



# The Repeater

Winter 2006

Distributed to all Current Members

## Membership Re-nawal time

On behalf of the Board we extend to you our best wishes for a **Merry Christmas** and an interesting **New Year**

### Important Dates:

MRS: Thursday at 9:00 pm MRS Semi-Weekly Net  
Sunday at 1:00 pm - MRS Semi-Weekly Net

WARC: Summer 2008 - Wpg Hamfest / RAC AGM

ARES:

WSC: 2nd. Thursday of each month - Breakfast

Other:

Nets: Daily 01:00 UTC	MB Evening Phone net 3760 KHz
Daily 01:30 UTC	Prairie traffic Net (CW) 3660 KHz
Daily 02:30 UTC	Aurora #2 net 7055 KHz
Daily 14:30 UTC	MB Wx Net 3743 KHz
Weekdays 9:00	Seniors morning net 147.390 MHz +
Wed. 02:00 UTC	MB IRLP Net 147.27 MHz +
Wed. 9:00 pm	Six Meter net 50.238 MHz USB
Thursday 9:00pm	MRS Net 147.390 MHz +
Sunday 9:00pm	MRS Net 147.390 MHz +
Sunday 7:30 pm	VE4BDN net 146.940 MHz -
Monday 7:30 pm	VE4HS net 146.880 MHz -

### President's Report

by Ed, VE4EAR

Welcome to our final installment of the REPEATER for 2006. I hope that you can find a few moments of spare time in this busy season to sit back and catch up on the latest developments and future plans of the Manitoba Repeater Society.

This has been another very busy year with the MRS. Just keeping up with the maintenance on such a geographically large system is a major accomplishment and challenge. The technical team has worked hard to restore many linked sites to an operational status as well as continue expansion to the west. Check out Gord's technical report for all the details.

As always, the technical group is looking for volunteers to assist with maintenance and installation of equipment. You certainly do not have to be an expert to help out and be part of the team. It is an excellent opportunity to learn some new skills while contributing to the success of the MRS. We will be holding some training session early in 2007 so please listen for announcements. If interested, please contact any member of the executive and we will be sure to let you know the next time a session is being held.

In case you didn't hear the good news, the issue with the VE4MAN repeater and the CBC site has been resolved for now. CBC has agreed to allow the amateurs to continue using the tower without paying an annual fee. The main requirement is that the repeater must be used for emergency training exercises and an annual report must be submitted to the CBC. I am sure that the local ARES groups will cooperate fully in this regard.

We are looking for suggestions or topics that would make for an interesting presentation at our annual general meeting coming up in the spring of 2007. If there is something that you would like to present or if there is a topic that you feel may interest others, send me an email and we will see if we can make it happen.

## M.R.S. Current Fee Schedule

Current & Renewal Members  
\$25.00 per calendar year

*New members only - Pro-rated quarterly*

January to December \$25.00  
April - December \$18.75  
July to December \$12.50  
October to December \$ 6.25

- First time members are no longer required to pay a one time only initiation fee of \$10.00 on top of the regular fee. Their membership fee is pro-rated for the first year only.

- Family membership is for each additional members residing at the same residence as the initial member. \$10.00 each

### Industry Canada Amateur Centre

Voice 1-888-780-3333 (toll-free)  
Fax: 1-613-991-5575  
E-mail: [spectrum.amateur@ic.gc.ca](mailto:spectrum.amateur@ic.gc.ca)  
Web: <http://strategis.ic.gc.ca/spectrum>

### The Repeater Advertising Rates:

All advertising is black & white and must be submitted in electronic format.  
full page \$75.00  
½ page \$40.00  
¼ page \$20.00  
bus.card \$10.00

For more information or to place an ad please contact any executive member.

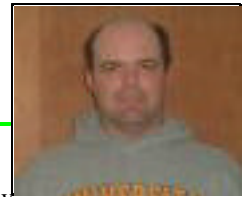
Comments or if you just want to reach us :

**Newscaster Editor**  
**Manitoba Repeater Society**  
**C/O VE4WSC**  
**598 St. Mary's Road**  
**Winnipeg, MB R2M 3L5**  
<http://www.ve4.net/mrs/>

While I am handing out homework, please don't forget that it is membership renewal time. For your convenience, there is a form included with this newsletter. The monies generated by membership fees account for virtually 100% of our income and are essential if we are to maintain or improve our repeater network. If this is important to you, I hope you will consider re-newing your membership for another year. For those that have already done so, a great big Thank you!

On behalf of the MRS executive and myself, I want to extend to everyone a sincere wish for peace, happiness, health and prosperity this holiday season and throughout 2007.

### Technical Committee Submitted by Gord, VE4GLS



Been a busy summer, fall, and now early winter for most of us. We didn't get some of the work completed that we really wanted to get done before the new year but things are progressing, if slowly. Too bad that four letter word "work" gets in the way of our hobbies!

### Projects on the go:

One of the operations we were hoping to report to be finished by now for sure is the antenna replacement at VE4MAN. It looks like the antenna might have to wait till spring as the crew at CBC didn't have to do the servicing on the tower they were expecting to do, leaving our project sitting on the ground (literally). I hope to have better news in the next newsletter.

Also concerning the Starbuck repeater, we have decided to replace the Res-Loc duplexer with a more robust

## M.R.S. Current Executive

President	Ed Richardson	VE4EAR	254-8425
V/President	Al Seddon	VE4AJO	889-9692
Secretary	Dick Maguire	VE4HK	256-3143
Treasurer	Harm Hazeu	VE4HAZ	669-6425
Membership	Roy Maguire	VE4EN	669-1355
Technical	Gord Snarr	VE4GLS	746-2743
Directors	Yori Tsuji	VE4ACX	453-3786
	Walter Bezpalko	VE4VB	284-3054
	Bill Simm	VE4ALW	857-9266
	Phil Barton	VE4QB	253-0505
Past Pres.	Derek Hay	VE4HAY	257-1420

hybrid ring filter system. The Res-Loc cavity filters in place are causing some trouble and taking a bit of a beating due to moisture and antenna problems. The receiver at Starbuck is most affected by lowering sensitivity. You may have noticed it difficult to access the repeater at times. This is the result of de-sense and excessive loss through the filtering system.

Yori is working on the new Hybrid-Ring system and we will likely install it later in the season, maybe springtime. There are many cables that have to be modified in this filter to bring it to our repeater frequency from the previous commercial channel. Each one has to have a connector removed, measure exactly for the working wavelength, and a connector re-installed. I think there are 20 cables that have to be modified, maybe more. The result is a filter that has negligible loss and excellent cross-channel rejection (over 100 dB). This filter will likely triple the power output and receiver sensitivity from the current filter system.

#### **Re-establishing the link to Brandon & VE4MRS site at Bruxelles**

We were hoping to get this going before freeze-up but things didn't work out. Some of the equipment wasn't ready to go on the scheduled date in November so we scrubbed the mission. Due to difficulty accessing the site in the winter we may have to put off our work at this site until spring after the snow melts.

The plan at Bruxelles is to replace the controller and east link radio, as well as install a VHF repeater system. The east link radio and controller were damaged from a lightning strike last summer. Some of the VHF antennae on the tower were also damaged so Prairie Mobile plans to replace two VHF arrays on their tower, one for the existing repeater (BARC's VE4HS ) and one for us to use as VE4MRS, a new repeater permanently linked to the MRS system. Installing the east link radio will allow linking into Brandon using the VE4TED repeater used previously for the same purpose.

#### **WRS Telephone interconnect/IRLP system:**

The phone patch here has been working very well and the repeater seems to have good coverage around Winnipeg and beyond. Regrettably the IRLP system requires a new(er) computer which is pending. We have some hardware but it requires configuring. Hopefully we can work on this during the cold dark days of winter coming up since this is all indoor stuff.

#### **VE4MAN-VE4CDN-VE4TOM link:**

MRS hopes to have this link set up before spring 2007. Most of the link system between VE4MAN and VE4CDN is ready to install to re-establish the original link, but with upgrades including one new link radio at Starbuck (L3) and duplexing (L1) at Morris. This will allow control of the link between VE4CDN and VE4TOM from anywhere in the MRS system at the CDN site. The Winkler link at VE4CDN

requires installation of a new link radio, feedline and antenna to provide the backbone signal for the VE4TOM repeater just south of Winkler. Prairie Mobile is providing all the infrastructure at the VE4TOM site.

#### **Repeater Rundown, E -> W:**

##### *VE4FAL, 146.64-, #40 Falcon Lake (Pinetree Intertie)*

- ✓ -VHF working very well
- ✓ -UHF link is back and working well. Good path to Milner Ridge. East link however is not working at this time. Latest news is that there is a bad antenna at the Kenora side.
- ✓ -We have a combiner system and hardware for a digipeater at this site. It will likely be installed this winter.

##### *VE4EMB, 147.36+, Hadashville*

- ✓ -Hot-linked to VE4FAL. Reports are that the link is only one-way from FAL to EMB.

##### *VE4MIL, 145.21- #42 Milner Ridge*

- ✓ -working fine. Link to Selkirk still pending. We need to install a tone generator to access the VE4MBR system in Selkirk.

##### *VE4GIM, 146.85-, #44 Gimli*

- ✓ -Working fine but the link is intermittent at times. We may be moving this repeater to a new site at Winnipeg Beach. The new site (Provided by Prairie Mobile) has a much higher VHF antenna and should provide better coverage to the Interlake area. The tower also has a UHF yagi already installed. No date planned for this upgrade so far.

##### *VE4VJ, 443.500+, #45 Winnipeg*

- ✓ -Working excellently! Great range and easy to work within 50 km or so of the city from a mobile. This system is under utilized for the coverage it has. It is a great backup f or VE4MAN until that system is repaired.

##### *VE4WRS, 145.45-, Winnipeg*

- ✓ -Both IRLP and phone patch are working well. See the previous report above.

##### *VE4WPG, 147.39+, #45 Winnipeg*

- ✓ -Our most used repeater.
- ✓ -Make sure the frequency is clear before bringing up the "link", and please ID. We seem to get the occasional

complaint about this. Please set a good example for others.

#### *VE4MAN, 146.61-, #46 Starbuck*

- ✓ -Operating at reduced output and receiver sensitivity until service can be performed. See above.

#### *VE4CDN, 145.27-, #47 Morris*

- ✓ -Working fine as a stand-alone system since last summer. Covers from Winnipeg South Perimeter to well south of the Canada/US border. Audio adjustments were made this fall to improve readability. Requires a 127.3 Hz tone for access. See above for other updates.

#### *VE4PLP, UHF link site, S of Portage La Prairie*

- ✓ -2 back to back UHF radios facilitate linking to Bruxelles site
- ✓ -May add a link to VE4PTG, no schedule so far.
- ✓ -Repaired a squelch problem this fall. System seems to be working OK.

#### *VE4MRS, 145.31- #48 Buydens Hill (Bruxelles)*

- ✓ -Link and repeater installation pending. See above report.
- ✓ -Repeater not yet operational at this time (Dec 2006)

#### *VE4NEP, 147.21+, #50 Minnedosa/Neepawa*

- ✓ -Still operating in stand-alone mode. No link.
- ✓ -We have a new VHF transceiver and a controller set aside for linking this repeater.
- ✓ -We hope to have it linked in sometime next year.

#### **MRS Web Site:**

Sorry our web page has been unavailable for some time now. We are looking into getting it going again through a new domain.

#### **Special Credits:**

Murray VE4RE and staff at Prairie Mobile  
 -Supplying equipment, sites, and support for our club  
 Yori VE4ACX and Walter VE4VB  
 -All the many hours of traveling, tuning, building, modifying, and hauling equipment for repair and service on our extensive network. These are the real technicians behind MRS!

## **Membership Report**

**By Roy, VE4EN**

Membership has remained very steady the past three years at approx. The fee has remained at \$25 per year with additional family members at the same household at \$5 each.

If you have e-mail capability we strongly encourage you to receive the newsletter via e-mail. In order for us to keep our rates down, we need to cut expenses, and the printing and mailing of the newsletter is a major expense. Please consider this when completing your application.

## **News from the net**

### *RAC-Bulletin 06-017E Special Prefixes Authorized*

At the request of Radio Amateurs of Canada, Industry Canada has authorized all Canadian radio amateurs to use special event prefixes for the months of December 2006 and January 2007, to mark the 100th anniversary of the first AM voice broadcast by Reginald Fessenden on December 24, 1906.

Reginald Fessenden, who was born in East Bolton, Quebec, on October 6, 1866, and lived until July 22, 1932, was the holder of more than 500 patents on a wide variety of subjects, and the inventor of radio as we know it today. He is particularly known for: the first voice transmission by radio in 1900, the first transatlantic two-way radio communications in January 1906, and the first radio broadcasts of entertainment and music in December 1906. On Christmas Eve, 1906, from a transmitting station in Brant Rock, Massachusetts, he sent a short program which included the song O Holy Night played on the violin and a reading from the Bible. A second short program was broadcast on December 31, 1906. Canadian radio amateurs are authorized to use the following special event prefixes during the period 1 December 2006 to 31 January 2007 inclusive:

CF for VA stations  
 CG for VE stations  
 CH for VO stations  
 CI0 for VY0 stations  
 CI1 for VY1 stations  
 CI2 for VY2 stations.

**We are in need of long runs of 7/8" Heliac or LMR-400 transmission cable. If you know of roll ends or good quality used cable available please contact anyone on the board.**



**RAC-Bulletin 06-018E Operation by "Basic Plus" Amateurs in the USA**

Since Industry Canada removed the mandatory requirement for the Morse Qualification for access to the HF bands below 30 MHz on July 22, 2005, there has been confusion as to whether amateurs with a "Basic Plus" qualification (without Morse Code) are permitted to use the HF bands in other countries. A spokesperson for the FCC's Amateur Division has clarified the situation regarding the Reciprocal Operating Agreement between Canada and the United States:

- A Canadian Basic Plus licensed operator located within the US, US- controlled territories or US territorial waters has the same HF privileges as in Canada, insofar as those privileges do not exceed those granted to US Extra Class amateurs.

A Canadian licensed operator operating within the US or US waters must comply with US regulations for the Amateur Radio Service. Their operating privileges can be no more than those of a US Extra Class Amateur. This means that Canadian amateurs in the US cannot, for example, use SSB below 7150 KHz on the 40 meter band, as they are able to do in Canada or in international waters. Industry Canada has confirmed that this statement is consistent with IC's understanding of the reciprocal operating treaty between Canada and the US. The situation in other countries varies from country to country. Many countries have still retained the Morse requirement for HF, and some countries continue to require a Morse qualification for HF operation by amateurs visiting from other countries. Basic Plus operators planning to visit countries other than the US and wishing to operate on HF while traveling should contact the regulatory authorities in those countries before leaving Canada.

**History Channel features Amateur Radio**

The History Channel plans to run a new 13-part series in early 2007 on the Secret Life of Machines. One of the episodes will be devoted to amateur radio, in particular amateur radio in space. Guests on the show will include Rosalie White of ARISS, an organization that carries out amateur radio contacts between school pupils and astronauts on the International Space Station. She will talk about the role radio amateurs have played in the SuitSat-1 experiment and explain how amateur radio satellites are designed, tested and launched. The amateur radio episode will also highlight the work of school pupils who built five types of crystal radios and compared their qualities. -- WIA

**Treasurers Report  
By Harm, VE4HAZ**

The Year to Date financial position of the Manitoba Repeater Society Inc. as of June 30, 2006 is as follows:

Opening Balance Jan 1, 2006	\$5053.99	
Self Insurance (Deduct)	\$1500.00	
Subtotal		\$3553.99
Revenue:		
Memberships	\$2700.00	
Donations	\$ 375.00	
Total Revenue:		<u>\$3075.00</u>
Cash Available for Use		\$6628.99
Expenses:		
Equipment Maintenance	\$ 700.00	\$ 580.66
New/Replacement Equip	\$3500.00	\$ 29.92
Newsletter	\$ 400.00	\$ 158.64
Insurance	\$ 600.00	\$ 500.00
MTS (phone patch)	\$ 600.00	\$ 511.47
Licenses and Fees	\$ 50.00	\$ 0.00
Misc.	\$ 200.00	\$ 381.05
Total Withdrawals	\$6050.00	\$2161.74
Total left for expenditures		\$4467.25
Self Insurance (add back)		<u>\$1500.00</u>
Ending Balance June 30, 2006		\$5967.25
		=====

**QTX~  
By Derek, VE4HAY**



Well another year has come and gone for the Manitoba Repeater Society. And it has been a very busy year at that. At least when viewed from the inside. To the average user of the system it may appear like not to much is happening. But I can assure you that at the monthly board meetings we spend a good 2 1/2 - 3 hours, discussing and planning the network as it has evolved. The price of gas these days has put a very big dent into the travel patterns of the Technical committee. We do a lot more planning, and hold off on some maintenance to combine it with outer duties in order to save a trip here & there. The coming year is looking very good, with plans well in place for extending our signals out west once again, as well as changes to the north & south. Our old equipment will be swapped out as time permits with more modern high duty cycle radios. We are also still looking for volunteers with experience who would like to help out technical committee. Please contact VE4GLS if you are interested.



Attn: Membership  
 Manitoba Repeater Society  
 C/O VE4WSC  
 598 St. Mary's Road  
 Winnipeg MB R2M3L5

**MEMBERSHIP APPLICATION / RENEWAL**

(Please note: membership year is January 1st to December 31st).

<u>Call Sign</u>	<u>Surname</u>	<u>Preferred First Name</u>
<u>Mailing Address</u>		
<u>City</u>	<u>Prov.</u>	<u>Postal Code</u>
<u>Home Phone</u>		<u>Work Phone</u>
<u>E-mail Address</u>		
<p><b><u>Club use only:</u></b></p> <p>Date: _____</p> <p>\$ _____</p> <p>Cheque / Cash / Money Order</p> <p>Rept. _____</p> <p>Card Issued: ___ Year _____</p>		

Renewal   
  New   
  New Ham (FREE if licensed in current membership year)

<p><b><i>Pro-rated-new members only</i></b></p> <p>Regular January to December \$25.00</p> <p>April - December \$18.75</p> <p>July to December \$12.50</p>	<p><b>Class of Member:</b> (please circle one only)</p> <p>Regular \$25 / Addn'l Family Member - \$5</p> <p>How do you wish the Newsletter to be delivered:</p> <p>(please circle one only)                      E-mail    or    Snail-mail</p>
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**Would you be willing to help out on work performed at the various repeater sites**      Yes  No

Please list your technical abilities or available equipment that would help out the Repeater Society: \_\_\_\_\_

Please indicate any other clubs you belong to:

WARC     ARES       WSC       RAC       Other: \_\_\_\_\_

**Optional Information:**

Current Occupation: \_\_\_\_\_

If Retired: Former Occupation: \_\_\_\_\_

Skills: \_\_\_\_\_