



The NEWSCASTER

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

May 2017

Facebook [Winnipeg Amateur Radio Club - VE4BB](#) Twitter [@ve4bbwarc](#)

VE4BB

TBA

Date: Monday, May 8, 2017

Time: 7:30 PM

Place: Dakota Collegiate - Theatre *See You There*
661 Dakota Street (At Beliveau Road)

Other Important Dates:

Newscaster: Deadline May 31, 2017

WARC: Monthly Meeting Dates
May 8, 2017
June 12, 2017 - Election Night
September 11, 2017
October 16, 2017 AGM
November 13, 2017

ARES: Tuesday, May 16, 2017
Sir Wm Stephenson Library
765 Keewatin Street - Presentation
2017 CANWARN Net Controller
Briefing

Other: Field Day - June 24 - 25, 2017

WARC Executive for 2016-2017...

President	Peter Toth	ve4tth@gmail.com
Vice-Pres.	John Romanec	ve4vjr@gmail.com
Treasurer	David Latour	ve4dla@gmail.com
Secretary	Gerry Sherman	ve4gks@outlook.com
Membership	Jessy Blanchette	ve4jbb@gmail.com
Programs	Your Executive	
Director	Gary Goodman	va4rwt@shaw.ca
Director	David Freemantle	
Past President	David Latour	ve4dla@gmail.com
Public Information Officer....	Kurt Sargent	kurtsargent@gmail.com

Manitoba Repeater Society Update Secondary Receiver for VE4WPG

There have been comments made that the VE4WPG repeater is suffering from poor receive coverage in the west end of Winnipeg.

To address this concern, a receiver has been installed in West Winnipeg that is linked into the VE4WPG system.

To access this second receiver, you must transmit on 147.990 MHz and use a CTCSS tone of 123.0 Hz. You will still receive on 147.390 MHz. To enable simple usage, simply program a 2 channels into your radio as follows:

CH 1 TX 147.990 with 127.3 Hz Tone
RX 147.390 (127.3 Hz tone decode is optional)

CH 2 TX 147.990 with 123.0 Hz Tone
RX 147.390 (127.3 Hz tone decode is optional)

To use the system, simply switch to your channel 2 if you receive reports of poor strength into the repeater. Please note, this will not improve your receive from VE4WPG.

You will have to experiment to determine when one receiver will provide better coverage for your situation.

This solution has been supplied courtesy Bruce VE4KQ

Temporary Repeater Unavailability

VE4WPG, VE4VJ and all links into and out of Winnipeg will be off the air, Saturday, May 6 11:30 pm, until Sunday, May 7 at 11:30 am.

This is due to a complete electrical shutdown at the Richardson Building

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

²
WARC Meeting Minutes
Taken by Gerry VE4GKS
Monday, April 13, 2017

April Minutes

Meeting called to order 00:28.

Introductions as usual.

Rolf VE4VB accepted minutes, Shawn VE4STT seconded, passed.

David VE4DLA gave financial report: \$536 income, \$42 paid out, \$10804 bank balance, less reserve for self insurance, almost \$600 in PayPal.

Jesse VE4JBB gave membership – 98 members. For non-RAC members membership fees will be raised by \$10.00.

Rob VE4SHS gave education report – 25 wrote, 24 passed, 21 with honours. Looking for a new instructor, as Rob is retiring.

Jeff VE4MBQ gave ARES report. Still looking for volunteers for the Marathon.

No new business from RAC. Peter gave a brief overview of RAC for new hams.

Adam VE4SN gave DX report. Conditions are starting to improve.

Rolf VE4VB is planning a seminar for the new hams on setting up an HF station.

Glen VE4GWN won the hand held.

Spring Flea Market Results
By David VE4DLA

Spring Flea Market was attended by 200 vendors and buyers. Door prizes of a Baofeng radio with accessories, \$50 and \$100.

1st Prize (Baofeng radio)
VE4GWF

2nd Prize \$50 non-ham with
(VE4JRG - Jack Glenn)

3rd Prize \$100 non-ham
Les Kirchner

We sold 5 WARC badges, 3 WARC caps and renewed 7 memberships. The total take on the day, admission, sales and table rental: \$1437.50



Workshop for New Hams
By David VE4DAR

Keen to learn more about setting up their stations and getting on the air, 13 hams participated in a workshop on April 29, 2017 at WSCRC. This was the third workshop I organized (in 2012, 2014 before) with Rolf VE4VZ as presenter. Hamish VE4JDH handled the registrations, and Lawrence VE4SS looked after the money.



Drawing from his experience as an electronic technician and as a ham active on HF, Rolf described some of his more interesting activities and provided lots of valuable ideas for choosing equipment, setting up and operating a station. He utilized equipment from WSCRC's museum to illustrate his points.



Participants enjoyed the tour of WSC's operating rooms conducted by Lawrence and Bert VE4AND. Gerry VE4GKS brought his QRP station for all to see. And neophyte ham, Gil VA4GES spoiled us with her delicious cookies.



We thank the Seniors Club for their support and letting us use their classroom.

3
Spotlight On: Jim Townsend VE4CY
By David VE4DAR

I nabbed Jim Townsend VE4CY at "The Arches" one Saturday morning having coffee with his pals. That was fortunate since he lives out of town. He didn't resist.



Jim said he first got interested in radio at age 16, when his parents gave him a Philco tube radio. It had continuous tuning so he could listen to pop music from all over, especially Chicago and Denver. Then Jim's interest shifted from Short Wave to Amateur Radio.

Did you take a class? "I went to what is now Red River College and took the Radio Operating and Electronics Communication course and got my commercial 2nd class ticket. That also gave me the Amateur Radio Operator Advanced Certificate. I also learned 20 wpm CW."

Jim's first station was a used Heathkit HW 100 that cost him \$300. He ran his antenna from the chimney to the clothesline!

"My first contact was at the Red River College station in the classroom. I got my Basic Certificate half way through the course. I operated all CW."

What have you got out of ham radio? "I just enjoyed it. It's a good hobby. Through it, I've made lots of friends all over the province."

Particular interests in the hobby? "It was full digital. Now it's being part of various nets and enjoying UHF, SSB and CW."

Public Service? "Manitoba Marathon; the EMO exercise in 2011 in Selkirk. Now I'm the Emergency Coordinator for the Interlake." (David's add-on: and your career with the WPS).

Advice for new hams? "Don't just buy a cheap Chinese radio. Ham radio is more than that. It's a broad hobby. Don't just get stuck in one mode."

What's the future for ham radio? "I'm concerned with all the modern communications, but I'm still optimistic that the hobby will continue."

Thanks for this, Jim.

Amateur Radios, Antennas, and more ...
Winnipeg ICOM Dealer...

Micro-HighTech Communications Ltd.

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/>

Manitoba Marathon

Jeff Dovyak VE4MBQ
ve4mbq@rac.ca

We still need about twenty (20) Amateur Radio operators for the Manitoba Marathon. The on-line volunteer registration form for the 2017 Manitoba Marathon has been live since mid-JAN on the WARC web-site:

**[http://www.winnipegarc.org/
marathon_with_form.html](http://www.winnipegarc.org/marathon_with_form.html)**

In particular, for back-up we still need two Marathon-experienced Amateurs living south of the Assiniboine as well as one Marathon-experienced Amateur living north of the Assiniboine who have not registered yet.

The 2017 Amateur Radio Group Volunteer Briefing is TUE 13 JUNE 1900h Crescentwood CC 1170 Corydon Avenue (Map 24 D2 in the Sherlock Map Book).

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!

<http://www.cjnu.ca>

4
Winnipeg ARES
Jeff Dovyak VE4MBQ
ve4mbq@rac.ca

2017 Spring Flood Operations have not called on Winnipeg ARES or any other ARES unit in Manitoba at press time. Several Winnipeg ARES members offered or loaned contingency equipment (power supplies and antennas). Thanks to:

VE4s RDO, GWB, SE and DLA

A few but not many ARES members in Manitoba volunteered for GO Teams and VE4EMO but were not pressed into service. Thanks to:

VE4s VID, PER, SIG, HAZ and JNF.

Thanks to VE4MWH who was willing to be part of a contingency team for a Reception Centre (we had equipment for setting up three temporary stations but were never tasked by the City of Winnipeg Emergency Preparedness Program).

Personally, I was logging in to WebEOC multiple times per day to keep a handle on provincial operations.

Hamish VE4JDH and his crew looked after the Winnipeg ARES Silent Auction at the recent WARC Flea Market. Thanks to table staff VE4s YYL, MMW, PEH and JDH.

Thanks to the following donors:

St. John Ambulance
Reliance Products
Micro HighTech Communications
Tom and Ruth Mills VE4s SE & XYL
Glen and Rosi Napady VE4s GWN & YYL
Nicki Albus VE4MMW
Hamish Donaldson VE4JDH.

The winners of the four lots were:

VE4GMB – Greg Bilinsky
VE4GWS – George Scott
VE4OAK – Ed Oakes
VE4KEH – Kent Haase.



VE4s JDH & YYL staff the Winnipeg ARES table. VE4HAZ in the background.
Photo Credit Mark Blumm VE4MAB

Greg Jabusch from Run2Believe attended our April General Meeting to provide a thumbnail sketch of the 10 SEP event and to take in a Winnipeg ARES meeting (Greg is a prospective Amateur).



Greg Jabusch Run2Believe
Photo Credit Garry Frankel VE4VD

Jack Peters VA4PNO took a very serious subject, Triage, and provided us with a very entertaining but very educational presentation at our April General Meeting.



Jack Peters VA4PNO
Photo Credit Garry Frankel VE4VD

We now need twelve to fourteen additional volunteer operators for RCAF Run SUN 28 MAY as well as about fifteen volunteer operators for Camp Zangime at Birds Hill Park 10-11 JUN.

Our next General Meeting will be TUE 16 MAY 1900h Sir Wm Stephenson Library 765 Keewatin Street. Yours truly will be doing the 2017 CANWARN Net Controller Briefing. The business meeting will include a discussion about future fundraising activities.

Manitoba Repeater Society **Testing Internet Linking** *By Derek, VE4HAY*

The Manitoba Repeater Society (MRS) maintains a network of VHF & UHF repeaters across southern Manitoba. Most of these repeaters have the capability to link to each other, to greatly extend the coverage area. Under normal situations the rural repeaters are always connected to a UHF backbone linking the various sites together. This policy of having the sites linked was done to provide a greater chance of being heard while travelling along our highways, in case of an emergency or urgent need. With today's proliferation of cell phones, perhaps this policy and the almost permanent linked system should be looked at.

For each repeater site that is link a minimum of 3 radios are being connected together. The repeater of course, but also the outgoing UHF link radio and the incoming UHF link radio at the next station along the connection. This then adds up for the next connection and the next etc. Until finally there are 10 repeaters and 18 link radios all connected together just so that someone can hear you kerchunking your station or to listen to the twice weekly nets that go on for over 30 minutes at a time with non-stop transmissions. That truly put a lot of toll on the various radio involved.

The Issues

The MRS technical committee is very busy from Spring to Fall of each year, going out to all our sites and trying to maintain these radios and system. At times it seems like a never-ending battle where, just as soon as we get one site fixed up, another one has an issue. The MRS



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

If you are a user of any of these repeaters, we urge you to support the group by becoming a member.

VE4MAN - Starbuck, VE4CDN - Morris,
VE4PLP - Portage, VE4MRS - Bruxelles,
VE4GIM - Gimli, VE4MIL - Milner Ridge
VE4EMB - Hadashville, VE4FAL - Falcon Lake,
VE4WPG - Winnipeg, VE4VJ - Winnipeg, VE4WRS
- Autopatch & IRLP link Winnipeg

Links to repeaters in Ontario, Brandon, Selkirk and soon to be the Dauphin & area.

info@mb-repeater-society.ca
<http://www.mb-repeater-society.ca/>
<http://www.facebook.com/ManitobaRepeaterSociety>

maintains a list on the status of all our repeaters on our web site. But to tell the truth, this list can not be properly maintained as equipment is breaking quicker than we can update the list. But at any given day or time, a scan of the issues than need to be looked at are for a majority of the time, a UHF link issue. Why so many problems with the UHF links? Well, first there are more link radios than repeater radios. The repeater radios for the most part have been upgraded in the last 10 years to a more robust radio converted from commercial use and repurposed for amateur radio use. These radios (such as a Motorola MSR2000) have very large heatsinks and are capable of long talk times using higher output power without overheating. While these are still crystal controlled radio, (being decommissioned by commercial dealers) they have come to us at the right price as compared to a synthesized radio, which will still run into the thousands of dollars to purchase, used. The link radio on the other hand, well, they are nowhere near as robust. They are in fact for the most part 1980's versions of mobile commercial radios, used in places like taxi's or police cars. And they are living on their last capacitor so to speak. Why you might ask are we still using such old equipment? Well, the truth is, we can afford to buy newer equipment and we just don't have the space to install anything newer. Larger, commercial quality radios capable of the duty cycles we need, will not fit into our cramped outdoor cabinets out in the field. Remember when I said there is a minimum of three radios used for each connection from one site to another (some sites have four radios). A mobile transceiver is so much smaller than a large commercial radio. In fact where we would put in one MSR2000 uhf radio, we can have up to 6 of our current mobile transceivers in the same space. And with power supplies, controllers and duplexers for each radio also occupying the outdoor cabinet, space is at a premium.

Something had to give.

A repeater site without a functioning repeater is not of much use. But a repeater site without a functioning link radio is still useful as a repeater site. At least that is the current view point of the MRS. With limited space for radios, it was decided that the repeater becomes the priority. Recently, an analysis was looked at to determine where our points of failure are and what it costs us to repair. In all situations 95% of the failures are with a UHF radio or an associated part thereof.

The cost to go out and constantly repair the UHF radios is by far exceeding the cost for more needed repairs like replacing a VHF antenna or a feed line. So what can be done to reduce these costs and repairs, taking into account the limited space we have to work with and our host facilities that we are getting space from? As a temporary fix, we have begun replacing the old mobile transceivers with, well, newer mobile transceivers, which are smaller in size, but may not be as robust of these older ones. They are commercial in nature but are more like you own personal mobile radio. The duty cycle is 85-10-5. Meaning 85% of the time they should be in standby, 10% they are receiving and 5% they

are transmitting. In our real world and with linking we are doing half of them are 85-5-10 and the other half are 85-10.5 depending on which repeater is being used and which links are transmitting.

The possible future.

In today's age, with the newer digital radios, that are available, most are linked together via an internet connection. Vast distances are covered and thousands of repeaters can be interconnected at any given point in time. The issue is the digital format they are using. D-S can not talk to Fusion, which can not talk to DMR, which can not talk to Nexus. (See my article in TCA November 2015 or in the WARC newsletter around the same time period.) The MRS discussed the possibility of installing D-Star at one point in time but the cost was too great and not enough users. We also discussed a Fusion repeater for a while, but dropped it as it can not be modified and we did not like the audio out of it. The MRS decided that because of the different formats of digital, that the one common format was still - plain simple analogue FM. From an emergency perspective, this was the one common format that all could talk. However, if we were to implement internet linking, we could possibly cut down on the main source of our failures and provide a network with better uptime as well as the possibility of an extended network all over Manitoba

A work shop was held in late January, where all this was discussed, and a group of three individuals stepped up and decided to take on the role of finding a solution for using internet linking. William, Dan & Wyatt were joined with Derek from the MRS to tackle the issue and find a solution. What the MRS wanted was something low in cost and easy to implement. VoIP or voice over internet protocol was decided as the way to go and in particular, Radio over Internet protocol (ROIP) was the direction we were looking for. Since everything starts with a google search, we quickly found dozens of possible solutions. But most were proprietary VOIP devices modified to work with Radio in place of a telephone. We even found one solution made by Icom., the VE-PG3 RoIP Gateway. But MRS had 10 repeater sites, not the 3 or 4 most of these solutions could handle. Our search took us to a device called the Universal Radio Interface. <http://www.dmken.com> This device would connect to the audio in/out of any radio, along with PTT and COR signals and then send them to a Raspberry Pi3 running an app called app-rpt which is an open source application that basically is a small Asterisk private branch exchange (PBX), as in a telephone exchange. Asterisk can handle thousands of telephone connections at a time, including conference calls, inbound and outbound traffic. This looked like the right solution and this is the path the group has taken.

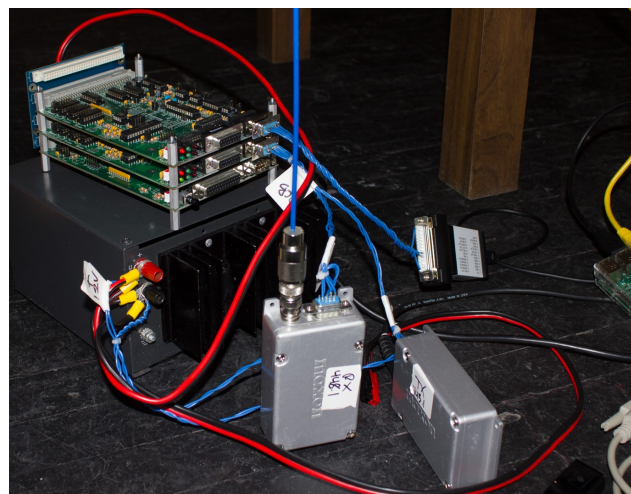
The URI/app_rpt

The URI and app_rpt worked on first connection to a radio and the internet. Configuration was quick and simple, and it immediately connected to the Allstar network. Allstar is a network very similar to IRLP. We were very excited. Now we just need to make sure it would be able to do 5 key things that MRS is looking

for.

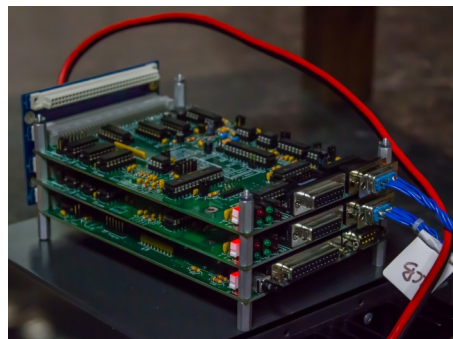
- 1) uri to uri connection (private network)
- 2) conference call- simulation of a net - uri - uri - uri
- 3) connection to the pstn.(auto-patch)
- 4) uri - Sierra repeater
- 5) uri controlling a Sierra &/or Palomar controller

The group has been able to perform all of the above to some degree. The big issue is being able to watch for conflict of commands on all systems involved the; URI/app_rpt, Sierra controller and Palomar controllers all have various commands and sequences to access commands.



The Demo

At the MRS annual general meeting, a demonstration of the proposed internet linking system was made. Derek, William and Dan, described the system, showed the various parts involved and were able to demonstrate each of the 5 key requirements. It will now be up to MRS to decide if this is the way they which to go to keep their repeaters interconnected. The cost for a link at any given site (not including the internet connection) is less than \$300.00. The cost for connecting any given standalone repeater in Manitoba to the system is less than \$300.00 (not including the internet) as the system can act as its own controller, so there is no need to buy the fancy Sierra controllers that MRS is using to control physical radios. The internet connection can be by any internet connection, provided by the host site or shared with a local amateur radio operator within line of site of the repeater, who is willing to share a few kilobits of internet bandwidth. Or if nothing else is available the cellular network and a rocket stick.



7 Contest Calendar

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

For May ...

CWops Mini-CWT Test 1300Z-1400Z, May 3
and 1900Z-2000Z, May 3
and 0300Z-0400Z, May 4

432 MHz Spring Sprint 1900 local - 2300 local, May 3

NRAU 10m Activity Contest 1700Z-1800Z, May 4 (CW)
and 1800Z-1900Z, May 4 (SSB)
and 1900Z-2000Z, May 4 (FM)
and 2000Z-2100Z, May 4 (Dig)

MIE 33 Contest 2300Z, May 4 to 0300Z, May 5

NCCC RTTY Sprint 0145Z-0215Z, May 5

NCCC Sprint 0230Z-0300Z, May 5

Araucaria VHF Contest 0000Z, May 6
to 1600Z, May 7

10-10 Int. Spring Contest, CW 0001Z, May 6
to 2359Z, May 7

SBMS 2.3 GHz and Up Contest and Club Challenge 0600 local, May 6 to 2359 local, May 7

Microwave Spring Sprint 0800-1400 local, May 6

F9AA Cup, PSK 1200Z, May 6 to 1200Z, May 7

ARI International DX Contest 1200Z, May 6
to 1159Z, May 7

7th Call Area QSO Party 1300Z, May 6 to 0700Z, May 7

Indiana QSO Party 1500Z, May 6 to 0300Z, May 7

FISTS Spring Slow Speed Sprint 1700Z-2100Z, May 6

Delaware QSO Party 1700Z, May 6 to 2359Z, May 7

New England QSO Party 2000Z, May 6
to 0500Z, May 7
and 1300Z-2400Z, May 7

Phone Fray 0230Z-0300Z, May 10

CWops Mini-CWT Test 1300Z-1400Z, May 10
and 1900Z-2000Z, May 10
and 0300Z-0400Z, May 11

RSGB 80m Club Championship, Data 1900Z-2030Z, May 10

NAQCC CW Sprint 0030Z-0230Z, Apr 11

NCCC RTTY Sprint 0145Z-0215Z, May 12

NCCC Sprint 0230Z-0300Z, May 12

Jakarta DX Contest 40m 1000Z-2200Z, May 13

Portuguese Navy Day Contest 1100Z, May 13 to 2300Z, May 20

HPC World Wide DX Contest 1200Z, May 13 to 1159Z, May 14

SKCC Weekend Sprintathon 1200Z, May 13 to 2400Z, May 14

VOLTA WW RTTY Contest 1200Z, May 13 to 1200Z, May 14

CQ-M International DX Contest 1200Z, May 13 to 1159Z, May 14

Arkansas QSO Party 1400Z, May 13 to 0200Z, May 14

MARAC County Hunters Contest 1400Z-2400Z, May 13
and 1400Z-2400Z, May 14

FISTS Spring Unlimited Sprint 1700Z-2100Z, May 13

50 MHz Spring Sprint 2300Z, May 13 to 0300Z, May 14

WAB 7 MHz Phone 1000Z-1400Z, May 14

UA2 QSO Party 1300Z-1659Z, May 14

4 States QRP Group Second Sunday Sprint 0000Z-0200Z, May 15
0230Z-0300Z, May 17
1300Z-1400Z, May 17
and 1900Z-2000Z, May 17
and 0300Z-0400Z, May 18

NCCC RTTY Sprint 0145Z-0215Z, May 19

NCCC Sprint 0230Z-0300Z, May 19

Slobzhansky Sprint Contest 1800Z-1959Z, May 19 (SSB)
and 2000Z-2159Z, May 19 (CW)

UN DX Contest 0600Z-2100Z, May 20

NZART Sangster Shield Contest 0800Z-1100Z, May 20
and 0800Z-1100Z, May 21

Aegean RTTY Contest 1200Z, May 20 to 1200Z, May 21

His Maj. King of Spain Contest, CW 1200Z, May 20 to 1200Z, May 21

EU PSK DX Contest 1200Z, May 20 to 1200Z, May 21

Feld Hell Sprint 1600Z-1759Z, May 20
and 2000Z-2159Z, May 20

Baltic Contest 2100Z, May 20 to 0200Z, May 21

Run for the Bacon QRP Contest 0100Z-0300Z, May 22

SKCC Sprint 0000Z-0200Z, May 24

Phone Fray 0230Z-0300Z, May 24

CWops Mini-CWT Test 1300Z-1400Z, May 24
and 1900Z-2000Z, May 24
and 0300Z-0400Z, May 25

RSGB 80m Club Championship, CW 1900Z-2030Z, May 25

NCCC RTTY Sprint 0145Z-0215Z, May 26

NCCC Sprint 0230Z-0300Z, May 26

CQ WW WPX Contest, CW 0000Z, May 27 to 2359Z, May 28

SARL Digital Contest 1300Z-1600Z, May 28

QRP ARCI Hootowl Sprint 2000 local - 2400 local, May 28

Phone Fray 0230Z-0300Z, May 31

CWops Mini-CWT Test 1300Z-1400Z, May 31
and 1900Z-2000Z, May 31
and 0300Z-0400Z, Jun 1

Into June 2017...

NRAU 10m Activity Contes 1700Z-1800Z, Jun 1 (CW)
and 1800Z-1900Z, Jun 1 (SSB)
and 1900Z-2000Z, Jun 1 (FM)
and 2000Z-2100Z, Jun 1 (Dig)

NCCC RTTY Sprint 0145Z-0215Z, Jun 2

NCCC Sprint 0230Z-0300Z, Jun 2

10-10 Int. Open Season PSK Contest 0000Z, Jun 3
to 2400Z, Jun 4

PVRC Reunion 0000Z-0400Z, Jun 3 (CW)
and 0000Z-0400Z, Jun 4 (SSB)

DigiFest 0400Z-1200Z, Jun 3
and 2000Z, Jun 3 to 0400Z, Jun 4
and 1200Z-2000Z, Jun 4

Wake-Up! QRP Sprint 0600Z-0629Z, Jun 3
and 0630Z-0659Z, Jun 3
and 0700Z-0729Z, Jun 3
and 0730Z-0800Z, Jun 3

Good Luck In The Contest

New Bands! FCC Issues Amateur Radio Service Rules for 630 Meters and 2,200 Meters

The Amateur Service will officially get two new bands in the near future. The FCC has adopted rules that will allow Amateur Radio access to the 630 and 2,200-meter bands, with minor conditions. A Report and Order (R&O) was released on March 29. The new rules become effective 30 days following publication in The Federal Register. The R&O, which also addresses several non-Amateur Radio issues, allocates the 472-479 kHz band (630 meters) to the Amateur Service on a secondary basis and amends Part 97 to provide for Amateur Service use of that band as well as of the previously allocated 135.7-137.8 kHz band (2,200 meters). The R&O also amends Part 80 rules to authorize radio buoy operations in the 1900-2000 kHz band under a ship station license.

"It's a big win for the Amateur community and the ARRL," ARRL CEO Tom Gallagher, NY2RF, said. "We are excited by the FCC's action to authorize Amateur Radio access for the first time on the MF and LF spectrum."

The FCC said the Amateur Radio service rules it has adopted for 630 meters and 2,200 meters allow "for co-existence with Power Line Carrier (PLC) systems that use these bands." Utilities have opposed Amateur Radio use of the MF and LF spectrum, fearing interference to unlicensed Part 15 PLC systems used to manage the power grid.

Amateurs operating on 472-479 kHz would be permitted a maximum equivalent isotropically radiated power (EIRP) of 5 W, except in parts of Alaska within 800 kilometers (approximately 496 miles) of Russia, where the maximum would be 1 W EIRP. Amateurs operating in the 135.7-137.8 kHz band could run up to 1 W EIRP. The FCC is requiring a 1-kilometer separation distance between radio amateurs using the two new bands and electric power transmission lines with PLC systems on those bands. Amateur Radio operators will have to notify UTC of station location prior to commencing operations.

The FCC also placed a 60-meter (approximately 197 feet) above-ground-level (AGL) height limit on transmitting antennas used on 630 meters and 2,200 meters. The bands would be available to General class and higher licensees, and permissible modes would include CW, RTTY, data, phone, and image. Automatically controlled stations would be permitted to operate in the bands. More details soon, on the ARRL website.

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!

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 Net (Afternoon) 7055 Khz
Daily at 23:30 UTC
Aurora # 2 Net (Evening) 7055 Khz
Daily at 02:30 UTC**

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