

The Repeater



The Manitoba Repeater Society Inc.

Summer 2002

Distributed to all Current Members

M.R.S. Current Executive President Ed Richardson VE4EAR 254-8425 V/President Gord Snarr VE4GLS 746-2743 256-3143 Secretary Dick Maguire VF4HK 667-7818 VE4MHZ Treasurer Paula Ehn Membership Roy Maguire VE4EN 669-1355 Technical Yori Tsuji VE4ACX 453-3786 Directors **Grant Delaney** VE4HGD 783-2663 Richard Sheridan VE4ESX 237-1487 284-3054 Walter Bezpalko VF4VB Past Pres. Derek Hay VE4HAY 257-1420

President's Report by Ed, VE4EAR

Hello everyone! Well summer is finally here and I hope everyone is finding the time to enjoy it.

I would like to thank everyone that attended the annual general meeting held at the WSC facilities. As always yours ideas and comments are always welcome as they set the direction for the executive. I would especially like to welcome Fred VE4FV to the board of directors.

Important Dates:

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

WARC: Sept. 9th. - Next meeting

WSC: Aug 8th - Breakfast @ Garden City Aug 22 - Picnic @ St. Vital Park

ARES: Monthly Meetings

Other - July 26 - 28 - RAC Convention Aug 2-4 - 23rd Annual Camp 807 Aug 16 & 17 - MARM Fest 8 Your MRS executive has a busy summer planned and will certainly be looking at recruiting some volunteers for several work projects. Please consider lending a hand or two if approached.

New antenna installations at Neepawa and on the Richardson Building are important activities. Both will serve to improve link coverage.

The repeaters have seen a fair amount of activity later. With local special events such as the Manitoba Marathon, and parades, to Can-Warm nets, ARES activities and the seasonal influx of tourists, the repeaters have been busy. Speaking of tourists, please remember that many hams from across Canada the US, and overseas will be visiting our province this summer. Please be friendly, patient and courteous when you hear a visitor on the repeaters. Just remember your exchange with them may leave a lasting impression of all VE4's with them. Lets make it a good one!

Please check out the rest of this newsletter for details on upcoming activities and projects!

Notice of Semi-Annual Meeting

Date: August 17th, 2002

Time: 2:30 PM

Place: Heritage Building, MARMfest Site

The agenda will include approval of the minutes of the annual general meeting, business arising, a treasurer's report, a membership report, and a technical report. These reports will be followed by new business,

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

- <u>First time members are no longer required</u> 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
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/

Treasurers report By Paula, VE4MHZ

 Opening Balance January 1, 2002 is
 \$3754.12

 As of June 30, 2002:
 \$3030.00

 Total Income is
 \$2132.29

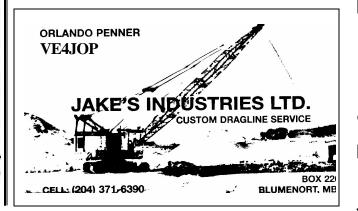
 Bank Balance is
 \$4651.83

Item	2002 Budget	Year to Date Totals
Equip. Maintenance	1500.00	65.34
New/Replacement Equip.		
(1 new MSR2000)	1500.00	1250.00
Newsletter	400.00	269.29
Insurance	950.00	0.00
Rentals	100.00	0.00
MTS	600.00	273.24
Licenses and Fees	50.00	0.00
Misc. Expenses		
(Bank Service Charges,		
VE4HK's Photocopying,		
Donation to WSC)	50.00	<u>174.42</u>
	5150.00	2132.29

Membership Committee By Roy, VE4EN

There are 152 PAID memberships for this year 2002, as well as 25 Life and special memberships. MRS would like all users of the repeaters to help us both financially and as members in order to assist us in our goal of installing new repeaters in heavy use areas. So if you know of anyone who is not a member but is using the repeater system, please encourage them to join the ranks and help support the system.

This year we hope to include a new repeater at Winnipeg VE4MAN, Gimli VE4GIM, and as soon as possible Neepawa VE4NEP. Thanks to all members for supporting the Manitoba Repeater Society.



RAC Bulletins

www.rac.ca/~racnews/othernotices/racbullemail.htm

RAC-Bulletins from HQ <rac-bulletins@mail.eton.ca> RAC Bulletin 02-042E 220-222MHz in Canada Under Attack

The Land Mobile Radio community has asked the Radio Advisory Board of Canada (RABC) to look into the possibility of making all or part of the 220-222 MHz portion of the 220-225 MHz amateur band available for Land Mobile use in Canada. The RABC will make its recommendations to Industry Canada later this year.

220-222 is already a land mobile band in the USA, and is not available to amateurs in most parts of the world.

The remainder of the band, that is the 222-225 MHz portion is not under discussion.

In Canada, the 220 to 225 MHz band is the last Primary allocation for radio amateurs until 24 GHz. The band is our source for expansion as the 144 MHz and 70 cm bands run out of frequencies for allocation to the various amateur radio interests. If RAC is to defend our interests in the review that has just begun, we need to know who is using the 220-222 segment, and how we are using it.

To assist, a web site has been created on the RAC web site at http://www.rac.ca/220survey.htm Please take a moment to fill in the questionnaire or to send information direct by e-mail to ve3iq@rac.ca, ve3pu@rac.ca and ve3byt@rac.ca.

For 220 to 222 Mhz we need to know who is using the band, where, for what purpose (e.g. emergency communication, IRLP, high- speed digital, etc.,) the modes and any legacy systems.

We urgently need this information (by 10 July) to prepare for upcoming meetings. Please take a moment now and complete the web site questionnaire or e-mail your response. Comments to: mailto: rachq@rac.ca

Local Access 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
Weekdays 9:00am Seniors Morning Net 147.390 MHz
Thursday 9:00pm MRS Net 147.390 MHz
Sunday 1:00pm MRS Net 147.390 MHz

MARMFest 8

August 16 & 17, 2002

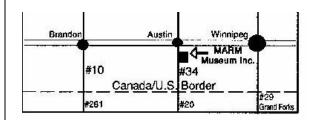
Austin, Manitoba

Registration is \$6.00 Fleamarket opens at 12:00 Noon (\$5.00/table) Banquet starts at 5:00 pm (\$8.00) Prize draw at 7:00 pm Dance at 9:00 pm (BYOB) (Free)

Camping is available for those who wish at \$12.00 for electric and \$10.00 for un-serviced.

Radio Controlled Aircraft display and fun fly. Talk-in Frequency is on 146.910 MHz. (-600) VE4ARM/VE4MTR

Contact Dave Snydal for more info @ 728-2463



http://www.mts.net/~holderr/marm.htm

New MRS Web Pages

Please check out the new MRS web pages at: http://ve4.net/mrs

And while your there, please take some time and vote for a new MRS logo.

http://ve4.net/mrs/logo.html

There are 9 to choose from! Please vote using the form at bottom of page after you've looked at all of the logo choices. Only one vote per callsign. All votes will be eliminated from the results in the case of duplicate or multiple choices sent under one callsign or for the case of multiple callsigns belonging to the same person!

We changed the URL of The Amateur Society of Dryden to www.arsd.dryden.net = \bigcirc \triangle =

Minutes of Annual General Meeting April 24th, 2002 Held at VE4WSC By Dick, VE4HK

Meeting began 7:00PM VE4EAR presiding. Members present introduced themselves. 27 members present VE4EAR made welcoming remarks

Minutes of 2000-2001

Minutes approved as published in Spring newsletter. Moved Derek Hay, VE4HAY, Seconded Yves Remillard, VE4DY No business arising - Carried

Treasurer's Report

Presented by Paula Ehn VE4MHZ.

See accompanying copy of present and proposed budgets. VE4MHZ has received approximately \$2260.00 in memberships for this year. Moved Paula Ehn, VE4MHZ, Seconded Roy Maguire, VE4EN - Carried

Auditors report: see accompanying copy of report.

Amendment: - Reference to Prairie Communications receiving cheque for \$2500.00 should be changed to Murray Ronald received cheque for \$2500.00 - Reference to WARC should be changed to MRS. Moved Paula Ehn, VE4MHZ, Seconded Tom Mills, VE4SE - Carried

Membership Report

Presented by Roy Maguire VE4EN

Membership last year 154. This year 152 so far, which is right on target. Executive would like to E-mail as many newsletters as possible, to save money. Give your E-mail address to VE4EN

Richard Sheridan VE4ESX asked if revenue was about the same as last year VE4EN replied "YES" End of Treasurer's Report

Technical Report

Yori Tsuji VE4ACX advised to see the spring newsletter for a detailed report

The Technical Committee will replace VE4GIM with a MSR2000 repeater this year. The link between VE4WPG and VE4GIM will be upgraded as soon as the Richardson Building people allow us to change the antennas on the roof

VE4EMB will be linked to the system, which will improve our coverage along the Trans Canada Highway east of Winnipeg.

VE4ACX thanked Phil Barton VE4QB for the many hours he spent repairing the cabinet now being used at VE4PLP.

Albert Diamond VE4ACX asked what was the output power of our repeaters. VE4ACX replied that VE4EMB is about 30 watts, VE4WPG and VE4MAN are about 20 watts, which is sufficient to cover the intended area. Grant Delaney VE4HGD added that the MSR2000 repeaters will give much better noise rejection at VE4WPG and VE4MAN

A discussion followed concerning the link to VE4GIM. It was pointed out that the link was working, but it was very quiet.

VE4HGD reminded the group that the link to Kenora was working well

Glen Napady VE4GWN asked about installing a PL tone on the output of VE4WPG to reduce interference in the downtown area. Gord Snarr VE4GLS pointed out that it would be required to filter it out or we would interfere with the DARC I link. VE4HAY noted that he liked the PL tone, but users should be reminded to turn off their transmit tones, to cure that problem

VE4MBQ asked for the date that VE4GIM will be upgraded VE4ACX stated it might be a while. The technical committee would like to complete work at VE4WPG first. End of Technical Report

New Business

VE4EAR announced that MRS purchased 3 newer MSR2000 repeaters from Murray Ronald VE4RE, of Prairie Mobile. One has been installed at VE4WPG and is working well. One will be installed at VE4MAN, once we have a suitable cabinet. The cabinet should arrive shortly. The third will be installed soon at Gimli. These repeaters were too good a deal to pass up.

VE4EAR announced that he spoke to the Richardson Building people at 4:00 o'clock today. Still no progress to report on installing our tower on the roof. Ed explained the details to the group. No other repeater groups are allowed to make changes or upgrades on the roof, only routine and emergency maintenance. Latest guess, we will have an answer early next week. The chief engineer has been very cooperative. VE4HAY suggested that the problem could be related to liability

VE4EAR advised that the secretary of IPARN had contacted him recently. The secretary asked if MRS would be interested in joining IPARN. Their satellite network is presently down, due to financial concerns. IPARN is considering replacing the satellite system with an Internet based system VE4MHZ pointed out that there was lots of discussion on the Internet about IPARN forming a private network separate from IRLP. VE4HK mentioned some of the problems encountered the last time IPARN wanted MRS to join. IPARN had very high minimum membership numbers, or MRS would have to pay about \$25,000 for the satellite ground station. Dick also mentioned problems with

incompatibility of IPARN linking codes with MRS codes, and their intractability about our codes.

Moved that the IPARN discussion be tabled until more information is available. Moved Tom Mills, VE4SE, Seconded Roy Maguire, VE4EN - CARRIED

VE4EAR passed around copies of proposed MRS logos designed by VE4MHZ. He then requested other ideas. VE4MHZ spoke to her logos. She requested that members E-mail comments or other logo designs to her at ve4mhz@rac.ca A discussion of the proposed logos followed. VE4EAR asked the membership to provide ideas to VE4MHZ. A vote will be taken at the semi annual general meeting

VE4GWN proposed a vote of thanks to VE4MHZ for a great, new, updated MRS website.

Budget 2002

VE4MHZ spoke to the proposed 2002-2003 budget. It is based on a slight reduction in membership. See attached copy. Move acceptance of proposed 2002-2003 budget. Moved VE4HGD, Seconded VE4MBQ - CARRIED

VE4SE asked how often is phone patch used - VE4MHZ replied that she did not know. After some discussion, consensus of members was that the phone patch was the only one left in Winnipeg, so it should remain on the air. It is one more tool in the toolbox in case of emergency.

Don Hamilton VE4HD asked about out of pocket expenses for fuel and meals etc. for Technical Committee when traveling to Gimli or other out of town sites. VE4HAY replied that he did not charge for gas and other out of pocket expenses, and most other members of Technical Committee did the same. Bill Simm VE4ALW volunteered to assist with VE4PLP. VE4EAR stated that many MRS members donated time and expertise, and that the executive of MRS was most grateful.

A member asked about venue for the semi annual general meeting. VE4HK stated that the executive normally decided at the first executive meeting after the AGM

End of New Business

Election of Officers for the upcoming year

The following have agreed to run for office VE4'S GLS, MHZ, HK, EAR, ESX, FV, EN, ACX, VB, HGD. Move nominations close. Moved, VE4MBQ, Seconded, VE4HAY - CARRIED

All above acclaimed to board of directors. Positions will be selected by the executive on Monday, April 29.

Notices from other Clubs and Organizations

VE4HAY Section Manager for Radio Amateurs of Canada announced that RAC rules for Public Service Honor

Roll have changed. See TCA Magazine or the latest WARC Newscaster.

VE4HAY also spoke to the E-mail SPAM problem being experienced by many amateurs. RAC cannot do anything about it. RAC has not sold or otherwise released the ***@rac.ca mailing list to anyone. RAC webmaster is working on the problem.

VE4HAY announced that Rick Lord VE4OV has resigned as Midwest Director, and that Norm Coull VE4EH will be assuming the position, until the end of 2003, as soon as he is officially appointed by RAC.

VE4MBQ gave an ARES report. See attached copy

VE4MBQ asked for volunteers for the Manitoba Marathon. Briefing meeting Tuesday, June 11, 1900 hrs at the Manitoba Sports Federation Building.

VE4EAR asked about procedures when Canwarn can be activated. VE4MBQ replied that amateurs must attend a training session. Canwarn can be activated by the Weather Office, by the on call Net Controller, or by an ARES official, such as VE4MBQ. VE4MBQ has a list of repeaters to use, along with backups for different areas.

VE4ESX recommended doing as much work as possible at Gimli ASAP

VE4HAY recommended a round of applause for the present executive.

No further business - Adjourn 8:24 VE4EN After a short break a RAC video tape was played

CAMP 807

23rd Annual August 2,3,4 - 2002 Warroad Minnesota

Friday: general activities 7 p.m. campfire, games. Saturday - breakfast is your responsibility

10:00 HamFest activities

17:00 Steak supper US\$ 6.00 You must bring your own plate and utensils.

19:00 Auction

21:00 - campfire, skits and songs, and socializing Sunday 8:00 Church Service & Coffee

10:00 Closing meeting & Radio Draw (2 m talk-in on 147.000 -)

http://camp807.tripod.com/2002/index.html

Technical Committee Submitted by Gord, VE4GLS

VE4CDN

This repeater is currently working with reduced range due to a loss in the duplexers, which need to be retuned. The repeater cabinet needs to be somehow sealed to prevent the constant build up of grain dust. We also need to look at the controller and its possible replacement. Earlier this spring we had a faulty connector causing the output to be extremely low (<1w) this was repaired once we found the problem. Output is about 3 watts. We hope to have this site fixed up later in the summer but is working acceptably for now. Working on plan to extend heat sinks to the outside of cabinet to allow the sealing of the cabinet and prevent the build up of grain dust.

VE4MAN

Working OK; #2 UHF link radio has been repaired so all links working again. VHF radio and it's power supply are to be replaced with Motorola MSR2000 but to do so requires a second cabinet to accommodate the larger size of the new transceiver. We are waiting to gain possession of a suitable cabinet. Until the VHF transceiver can be replaced the transmit output and receive sensitivity will remain inconsistent...

VE4PLP

This site is working OK considering one run of Heliax has been saturated with moisture and corrosion both outside and inside of copper shielding and needs to be replaced. 2 UHF link antennas also need to be replaced due to weather aging, corrosion, etc. The radio equipment has been moved to new stand-alone weather proof cabinet already on site and link radio re-tuned. We are awaiting a professional tower climber to do the tower work for us since Hydro will not allow us to climb their structure without proper certification.

VE4NEP

2 UHF link antennas need to be replaced. We are planning a trip out to service the site in summer, which will include a re-lamping of the tower, replacement of the UHF antennas and a general re-tune of the radios. The executive is also considering replacing the VHF transceiver with something newer if we can work it out with our budget next year...

VE4GIM

Has been working OK except for the link to Winnipeg. (see VE4VJ below). We are planing on doing a major

overhaul of this site this year. This will be started as soon as the work at the VE4VJ/VE4WPG site is complete. This work is needed before we start the VE4GIM work as the UHF link frequencies will be changing. The plan includes the install of a Palomar 4 link controller which was bought from Dryden Amateur Radio Society. A MSR2000 commercial grade VHF repeater radio and power supply. The UHF & VHF antennas will be checked. We have been approached by a group from Manigotogan to allow a link to a system they will be installing. As well test will be done on changing the interconnect to the DARC system to a link port on this site. This will leave at least one more link port available for any other group that wishes to link in, or for possible expansion.

VE4MIL

Working good; The technical committee has fixed the corrosion problem with UHF transmitter at VE4MIL. The link to VE4FAL still up and down or noisy due to problem at VE4FAL. The link to VE4EMB is progressing well. Most of the equipment is ready to go for this site. We just need to do a re-racking of the equipment to get it to fit into the area we have been assigned.

VE4EMB

As of the end of June this repeater is being fitted with a new ID card. This will allow the Hadashville site to link to the Milner Ridge site once all the equipment is installed (schedule for the time of printing this newsletter). This repeater will be hot linked to VE4MIL to provide more consistent coverage between Winnipeg and Falcon Lake along the Trans-Canada Highway and along Highway 44. [The new ID card sends out a 1064 Hz CW ID so the filters in the Palomar controller at Milner Ridge can filter it out so as not to retransmit VE4EMB's ID out over the rest of the system. It also sends out a sub-audible tone linked to the receiver's COS to trip the receiver at the VE4MIL site.] (The Manitoba APRS group may be adding an APRS digi to this site multiplexing the existing VHF antenna. This should provide APRS coverage from Winnipeg to the Ontario border on 144.39 MHz without degrading the VHF repeater functions.)

VE4VJ

VE4VJ has been working with reduced range; antenna/feed line turned out to be fine but the transceiver has lost sensitivity and output. Yori is tuning up and re-crystalling a commercial grade replacement radio to be installed on July 2. Once install this will bring this system back to its normal coverage.

VE4WPG

VHF repeater is working very well with MRS2000 installed. Audio has been very stable and the repeater us holding out very well even with the heavy use it experiences. Link antenna to Milner Ridge needs to be repaired as it is causing an intermittent feedback signal on the linking system. A 4th Palomar linking card, a UHF radio and antenna will be added for a new link to Gimli (present link is through VE4VJ)

VE4WRS

The phone patch is working well on 145.450 MHz. The WRS signal is multiplexed with the VE4WPG signal to use the same antenna. We may be considering changing the 2 bay folded di-pole antenna with a 4 bay in the future to increase the output of both systems. The access code will remain the same for now. Use of the patch is down considerably due to the use of Cell phones, but is still available in the event of an emergency should you need it.

General System Status:

Links are normally ON between Neepawa and Milner Ridge. The VE4TED repeater, accessed through link #2 at VE4NEP, is normally off the linking system. Same with the VHF repeater at VE4WPG in Winnipeg (due to excessive traffic). Gimli is normally off the system and access is limited due to problems at the WPG site (see explanations above). This should change soon.

The Lake of the Woods Amateur Radio Society operates the VE4FAL repeater and it is normally linked to their repeater system. The link can be activated to/from the west at any time (other than during the MRS nets Please!) As long as you bring down the link after you have finished your call. See your latest visor card for link code information.

Mutual Agreement Systems

PineTree

BearPaw Repeater, - Scott Moody, VA3EXT On June 22, 2002, Arnie (VA3NOL), Bob (VA3UDP), & Myself (VA3EXT) drove down to the BearPaw Repeater site and installed the equipment. We called up VE3BVC & VE3FNP in Fort Frances and things worked great. Later I had a QSO with VE3BIK, 6 miles north of Devlin & we can work it mobile, some spots in Dryden. Try it out on 145.425 -, *704 to connect it to VE3DRY and *740 to disconnect. You can connect VE3DRY to VA3BPL from either of the two repeaters with this command. VE3DRY is always monitoring BearPaw if there is any emergencies on HWY 502.

Current Projects

Our big roof project at the VE4WPG/VE4WRS/VE4VJ site is progressing, however very slowly. We are being boggled down in red tape, certification of documents and other roofing projects planned by our hosts. Our project includes moving all antennas (1 VHF and 4 UHF) from multiple support structures/masts & one antenna that is inside the building (link to VE4MAN) to a single tower structure capable of supporting all the antennas. When done this should reduce all linking problems at this site. We have submitted all the required paperwork to the Richardson Building Engineer, and we are waiting for approval from the building management and their engineers.

News from the Net

New TV Documentary to Feature Amateur Radio

Now news of a unique new television documentary series which will feature amateur radio in a big way. The Human Race' is a project which pits two radio amateurs against one another in a race around the planet. One heads east and the other west. The racers are tracked on a website by fellow radio amateurs who participate in the race by transporting the racers from place to place. Both teams are followed by television production crews documenting the race. Throughout the production phase, amateurs will be interviewed on camera to tell the story of amateur radio to television viewers. The race will begin in the American midwest in June 2003 and will conclude when the two teams meet one another at a point half way around the world in December next year. The producer of the program is William Desjardins, W1ZY - RSGB

Antenna Tuning Problems Using An Automatic Tuner

By Allan A. Simpson, VA6AS

In the good old days when I was first licensed back in 1948 as VE6ZZ, tuning an antenna was a relatively simple procedure involving the use of a war surplus RF ammeter or a neon bulb. Reasonable on air results together with lots of RF floating around the shack was viewed as indications that the antenna was working as it should. This type of operation was satisfactory while using a single tube MOPA (master oscillator power amplifier) rig but with the availability of war surplus gear like the Bendix TA-12 with it's Pi Network and the Command Sets with their rotary inductors and variable capacitors for matching end fed antennas, antenna tuning and matching became a little more complicated. SWR measurements were nonexistent unless one built up an RF bridge which was quite critical to construct and use in those days.

As time went on VSWR meters as well as quality feed lines, both twin lead and coaxial, became more readily available. Coax cable together with VSWR meters and antenna tuners became the most common way of feeding RF to antennas. After many years of designing and constructing my own transmitters, receivers and antennas (Simpson 1969 and 1974) I was beginning to feel that tuning up antennas was a piece of cake. This feeling changed, however, when I decided to upgrade my radio equipment to a version with an automatic antenna tuner.

In the spring of 2000 I was licensed as VE4AS operating at Falcon Lake Manitoba and made the decision to relocate back to Calgary Alberta. Rather than transport the wide range of both tube and solid state equipment I was operating, I decided to sell it all and buy one modern HF rig. Accordingly, I bought an Icom IC-706MKllG, an IC-AT180 automatic antenna tuner and a neat little MFJ switching power supply.

As soon as I took delivery of the new equipment I just had to get it on the air to try it out but both my towers and all my beams and wire antennas had been taken down and sold. No problem, I constructed the very straight forward G5RV and put it up between two trees. The results were somewhat mixed, the rig liked some bands sometimes with the rest being unusable and then at other times some of the unusable bands would work with the previously usable bands becoming a problem. There was no consistency. A loaded 4 band vertical was tried with similar results and tuning adjustments produced very queer results with no improvement in the SWR.

Upon moving into a new home at Calgary in late November 2000, I mounted my Hustler mobile whip on the ground in the back yard working against a dozen or so random length counter poise wires for the winter. I also put on a multi-coil mount which made it possible to have 5 coils on the antenna at one time. I had used this arrangement in the past with older radio equipment while operating as a snowbird in Arizona and It always worked satisfactorily but with the new equipment and the automatic antenna tuner, several of the bands would not tune and the tuning was extremely erratic. I then decided to switch off the automatic tuner, install an outboard SWR meter and then retune the coils. WOW... what a difference, the coils all tuned up nicely with usable SWR readings (close to or below 1.5:1). The IC-706MKllG instruction manual indicates that the AT-180 automatic tuner will reduce a mismatch to less than 1.5:1 but if it cannot reduce it to this level, it will shut itself off after 20 seconds. The "through inhibit" function of this tuner might also suggest that a SWR of 3:1 is the maximum SWR that it wants to deal with.

Upon turning on the automatic tuner, operation on all bands was acceptable under normal circumstances where operation was close to the frequency that the coil had been tuned to. Sometimes the tuner would turn itself off when it could not drop the SWR to 1.5:1 but it was close enough that the transmitter would operate OK without the tuner on. In other cases, the tuner would be very erratic and the SWR would be too high to operate. I came to the conclusion that when the operation was erratic that it was because of stray RF getting into the tuner circuit and tests with toroids seemed to confirm this. Further confirmation of such RF interference was noted in a recent QST Hints and Kinks article (Schetgen 2001). This article also suggests that many, if not all, automatic tuners are subject to similar problems. In this regard, it appears to be inappropriate to use an automatic tuner while adjusting the tuning of an antenna.

The SWR of an antenna before adjustment may be well beyond the automatic tuner's ability to function and if so, the SWR must first be brought down to a reasonable level by manual adjustment. Stray RF problems may be unique to the specific automatic tuner involved and could require bypassing and filtering. It might also be related to coax cable termination and leakage or poor shielding and filtering in the station's equipment cabling. It appears that both types of automatic tuners, those that are an integral part of a transceiver and those that are stand alone units are similarly affected.

In the fall of 2001 I installed a Butternut Model HF9V nine band vertical antenna working against 32 ground radials varying from 20 to 30 feet long. Each of the 9 bands

has an adjustment method to bring the band resonance to where it is desired. This antenna was tuned using the IC-706MKllG on low power and without the automatic tuner hooked up by using an external SWR meter. The following chart shows the results after tuning.

Butternut Vertical HF-9V Ground Mounted with 32 Radials BAND FREQUENCY RANGE

Mtr	Lower	SWR	Center	SWR	Upper	SWR
80	3.720	1.3	3.775	1.0	3.820	1.5
40	7.000	1.2	7.150	1.1	7.300	2.0
30	10.100	1.0	10.125	1.0	10.150	1.0
20	14.000	1.3	14.200	1.2	14.350	1.4
17	18.110	1.8	18.134	1.8	18.168	1.8
15	21.000	1.2	21.200	1.0	21.450	1.4
12	24.930	1.0	24.960	1.0	24.990	1.0
10	28.000	2.0	28.900	1.0	29.700	2.5
6	50.000	1.3	50.200	1.1	50.500	1.2

When the automatic antenna tuner was hooked up it operated normally on all bands but 10 meters where it was extremely unstable. By decoupling the tuner control cable as well as the input and output coax leads with snap on toroid (ferrite) chokes, operation on 10 meters also became normal. It is a pleasure now to switch to any of the nine bands and immediately start operating. Also, other than for the low and high ends of 80 meters, the tuner tracks across the bands with no problem.

BIBLIOGRAPHY

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News from the Winnipeg Seniors' Radio Club by Gil Frederick, VE4AG

Our annual Picnic will be held this year on Thursday, August 22. Location is the St. Vital Park, duck pond area. Cost is \$3.00 per person, (free to children under 12) and this gets you a tasty lunch (starts at 12 noon). On the menu are: hot dogs, hamburgers, corn on the cob, condiments and other fixings, potato chips, and coffee, tea, soft drinks.

There will be entertainment, and possibly Bingo if requested and weather permits. There will be admission draw prizes. Please bring folding lawn chairs. This venue has ample parking, a covered area, and wash rooms. Christmas banquet tickets will be available (\$15.00 each). Come one- come all!

The Club is setting up a special computer teaching room – we will be able to offer to Seniors a short course in basic computer operating, using Windows 98. We will also teach the basics in MS Word, and use of the internet for e-mail and information searches. This course is slated to begin in mid-September. It will be ongoing as long as there are people interested. Cost will be affordable to anyone. We can only handle six persons at a time to give each student close personal supervision and training – but we can also offer some extra tutoring if required. This course will be given wide exposure in early Fall. If you know of a senior that would benefit from this training, please call 233-3122 and leave the particulars.

Our new BBS is almost ready for operation, thanks to the help of Werner, VE4UA. There will be a news release when it is fully operational.

Our next breakfast will be Thursday, August 8th, at the Garden City Inn, McPhillips at Jefferson. Starts at 9:00 a.m. with food ordering and attendance draw, so please come and be seated before 9.

The club remains open during the summer months, Monday through Friday, from 9 a.m. until approx. 3:00 p.m. Visitors are welcome. We monitor 147.390+ repeater, and 14.140.

Manitoba ARES CANWARN Program 2002 By Jeff, VE4MBQ

Thirty-four ARES members representing six of the seven CANWARN regions attended a CANWARN Spotter Training Session in Winnipeg Saturday morning 11MAY at Prairie Storm Prediction Centre. Participants were VE4s: XA, AEY, RAW, AJR, KU, JNF, WF, UN, GLS, MHZ, SE, GWN, YYL, TN, TG, HK, MMG, KAZ, GMS, SAM, WJE, HAZ, ALW, ESX, FV, TJR, BSR, XM, AND, HLO, HAY, CD, MBQ, VA4CQD, Jay Anderson.

A number of the participants stayed for the afternoon session that covered "on-scene" or "mobile" spotting which is NOT part of the CANWARN program. Approximately twenty ARES members from Winnipeg and Pinawa units are volunteering as on-call Net Controllers for VE4WWO at the Prairie Storm Centre. Operators are on-call 0930-2130 daily from 13MAY through 08SEP. CANWARN in most of Canada can only be activated by Environment Canada. In southern Manitoba CANWARN can be activated in three ways:

Severe Wx Forecaster PSPC On-Call WWO Net Controller District CANWARN Coordinator (usually the EC or AEC).

No-Code International

http://www.nocode.org/

No-Code International is a organization dedicated to the abolition of the Morse code testing requirement as a prerequisite for any class of Amateur Radio license. NCI TM will continue as a lobbying organization as long as the manual telegraphy testing requirement exists.

What we believe. We want to make a few points crystal clear:

- NCI is not opposed to manual Morse code operation. But CW is just another mode and should not be afforded any special priority over others. It is available to those who wish to use it. Morse proficiency should not be required for those who do not wish to use the mode.
- 2. Manual radiotelegraphy communications has been superseded by more modern, reliable, accurate, faster and efficient means of communication.
- 3. Requiring manual telegraphy proficiency is not compatible with the radio amateur's mandated objective of contributing to the advancement of the radio art.
- 4. No evidence exists that Morse proficiency is an indicator of a desirable, motivated or better qualified operator.
- 5. The Morse code requirement serves as an advancement barrier to many otherwise qualified individuals.
- 6. The value of Morse code communications in the Amateur Service is primarily recreational in nature and manual telegraphy proficiency should no longer be a compulsory licensing requirement for any class of Amateur Radio license.

Editors Comments

By Derek, VE4HAY

Well I got this one pieced together finally. A little pinch here and a tweak there and it all fit into the required space. So if June wasn't busy enough, the summer is just as busy. Form the International Hamfest in the Peace Garden this weekend to the RAC National Convention, to Camp 807 and finally Marmfest. I would love to be able to make the circuit this year. But my schedule just won't allow it. In fact I will be lucky if I can make one of these date. My kids seem to have functions on these dates this year. Oh, well there is still next year. But don't let me not being able to attend stop you. In fact without myself in attendance. Maybe more of you will want to attend. And those others can attend with my proxy.

73 Have a a great summer !!





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