z-0300Z, Apr 8
 JIDX CW Contest 0700Z, Apr 9 to 1300Z, Apr 10
 PODXS 070 Club PSK 31 Flavors Contest
 1000Z, Apr 9 to 0400Z, Apr 10
 QRP ARCI Spring QSO Party
 1200Z, Apr 9 to 2359Z, Apr 10
 SKCC Weekend Sprintathon
 1200Z, Apr 9 to 2400Z, Apr 10
 OK/OM DX Contest, SSB
 1200Z, Apr 9 to 1200Z, Apr 10
 New Mexico QSO Party
 1400Z, Apr 9 to 0200Z, Apr 10
 Georgia QSO Party 1800Z, Apr 9 to 0359Z, Apr 10
 and 1400Z-2359Z, Apr 10
 Yuri Gagarin International DX Contest
 2100Z, Apr 9 to 2100Z, Apr 10
 International Vintage Contest HF
 1200Z-1800Z, Apr 10
 Hungarian Straight Key Contest 1500Z-1700Z, Apr 10
 144 MHz Spring Sprint
 1900 local - 2300 local, Apr 11
 NAQCC CW Sprint 0030Z-0230Z, Apr 13
 Phone Fray 0230Z-0300Z, Apr 13
 CWops Mini-CWT Test 1300Z-1400Z, Apr 13
 and 1900Z-2000Z, Apr 13
 and 0300Z-0400Z, Apr 14
 RSGB 80m Club Championship, SSB
 1900Z-2030Z, Apr 13
 NCCC RTTY Sprint 0145Z-0215Z, Apr 15
 NCCC Sprint 0230Z-0300Z, Apr 15
 Holyland DX Contest 2100Z, Apr 15 to 2100Z, Apr 16
 TARA Skirmish Digital Prefix Contest
 0000Z-2359Z, Apr 16
 ES Open HF Championship 0500Z-0559Z, Apr 16
 and 0600Z-0659Z, Apr 16
 and 0700Z-0759Z, Apr 16
 and 0800Z-0859Z, Apr 16
 Worked All Provinces of China DX Contest
 0600Z, Apr 16 to 0559Z, Apr 17
 CQ Manchester Mineira DX Contest
 1200Z, Apr 16 to 2359Z, Apr 17

Nebraska QSO Party 1400Z, Apr 16 to 0200Z, Apr 17
 and 1400Z-2300Z, Apr 17
 Michigan QSO Party 1600Z, Apr 16 to 0400Z, Apr 17
 EA-QRP CW Contest 1700Z-2000Z, Apr 16 (20-10m)
 and 2000Z-2300Z, Apr 16 (80m)
 and 0700Z-1100Z, Apr 17 (40m)
 and 1100Z-1300Z, Apr 17 (20-10m)
 Ontario QSO Party 1800Z, Apr 16 to 0500Z, Apr 17
 and 1200Z-1800Z, Apr 17
 North Dakota QSO Party
 1800Z, Apr 16 to 1800Z, Apr 17
 Feld Hell Sprint 1700Z-1859Z, Apr 16
 YU DX Contest 2100Z, Apr 16 to 0500Z, Apr 17
 and 0900Z-1700Z, Apr 17
 WAB 3.5/7/14 MHz Data Modes 1200Z-1400Z, Apr 17
 and 1800Z-2000Z, Apr 17
 ARRL Rookie Roundup, SSB 1800Z-2359Z, Apr 17
 Run for the Bacon QRP Contest 0100Z-0300Z, Apr 18
 222 MHz Spring Sprint 1900 local - 2300 local, Apr 19
 Phone Fray 0230Z-0300Z, Apr 20
 CWops Mini-CWT Test 1300Z-1400Z, Apr 20
 and 1900Z-2000Z, Apr 20
 and 0300Z-0400Z, Apr 21
 RSGB 80m Club Championship, Data
 1900Z-2030Z, Apr 21
 NCCC RTTY Sprint 0145Z-0215Z, Apr 22
 NCCC Sprint 0230Z-0300Z, Apr 22
 10-10 Int. Spring Contest, Digital 0001Z, Apr 23
 to 2359Z, Apr 24
 SP DX RTTY Contest 1200Z, Apr 23 to 1200Z, Apr 24
 Helvetia Contest 1300Z, Apr 23 to 1259Z, Apr 24
 BARTG Sprint 75 1700Z-2100Z, Apr 24
 SKCC Sprint 0000Z-0200Z, Apr 27
 Phone Fray 0230Z-0300Z, Apr 27
 CWops Mini-CWT Test 1300Z-1400Z, Apr 27
 and 1900Z-2000Z, Apr 27
 and 0300Z-0400Z, Apr 28
 432 MHz Spring Sprint
 1900 local - 2300 local, Apr 27
 UKEICC 80m Contest 2000Z-2100Z, Apr 27
 NCCC RTTY Sprint 0145Z-0215Z, Apr 29
 NCCC Sprint 0230Z-0300Z, Apr 29
 SBMS 2.3 GHz and Up Contest and Club Challenge
 0600 local, Apr 30 to 2359 local, May 1
 Russian WW MultiMode Contest
 1200Z, Apr 30 to 1159Z, May 1
 Florida QSO Party 1600Z, Apr 30 to 0159Z, May 1
 and 1200Z-2159Z, May 1

Into May ...
 AGCW QRP/QRP Party 1300Z-1900Z, May 1
 RSGB 80m Club Championship, SSB
 1900Z-2030Z, May 2
 ARS Spartan Sprint 0100Z-0300Z, May 3
 Phone Fray 0230Z-0300Z, May 4
 CWops Mini-CWT Test 1300Z-1400Z, May 4
 and 1900Z-2000Z, May 4
 and 0300Z-0400Z, May 5

Hello from Overseas

By David VE4DAR

I'm in Tel Aviv, Israel, trying to learn some Hebrew at an Ulpan, or language school. The course I'm in is for tourists, which makes for an interesting mix of classmates. Mine are from Belize, Berlin, Bogota, France, Russia, Thailand and Israel itself. It's a large class of 25 students with an excellent professional teacher; not just a "local". We study three days a week with four-hour classes and breaks. And lots and lots of homework.

I've been to Israel before so I have friends here. Among them are some hams. Last week I joined a group that meets socially Friday evenings. Among those I met were the President, Treasurer and Secretary of the Israel Amateur Radio Club (IARC). The IARC covers all of Israel and has been around since Israel was founded in 1948. They have around 400 members. There is a system of linked repeaters, which are being upgraded. Sound familiar?



Amnon Bar-Giora 4X1DF's Ham Shack

My pal Shalom 4Z4BS and his wife took me to visit Amnon 4X1DF in northern Tel Aviv. I forgot to ask Amnon (93) how long he's been a ham. He did say that he was teaching CW during WWII. As you can see in the photos he has a terrific shack, from which he regularly operates. He's got all the certificates including having led two DXpeditions to places I hadn't heard of!

His collection of CW keys is amazing. Included are keys from ships, tanks, aircraft; from many countries; small ones the size of your thumb to the large "bug" in a metal case. It's no wonder Amnon asked,

"Do you want to see the temple?"



Amnon 4X1DF collection of Morse keys from around the world



Amnon 4X1DF showing signalling device to Shalom 4Z4BS

So, "Shalom" from Israel, the Holy Land. BTW, "shalom" means hello, peace, and good-bye. See you at the WARC Flea Market!

Amateur Radios, Antennas, and more are available from your local

Winnipeg ICOM Dealer...

Micro-HighTech Communications Ltd.

NEW LOCATION

2223 Henderson Hwy, East St. Paul, MB
(Just south of perimeter hwy)

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

Visit their web site..

<http://www.microhightech.ca/>

Nostalgia Radio CJNU 93.7

CJNU 93.7 FM is where you'll hear the very best easy listening music that has been popular over the past eight decade !

Listen On-Line at ...
<http://www.cjnu.ca>

VE4PEH GETS 1st Place In CLARA CHATTER PARTY 2015

By Pete Haertel VE4PH

"I never imagined that I had even the slightest chance of getting in the top 10 never mind First Place." said Pat, VE4PEH, in total amazement when she received this certificate in the mail.



She was not even planning to participate but was encouraged to try by myself. Pat made the contacts and I did the logging using our modest little station consisting of an Icom IC 7100, Ldg 100 tuner and Hustler 5btv vertical antenna with only 2 radials per band.



There will be the 2016 Clara Chatter Party coming up and Pat will be certain to be a willing entrant. The Chatter Party type of contest is more "gentler" than just giving callsign, signal report etc.... the ladies get to rag chew. For more info on CLARA, ladies, go to

<http://clarayl.ca>

VHF Nets

MRS Nets - 147.390 Mhz +

Sundays & Thursdays at 9:00 pm

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!

Friendly Manitoba IRLP Net

Net - 145.450 Mhz - (Node # 1066)

On - The Great Lakes Reflector #9611

Wednesdays at 7:00 pm

This net connects you with the world using the internet as the backbone!

Newbie Net 147.390 Mhz+

Saturdays at 10:00 am

This net is intended to give students and neophyte hams a chance to learn more about our hobby and to practice their on-air skills.

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 21 (XRF021BO)

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 (REF001CL)

More nets <http://www.dstarinfo.com/nets.aspx>

HF Nets

MB Evening Phone Net - 3747 Khz

Daily at 7:00 PM Local Time (CT)

Prairie Traffic Net (CW) 3660 Khz

Daily at 01:30 UTC

Aurora # 2 Net 7055 Khz

Daily at 02:30 UTC

MB Wx Net 3743 Khz

Daily at 8:30 Local Time (CT)

ARES Manitoba Monthly Readiness Net

4TH Sunday of each month

4:00 PM - 4:10 PM -7,075 Khz

4:10 PM - 4:20PM -3,675 Khz LSB 5,375 USB

Manitoba IRLP Nodes - Use reflector 9003

Winnipeg VE4WSC (Node 1809) Pinawa VE4PIN

(Node 1981), Flin Flon VE5ROD (Node 1750),

DARC Swan River VE4SRR (Node 1700)

The Newscaster is the Official Publication of **Winnipeg Amateur Radio Club**

Please send your submissions/comments to the editor Mark VE4MAB, - newscaster@WinnipegARC.org