



# The NEWSCASTER

The Official Publication of the Winnipeg Amateur Radio Club

<http://ve4.net/warc/>

March 2005

VE4BB

Free to Members

## Fire Safety

By Tom, VE4SE

Date: March 14th, 2005

Time: 7:30 p.m.

Place: Sturgeon Creek Regional Secondary School

### Other Important Dates:

WARC: April 11 - Home Brew Night  
April 17 - Flea Market  
May 9th - Monthly Meeting  
June 13 - Year End Wind-up

WSC: 2nd Thurs. of month - Breakfast - Garden City Inn

ARES: March, 15th - VE4DJM - Inter-operability

Other: April 16 - Fargo Hamfest  
April 21 - MRS - Annual General Meeting  
June 19 - Manitoba Marathon  
June - 25 & 26 Field Day  
July 8-10 - 42nd. International Ham Fest  
July 22-25 - Saskatchewan Ham Fest - Saskatoon  
July 22-25 - RAC AGM - Saskatoon  
Aug 19-20 - 10th. MARMFEST - Austin, MB

Nets: Daily 01:00 UTC **MB Evening Phone net 3747 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 +

### The President's Call By John, VE4QV



Just six days after our next general meeting March 14th, spring will officially arrive. It feels like this winter has gone on forever but I'm sure warmer days aren't far away. What spring will bring us are some of the most exciting activities for the Winnipeg Amateur Radio Club. First up will be Homebrew Night at the April meeting. There's still plenty of time to get a project ready. What I love about this event is not only how it shows off the incredible skill and creativity our members have, but also the very diverse interests within the club. Homebrew night brings us back to the beginning of how amateur radio started, with experimentation. This year's event promises to be full surprises. Don't miss it. Homebrew night is April 11th.

The next item on the spring calendar is WARC's annual spring Flea Market. Mark your calendar and set your alarm for Sunday, April 17th. The details as to start times for vendors and the general public will be in the next Newscaster as well as being announced on the MRS net. While we do not have a Flea Market coordinator at this time plans are well underway non-the-less. We'd love to have you help out even for a half hour shift. Please contact either myself John Pura VE4QV or Ruth Mills VE4XYL. Also contact Ruth if you're interested on a table to show your wares. Also rapidly approaching is Field Day. This year's Field Day falls on the weekend of June 25th and 26th. Bird's Hill Park will again be the location. There will be more details in the next Newscaster.

### WARC: Executive for 2004

Past President	Louis Gaudry	lcgaudry@mts.net
President	John Pura	ve4qv@rac.ca
Vice-Pres	Vacant	
Secretary	Ed Horton	ve4eih@rac.ca
Treasurer	Fred Venema	fvenema@shaw.ca
Membership	Mark Blumm	ve4mab@rac.ca
Program	Vacant	
Director at Large	Jan Schippers	schippej@squared.com

The topic for our March meeting is Fire Safety presented by the City of Winnipeg Fire/Paramedic team. To accommodate our presenter we will be having the presentation at 7:30 PM, and then the business meeting immediately afterward. I look forward to seeing you all at the meeting.

### **Minutes for W.A.R.C. February 14th, 2005** **Submitted by Ed, VE4EIH**

The meeting started at 1936 hours. There were 39 people in attendance. All were welcomed. John asked if there any problems with the previous minutes. John VE4JNF motioned to approve, VE4HAY 2nd. Previous minutes were accepted.

#### **IRLP project**

John informed those in attendance of the IRLP. Les VA4LES is configuring the computer. There were a couple of snags, but they have been worked through. The Dimensions were passed on to Gord of MRS. The set up is soon.

#### **Treasures report.**

Fred reported that there were 4 new members at \$60.00, 50/50 was \$83.00, Insurance was \$550.00 Red Cross was \$500.00, and postage and stamps was \$47.00. The balance for previous month was \$1058.00.

#### **Standing committee**

Programming John reported that he has a few things lined up. Tonight is IRLP. March Tom VE4SE will be talking about fire safety. April is home Brew night. (Time to finish those projects.) May will have VE4GTB talking about Amateur Satellite. June is Elections once again.

#### **RAC**

VE4SN, Adam announced that Derek, VE4HAY agreed to come on board as assistant director. As well as Dick, VE4QK. Paul VE4AEY was unable to continue with the

duties. On the matter of CW, nothing has yet come through. The gazettes had 60 day comment period. Only 150 submissions. Adam then showed a graph, of the break downs. 123, wanted relaxed cw, while 19 wanted it kept as is.. The department will now formulate a plan. Adam also reported that RAC has instituted a Liability Insurance. Yearly dues for RAC is to go up to \$49.95 per year. The liability insurance deals with damage done, not theft or fire. All those who are life or annual members of RAC are covered. A question was asked about clubs. Adam explained that clubs are now included.. The club has to be registered. Cost for coverage would depend on numbers of RAC members in the club. For club liability, this would cover club events ie Field Day., if a club member is not part of RAC. .More information is on the RAC home page. VE4HAY was sent a E-Mail from VE5FX, to find the curiosity level about a foundation license. This issued was raised previously, but never taken up. This may get a more interest in to amateur radio.

#### **DX Sleuths**

Adam told that the 20, 10, and 15 meter bands are opening. Edamin Islands expedition was close to Isuami area. Operators from India were used to help with Tsunami communications. Did a excellent and credible job. Adam then told how he worked Gemsis and Ed VE4YU has made various contacts while contesting.

#### **ARES**

Jeff reported in News Caster that Tedd VE4VID is giving a talk about geo cashing, Marathon meetings are starting. The marathon will be on fathers' day.

#### **Flea Market**

The spring Flea market is fast approaching. Currently there is no coordinator. The Flea Market is to be on the 17 of April, at the Victoria Heritage community center. Field day is also coming on as well. Looking for a coordinator. Space is to be booked.

#### **Field Day**

David asked about booking for Field Day. He was told that, bookings are down in April.

#### **Good and Welfare**

Sadly VE4KR Ron has passed away, this was passed on from Glen VE4GWN to John.

### **Parkside Appliance & Electronics**



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**John, VE4JNF**

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Industry Canada Amateur Centre

Voice 1-888-780-3333 (toll-free)

Fax: 1-613-991-5575

Email: [spectrum.amateur@ic.gc.ca](mailto:spectrum.amateur@ic.gc.ca)

<http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/vw>

[GeneratedInterE/h\\_sf01709e.html](http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/vw/GeneratedInterE/h_sf01709e.html)

Comments or if you just want to reach us :

**Winnipeg Amateur Radio Club  
C/O VE4WSC**

**598 St. Mary's Road**

**Winnipeg, MB R2M 3L5**

Newsletters - past issues

<http://www.ve4.net/newsletters.html>

**WPGARES****By Jeff, VE4MBQ Emergency Coordinator**

Our February General Meeting featured a presentation on Geocaching by Tedd Vidler VE4VID. In lieu of our routine business meeting the ad hoc committee on recruitment presented their report. Thanks to David VE4DAR, Don VE4DWG, and Harm VE4HAZ for their deliberations. Kent VE4KEH (Fundraising Chairman) appears to have things well in hand for the WPGARES tables at the Spring Flea Market..

Elsewhere in this edition of The Newscaster is a call for volunteers from Rob VE4RST for the Manitoba Marathon. Maiko VE4KLM will be organizing the APRS part of the operation, he's got a request for borrowing some APRS gear in with Rob's call for volunteers.

Our next General Meeting is TUE 15 MAR 1900h at Sir Wm Stephenson Library 765 Keewatin Street. Don Mackinnon VE4DJM will be giving us a presentation about Inter-operability.

**Calendar****March**

AGCW YL-	CW	1900Z	Mar 1
ARRL Inter. DX Contest	SSB	0000Z	Mar 5
Wake-Up! QRP Sprint		0400Z	Mar 5
DARC 10-Meter	Digital	1100Z	Mar 6
RSGB 80m Club Championship	Data	2000Z	Mar 7
ARS Spartan Sprint (Mar)		0200Z	Mar 8
Pesky Texan Armadillo Chase		0200Z	Mar 10
RSGB Commonwealth Contest		1000Z	Mar 12
AGCW QRP Contest		1400Z	Mar 12
Oklahoma QSO Party		1400Z	Mar 12
	And	1400Z	Mar 13
North American Sprint	RTTY	0000Z	Mar 13
UBA Spring Contest	CW	0700Z	Mar 13
NSARA Contest		1200Z	Mar 13
	And	1800Z	Mar 13
Wisconsin QSO Party		1800Z	Mar 13
RSGB 80m Club Championship	CW	2000Z	Mar 16
10-10 Int. Mobile Contest		0001Z	Mar 19
BARTG HF Contest	RTTY	0200Z	Mar 19
SARL VHF/UHF Contest		1000Z	Mar 19
Russian DX Contest		1200Z	Mar 19
CLARA and Family HF Contest		1700Z	Mar 19
Virginia QSO Party		1800Z	Mar 19
UBA Spring Contest	6m	0700Z	Mar 20
9K 15-Meter Contest		1200Z	Mar 20
RSGB 80m Club Championship	SSB	2000Z	Mar 24
CQ WW WPX Contest	SSB	0000Z	Mar 26

UBA Spring Contest	2m	0600Z	Mar 27
Spring QRP Homebrewer Sprint		0000Z	Mar 28

**April**

SP DX Contest		1500Z	Apr 2
EA RTTY Contest	RTTY	1600Z	Apr 2
Missouri QSO Party		1800Z	Apr 2
	And	1800Z	Apr 3
QCWA Spring QSO Party		1800Z	Apr 2
144 MHz Spring Sprint		1900 local	Apr 4
ARS Spartan Sprint (Apr)		0200Z	Apr 5
YLRL DX-YL to NA-YL Contest	CW	1400Z	Apr 5
SARL 80-Meter QSO Party		1700Z	Apr 7
JIDX CW Contest	CW	0700Z	Apr 9
ARCI Spring QSO Party		1200Z	Apr 9
EU Spring Sprint	SSB	1500Z	Apr 9
Georgia QSO Party		1800Z	Apr 9
	And	1400Z	Apr 10
UBA Spring Contest	SSB	0600Z	Apr 10
Hamnet 40m Simulated Emerg Contest		1200Z	Apr 10
222 MHz Spring Sprint		1900 local	Apr 12
YLRL DX-YL to NA-YL Contest	SSB	1400Z	Apr 13
Holyland DX Contest		0000Z	Apr 16
TARA Skirmish Prefix Contest	Digital	0000Z	Apr 16
ES Open HF Championship		0500Z	Apr 16
YU DX Contest		1200Z	Apr 16
EU Spring Sprint	CW	1500Z	Apr 16
Michigan QSO Party		1600Z	Apr 16
Ontario QSO Party		1800Z	Apr 16
432 MHz Spring Sprint		1900 local	Apr 20
DX Colombia International Contest		0000Z	Apr 23
SP DX RTTY Contest	RTTY	1200Z	Apr 23
Helvetia Contest		1300Z	Apr 23
Florida QSO Party		1600Z	Apr 23
	And	1200Z	Apr 24
Nebraska QSO Party		1700Z	Apr 23
EUCW/FISTS QRS Party		0001Z	Apr 24
SBMS 2 GHz and Up WW Club		0600 local	Apr 30

**DIAMOND  
IMAGE**

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## News from the Net

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### *Changes in store for the WIA*

A busy time ahead for the WIA and the ACA This year will see a number of important changes occurring for amateur radio in Australia with licence restructuring, a new approach to interference management, and lots more. The Australian Communications Authority (ACA) is on track to implement the remaining of its decisions arising out of the Review of Amateur Service Regulation.

- A major change from it has already occurred. That was the end to Morse code tests as an amateur licence requirement for access to the HF bands.
- The introduction of the Foundation Licence expected in April this year will be part of a new three-tier structure of Foundation, Standard and Advance licences.
- The responsibilities of radio amateurs for resolving interference are to be included in the Amateur Licence Condition Determinations - our regulations. The ACA proposes to publish as an Advisory Guideline, under the Radiocommunications Act, outlining the responsibility of those affected by interference and the ACA's method of dealing with it.
- The ACA intends to out source the issuing of amateur certificates of proficiency and the management of callsigns, that may include new four-letter callsign suffixes.
- A Class Licence is also being created so that visiting radio amateurs with European Conference of Postal and

Telecommunications Administrations (CEPT) licences can operate portable in Australia, for short term visits, using their home callsign. -- WIA

### *Amateurs Help Broadcaster get back on air*

AID TO THE BROADCASTER - STRICKEN 2NCR-FM, 92.1 MHz. Lismore Community broadcaster 2NCR-FM, got lightning struck a few weeks ago. Severe damage to the 1000W transmitter, especially to the exciter, put them off air. To the rescue, Summerland Amateur Radio Club members, VK2's JUB, AUX and ZDR After many hours of rebuilding and repair they are again on air, albeit weaker. The final repair situation is yet to be determined. -- WIA

### *Broadcaster wakes up on BPL*

Radio Netherlands rings alarm bells on possible BPL roll out. Radio Netherlands have posted to their website and <http://www2.rnw.nl/rnw/en/features/media/features/bpl05012.7.htm> broadcast via their radio network a very informative program called "Wake up and smell the coffee". The item is all about why the short-wave broadcast industry should be doing more to fight BPL. Read and or listen on MP3 to the article here. -- WIA

### *Australia seeks Private band Managers*

ACA seeks expressions of interest in private band management ACA acting chairman Dr, Bob Horton has announced the possibility of industry, community or other government organizations managing some radio frequency spectrum bands. The idea is canvassed in a discussion paper released by the Australian Communications Authority (ACA). WIA's Glenn Dunstan VK4DU told us this ACA proposal is not intended to be applied to internationally allocated spectrum - such as that used by amateurs. Dr Horton of ACA said preliminary talks with industry and other government organizations had shown that there was growing interest in the concept of private band management. "The ACA is interested in views on the concept," he said. "In particular, we would like to know whether there are people or organizations interested in becoming private band managers, which specific bands may be of interest, and whether the ACA should consider options for a policy framework to support private band management." -- ACA

### *WRC-07 PREPARATIONS*

It seems only a short time ago that WRC-03 took place in Geneva, Switzerland. However, preparations for WRC-07 are well underway within CITEL, the Region 2 telecommunication organization.

There are two important amateur radio related issues that will be addressed at WRC-07. Agenda item 1.13 will review the allocations to all services in the HF bands

## Semi- Annual WARC Flea Market

**April 17, 2005**  
**Heritage Victoria Community  
club**  
**950 Sturgeon Rd.**

\$2.00 Entrance fee

Tables are \$5.00 for WARC members, \$10.00 for non WARC members and commercial outlets.

Ed Horton VE4EIH is the Coordinator. If you would like to volunteer for various jobs please contact him.

Ruth VE4XYL and Tom VE4SE will be selling tables, please contact them at 837-6915 or at 605 Bruce Ave.

between 4 and 10 MHz, excluding those allocations to services 7.0 to 7.2 MHz. WRC-03 expanded the 40 meter amateur allocation in Region 1 and most of Region 3 by doubling the band to include 7.0 to 7.2 MHz. In Region 1 and most of Region 3 the band prior to WRC-03 was 7.0 to 7.1 MHz. The expansion is due to be effective in 2009 but several of the Region 1 administrations have already allowed amateur operation in the expanded portion of the band. Of course, in Region 2 our 40-meter band is from 7.0 to 7.3 MHz. There is some thought that WRC-07 may "harmonize" the 40-meter band worldwide by simply taking the top 100 kHz from the amateur radio service in Region 2 so that the worldwide amateur radio band will be 7.0 to 7.2 MHz. It is important that all Region 2 Member Societies make their telecom authorities aware of the need to retain the top portion of the 40-meter band in Region 2. The IARU objective is to have a 300 kHz band worldwide for the amateur service. It is not too early for each R2 society to discuss this issue with their telecom officials. Any meeting or opportunity to discuss amateur radio issues with telecom officials presents the opportunity to bring this issue to their attention. One of the resolutions passed by the General Assembly at the IARU Region 2 Conference last year was to urge all Region 2 societies support the IARU objective of a 300 kHz worldwide amateur radio band with their own administrations and to urge their administrations to support that objective at CITEL meetings.

The other important amateur radio issue to discuss with telecom authorities is WRC-07 agenda item 1.15, which is a move to establish an amateur radio allocation at 135.7 to 137.8 kHz. Maintaining support for this issue within CITEL is necessary if this allocation is to become a reality. This issue should also be on the list of discussion topics with telecom authorities. -- *IARU Region2 News*

### ***Icom to replace the 706 series***

The successor to the IC-706MKIIG has been announced. We should know some more soon, since it will be available in the second quarter of 2005, according to information supplied by ICOM France. Check this web site: <http://www.qsl.net/ab4oj/icom/ic7000.html> -- *QSL.net*

### ***SOUTH AFRICA GOES CODE FREE***

Big changes have taken place in the ham radio licensing structure in South Africa: South Africa has gone entry level code free. This, with an announcement that as of February 4th passing a Morse exam is no longer a requirement for a full Zed-S license.

A technical examination (HARC Syllabus) is the basic entry requirement. Successful candidates are allocated a call sign with a ZR prefix and are given limited HF privileges. They have full access to the 160, 80 and 40 metre bands and

limited use of frequencies in the 20, 15 and 10 metre bands. The following allocations apply:

20 metres 14.070-14.099 kHz, 14.225-14.250 kHz

15 metres 21.070-21.120 and 21.300-21.450 kHz

10 metres 28.050-28.150 and 28.300-28.500 kHz

ZR licensees have full use of all VHF and UHF bands. The permitted power as measured at the antenna terminals is 20dBw (100 watts). To upgrade to a full ZS licence, the ZR licensees has to achieve one of the following:

**Operating Achievement** Confirmed contacts with 100 separate stations on any combination of bands or modes. Note that the requirement of 100 separate stations means that each station can only be counted once, even if it is contacted on many bands or modes.

**Electronics Construction** The candidate must construct and demonstrate one of the following: A working direct conversion or superheterodyne radio receiver that can receive and demodulate transmissions on any frequency allocated to the amateur service in any mode used by the amateur service. A working crystal-controlled transmitter that can transmit modulated signals with a power of at least 1 watt on a frequency allocated to the amateur service using any modulation method used by the amateur service.

**Public Service and Emergency Communications.** The candidate must provide proof that he or she has spent at least 50 hours providing communications services for one or more public service events Recognition of professional qualifications The candidate must provide proof that he or she has been awarded any of the following qualifications: A nationally recognized tertiary degree, diploma or trade certificate in electronics or radio that would ordinarily require at least two years of study to complete;

**Morse Code Proficiency** The candidate must demonstrate the ability to send by hand and receive by ear Morse code at a speed of not less than 5 words per minute. SARL President Graham Hartlett ZS6GJH said that the new license structure heralds a new era for amateur radio in South Africa. "Morse code became a major stumbling block to grow the base, particularly in attracting the younger generation," he said. " We however have managed to convince the regulator to keep Morse code as one of the options, albeit it is at only 5 words per minute."

The ZS license gives full access to all amateur bands with a power limit of 26 dBw (400) watts measured at the antenna terminals. South Africa also has a novice license carrying the prefix ZU. ZU licensees have very limited access to HF. Full details of the South African licenses can be found on [www.sarl.org.za](http://www.sarl.org.za). --*SARL*

### ***VK's looking for National QSL Service***

National QSL Service Work is ongoing designing a national QSL service and this involves consultation with all states and territories each of which has over the years

developed its own methodology which has to be incorporated into a homogeneous and coherent national approach. The timing of designing and implementing the new system is uncertain because of the steps required and the number of people and systems to be consulted but it is targeted to be implemented this year. Pending the introduction of the national system, the individual QSL Bureaus are carrying on as before. -- WIA

### ***Tower Policy Review Released by Industry Canada***

Industry Canada has announced the release of the Report on the National Antenna Tower Policy Review . This review was led by Professor David A. Townsend, Professor of Law at the University of New Brunswick, with the support and assistance of the National Antenna Tower Review Advisory Committee. RAC contributed to the study directly and through the Radio Advisory Board of Canada. The objective of the consultation was to examine possible improvements to Industry Canada's existing antenna tower siting policies and approval procedures. The department received Professor Townsend's Report on the National Antenna Tower Policy Review on December 6, 2004, and is currently reviewing its findings and recommendations. The announcement can be found on the Industry Canada web site in English at:

<http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/en/sf05353e.html>

copies of the report are available for download from this web site by clicking here.

[http://www.rac.ca/downloads/200502\\_ic\\_antenna\\_report-e.pdf](http://www.rac.ca/downloads/200502_ic_antenna_report-e.pdf)

The report contains 34 recommendations to Industry Canada, but only one specifically mentions the amateur radio service.

#### ***Recommendation 19:***

That Industry Canada should ensure that a flexible and expeditious land-use consultation model is available for the establishment and operation of radio stations (such as amateur stations) likely to have only a modest and localized impact upon their surroundings. This model should set out both the rights and obligations of antenna proponents seeking antenna approvals from land-use authorities. Several other recommendations may turn out to be important to amateurs who will be dealing with local land use authorities. In particular, Recommendations 1 to 13 as well as 25, 28 and 34, should be read carefully. Of course we will have to wait and see what action Industry Canada decides to take in response to the recommendations.

### **Kid's Day 2005**

**From Bob Brown, KW3F AMSAT Member #20850**

#### ***Here's a twist on kid's day that I think is really very cool.***

I'm a 53 year old "kid" that was assisted by a fine young ham from Winnipeg, in making my first two satellite contacts. That young kid is: Aruni Perera VE4WMK - EN19 AMSAT Member #35560

I'm brand new to working the satellites. I stumbled across an ad or link concerning the Arrow II and thought "this'll give me something new to try". I started doing some research, and I subscribed to this mailing list about 3 weeks ago.

Aruni had posted a message telling of her success with the recent QRP day event and that she was using an Arrow II and an IC-W32A. I emailed Aruni and asked some questions, and for some advice, about gearing up and getting involved.

Well, a couple of emails back and forth, some tutoring on how to program the memories of the HT for Doppler etc., and I had success with SO-50 and AO-27 today. I think I'm going to get hooked on this. I'm already looking towards a FT-847.

I didn't have a clue about Aruni's age until about our third email exchange. She is 10 years old. YAY! There still is hope for future generations to carry on this great hobby. When I learned she was 10 I immediately thought about my first hamming experiences 40 years ago. It brought back good memories.

Thanks Aruni! You helped in more ways that just getting me going on this segment of our hobby. And I hope we soon get to work each other on the birds!

**MB Evening Phone Net**  
**Frequency Change**

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Due to interference on the regular net frequency of 3760 KHz, it was decided by the net controllers to move the MEPN to 3747 KHz starting Monday February 28th (0100 March 1 UTC). The net will continue to be at the same time, 7:00 pm local. The Saskatchewan net at 3744 KHz and the NW Ontario net at 3750 KHz should not normally cause interference on the new frequency and shouldn't interfere with ours with 3 KHz separation between channels. Just make sure, if you are running extra power, that your signal is clean and doesn't splatter beyond proper bandwidth.

## The Satellite Beacon

A monthly article presented by the Project OSCAR Amateur Radio Club



*This Month's Topic – Kids and Amateur Satellites*  
*By Arundathie (Aruni) Kumari Perera VE4WMK – Project OSCAR Team Member*

[ Ed. Note: At age 11, Aruni is the youngest member of the Project OSCAR team. She lives in Winnipeg, MB and attends the 6th grade. Her Dad, Kumara Perera VE4WKP is also a Project OSCAR member and active on Amateur Satellites.]

Amateur radio is a wonderful hobby with no age limit. It is not only a “fun” hobby but also a hobby with great benefits for our school studies such as science, math and social studies, as well as for our day-to-day life. Amateur satellite communication is the most fascinating and technically challenging part of this hobby in the modern world.

What are these Amateur Satellites or “birds” (the pet name for Amateur satellites)? What we can learn from this as school children if we become young Amateur satellite operators?

Understanding the basics of Amateur satellites is very beneficial for us as school children. Amateur satellites are built on the ground by Radio Amateurs and sent into space around the earth by powerful rockets. They carry transmitters and receivers to communicate with Radio Amateurs on the ground helping them to exchange radio contacts from long distances covering large ground areas. Their paths or “orbits” around the earth are about 400 Km to 2000 Km high above the earth. They travel on these “orbits” at a speed of about 28,500 Km per hour. Such speed keeps satellites from falling back to earth due to gravity. This is a very important principle of physics in science we learn in our later grades.

We learn how to send radio signals to these moving satellites by tracking or following their paths accurately while they travel above our ground stations. There are computer “satellite tracking programs” to help predict these paths for us. We can learn some interesting geographical terms such as Horizon, Azimuth, Elevation, Latitude, Longitude, which are related to these computer programs. We also learn about the earth’s time zones when we learn how to convert our local time to the Universal time UTC (Universal Time Coordinate).

To know the exact angle the satellite entering from our “Horizon”, we must learn how to measure various angles. We learn how the “Compass” works and how to find the “Azimuth” or the geographical angle of the satellite’s path using the Compass. Elevation is also an angle we should

understand to locate these “birds”. These are good homework for our math studies.

We satellite operators, exchange contacts through these satellites using base stations, mobile stations with equipment mounted in cars or even like myself operate with inexpensive portable transceivers and handheld antennas. When we use our radio equipment and portable antennas for satellite communication, we learn the basics of modern communication equipment and radio transmission principles. It’s a great opportunity for us to learn how to program the various functions such as transmit and receive frequencies, tones, transmit power levels etc in modern transceivers. We also learn how to care about our basic electronic equipment and how to maintain their rechargeable batteries.

As satellite operators, we follow certain routines in order to share this fun with other operators. Since these satellites travel above our stations only for about 15 minutes, we learn to be patient to make a contact with a station in order not to interfere with on going communications. We also learn to follow the “Golden rule” - not to send transmissions to the satellite until we hear other stations. This is to make sure our receiving setup is working properly before we transmit. These are good manners and disciplines that are even useful to our daily life.

We also learn to keep records of all the satellite contacts we make to exchange official “QSL cards” to confirm our contacts. These records includes all necessary details about these contacts including date, time, station call signs, grid locations, frequencies, equipment, antennas etc. These records can be used to apply for various satellite communication awards. Recently I won my first such award of “Oscar Satellite Communication Achievement Award” for the satellite contacts I made through 20 individual US states including 3 Canadian provinces. This is one of the things we earn from Amateur Satellite operations that we can be proud of when we grow up. Since I started keeping records of my satellite contacts, I also started maintaining a record about the history of my daily activities before I go to bed. This is a good example of a great habit, which I learned from being a Radio Amateur.

I hope many more kids join with this exciting hobby, benefit from the experience, which will help to build their future successfully.

Hear you on the “birds” soon!

73,

Aruni

Member of WARC (Winnipeg Amateur Radio Club)  
 Member of RAC (Radio Amateurs of Canada)  
 Member of CLARA (Canadian Ladies Amateur Radio Association)  
 Member of AMSAT (Amateur Satellite Organization) A Plan for ARES Teams During Power Outages

## 2005 Manitoba Marathon Volunteer Request

### By Robert Stegmaier, VE4 RST

One of the major events in this upcoming season for Amateur Radio is the 2005 Manitoba Marathon. Last years marathon was a great success. Support for the runners through the presence of Amateur Radio provided for a smooth running event as well as prompt emergency communication when needed.

This years Manitoba Marathon will be held on Sunday, June 19th with your commitment being from about 06:15 in the morning to about 13:30 in the afternoon. There is also a pre-event meeting, a few days prior to the marathon, where individual station information packets are discussed and distributed. Please make arrangements in your individual schedules to attend. This year's pre-event meeting will be held on Tuesday June 14th at the Manitoba Sports Federation Building, 200 Main St, beginning at 1900 hrs in rooms 227-229. As perks for volunteering for the marathon, T-shirts, tickets for the pasta feast and an open invitation for the post event BBQ are usually provided.

One of the ways we can provide more accurate and timely service to the marathon is by tracking Medical and Supply vehicles on the course during the race. We are asking amateurs for their help with the loan of the equipment needed to accomplish this during race day. All equipment will be handled with care, labeled with the person's call sign and returned after the race. The following equipment is needed,

- Kantronic KPC 3 or better TNCS
- Any other TNCS with built in GPS Support
- Tiny Tracker Boards

If you have this equipment please contact Maiko Langelaar VE4 KLM at 885-2398. Your generosity will be appreciated.

If you wish to volunteer you may contact me in one of two ways:

E-mail [rstegmaier@shaw.ca](mailto:rstegmaier@shaw.ca)  
 Phone (work) 982-9600 (if answering machine is on, please leave message)

#### *Please indicate*

- ✚ If and when you last volunteered for the Manitoba Marathon
- ✚ Your call sign and your name
- ✚ Your, last position posted at the marathon and if you wish to volunteer there again. (when applicable)
- ✚ Your phone number and preferred time of contact
- ✚ If you wish to be posted with someone in particular
- ✚ Your T-shirt size
- ✚ Your full mailing and e-mail address

## APRS – Easier than you think

### By Mark, KC0SHM

*Extracted from the Red Revier Radio Flyer*

As a new ham of 8 months, I find it fascinating how many different facets of amateur radio as a hobby has to offer. EME, satellite, 2 meter voice, antenna building, international QSO's on HF... it seems endless. I am sure it would take several lifetimes to try it all. Last summer while helping with the MS Bike tour, I was introduced to yet another of the endless stream of ham acronyms, APRS. Needless to say, I was interested.

APRS stands for Automatic Position Reporting System, and has promising practical applications for ham radio. APRS was developed by Bob Bruninga, WB4APR, with humble beginnings as a digital RTTY position reporting system in 1976. Over the years it has evolved into a modern system, exchanging telemetry, weather and messages reaching great distances through the use of Digipeaters and Igates.



Surprisingly, there are very few people in the area that are taking advantage of this useful technology. Off hand three practical uses for APRS come to mind:

1. Skywarn - Net control can overlay locations of spotters over weather radar maps. Know if too many people are in the same place, address specific spotters closest to points of interest.
2. Various walks and bike tours – Net control can visually see the lead and tail of the pack, the medical SAG's, and other support persons all in real time on a map.
3. Getting a message through in a pinch. – APRS expresses resiliency to poor signal quality and many digipeaters are available to forward your information.



***So what do I need to start with APRS? It breaks down to track or be tracked.***

If you just want to watch, the easiest way to start is getting to that internet connected computer in the shack. Surf the website [www.findu.com](http://www.findu.com) and soon you will be tracking APRS savvy hams across the country. However, it doesn't have the full feel of Amateur radio.

Better is viewing APRS information on your PC using a TNC or a soundcard TNC program, an APRS program and a 2 meter radio or a scanner. One such APRS program is UIview32, available to all hams for an "on your honor" donation to your cancer charity of choice as part of the authors passing wishes. A UIView32 enabled computer connected to a transceiver is a powerful APRS tool, not limited position reporting and tracking. Digipeating, messaging and weather tools are all in the box.

If you want to track a moving vehicle, you can be as exotic as loading up your computer in the truck and add a GPS the above mentioned system or simplify things by using a \$36 Tiny Track from [www.byonics.com](http://www.byonics.com), an HT and a GPS. The Tiny Track comes as a barebones kit, or as a completely assembled device with a case for a few dollars more. Tiny Track will then convert the GPS data, incorporating your call

sign and relay instructions into analogue sounds passed to a VHF radio. I use this in my vehicle and it works great.

If you fret over too many radios (is there such a thing?) in your vehicle, there are several off the shelf mobile rigs that also support APRS in addition to FM voice. Consider the opposite end of the spectrum from the Tiny Track, the Kenwood D700. This rig incorporates the best of everything APRS and a dual band radio should have in a simple, clean mobile package. It's large display and internal TNC make it ideal to send telemetry and messages, all while using the other side of the radio for VHF or UHF voice. Kenwood also makes a mobile HT with many of the same features.

I have had much enjoyment tinkering with APRS this fall and look forward to seeing your call sign on my PC soon.

### **RAC Midwest Director's Report** **By BJ Madsen, VE5FX**

The RAC Board of Directors have decided to hold the 2005 RAC Annual General Meeting at the Saskatchewan Centennial Hamfest 2005, to be held in Saskatoon on July 22 - 24. Various RAC officials will be in attendance, including Chairman Smith (VE6NM) and General Manager Debbie Norman (VA3RGM). Debbie is bringing along a quantity of RAC merchandise. This will be an excellent opportunity for you to stop by and chat with the lady who solves the problems at the RAC offices. See the HamFest WEBSITE for details: <http://www.saskhamfest.com>

At the Board of Directors' meeting to be held this spring, I intend to initiate discussion on the merits of a "Foundation License", similar to that which has been in effect in Great Britain for some years. This is an 'entry level' license, the syllabus for which can be found at <http://www.rsgb.org/foundation/syllabus.htm>. If you have thoughts about such an undertaking, I welcome you to share them with me.

I have applied for a special prefix for Saskatchewan for the month of July, to commemorate the Centennial of the province. I requested and received XL5/XM5

Professor Townsend's report on towers has been posted to Industry Canada's "Strategis" WEBSITE. It runs to some 250 page. This report has the potential to have an impact on Amateur Radio structures.

What is your E-mail address? If you still do not have an @rac.ca address, it is high time that you considered it. We all know one another's callsigns, right? Remembering E-mail addresses becomes a 'no-brainer' when all of us get the @rac.ca address. It is free. It is available to RAC members and non-members alike. Simply log onto the RAC WEBSITE at <http://www.rac.ca> and follow the directions. Simple.

## QTX~ By Derek, VE4HAY



Did you know that if you were thinking of getting a VE4 Auto License plate for your vehicle, that the best time to do this is a few months before your current registration is going to expire. That way you have the new plate in your possession at renewal time, and you can simply register with the new plate. You still need to pay for the VE4 plate and for plate registration, but it is still a lot cheaper than other personalized plates. The WRC web site has a link to the application for the VE4 plate which you can download

[http://www.mpi.mb.ca/PDFs/DVL\\_PDFs/VE4Form.pdf](http://www.mpi.mb.ca/PDFs/DVL_PDFs/VE4Form.pdf)

Also see the MPI web site for

[http://www.mpi.mb.ca/english/Registration/Reg\\_VE4.html](http://www.mpi.mb.ca/english/Registration/Reg_VE4.html)

And the brochure

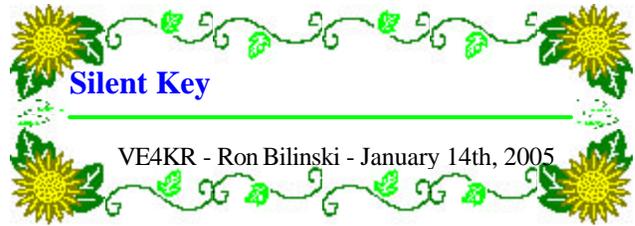
[http://www.mpi.mb.ca/PDFs/DVL\\_PDFs/br\\_plp.pdf](http://www.mpi.mb.ca/PDFs/DVL_PDFs/br_plp.pdf)

Mine plate arrived last week and is now on my truck. So watch for me driving around town. BTW - my daughter will be turning 16 in just before the next meeting. And I will shortly be ordering a VA4HAY plate for the vehicle she will be driving. So, do me a favour, if she is not driving properly, let me know. Ahhh, the advantage of a personalized plate and a close knit amateur community pay off. So is your plate on order yet ?

Thinking of Field day this year. If so then you should check out the new rules and bonus points. Check this site <http://www.arrl.org/contests/forms/05-fd-packet.pdf>

I have been reading a lot about Morse Code lately. It seems like the critters are starting to come out of the wood work. Yeah you know who you are. The ones on either side of the fence. It seems that since it looks inevitable that morse will be dropped as a requirement to the HF bands, a lot of people are thinking that Morse Code is dead, or they are just saying/telling others that Morse Code is dead. This could not be further from the truth. Morse Code is not dead. It is still around and still being used. Just tune to the lower part of any band, and you will hear it. Even in the so called code free bands of VHF & UHF. Morse code is still there. And it will be for a very long time. So please stop saying that it is dead.

Now with that said, I suggest that those who can use Morse, I encourage you to keep using it. Remember AM. Let's not let the same thing happen to CW. Keep it going, keep communicating with Morse. Keep showing new HAMS what morse is all about. At the same time, we need to make room for the new digital modes, and we need to encourage these modes to be used as well. OK, time to step down from the soap box.



## Silent Key

VE4KR - Ron Bilinski - January 14th, 2005

## "Morse Code Will Always Be Here" Submitted by Dave, VE4KU

A patient in the hospital, bed ridden had his life enhanced a little when the Doctor discovered a communication means could be used to help this patient.

The patient was paralyzed from the neck down. All he could move was his eye lids.

The doctor made a poster with Large symbols on it. She placed it in a conspicuous spot so all could see, especially the patient. The poster was a list of the Morse Code. With it the patient communicated with the staff. The first thing he said was:

"Please don't close the door. I am scared with the door shut". And through this means of communication the patient was cared for.

The patient was a 40 year old young man. He visited the hospital a while later. He had regained the use of his hand and was able to operate the motorized wheel chair. It was through the ingenuity of the Doctor that made this persons life a little better.

Yes it's coming.... And soon.

## Home Brew Night

April 11th

What have you decided to build ? If you start now, you should have it built in time for the big night. So start building and show your soldering prowlness by bringing your project out on April 14th, to be judged by your fellow hams. If you are lost for idea's, check out these sites on home brew projects.

<http://homepage.tinet.ie/~ei9gq/homebrew.html>

<http://www.ku4ay.net/homebrew.html>

<http://www.ac6v.com/homebrew.htm>

<http://www.ac6v.com/homebrew.htm>

<http://wb0nni.dakotamade.com/>

<http://www.qsl.net/ve3rgw/dream.html>

<http://www.tecsolv.com/cq/>