



The **NEWSCASTER**

The Official Publication of the Winnipeg Amateur Radio Club
<http://www.mts.net/~warc>

March 2011

IRLP # 1066 on VE4WRS 145.450-

VE4BB

History of The Wireless School & CMU By Craig Martin, VE4CDM

Date: Monday, March 14, 2011
Time: 7:30 PM
Place: Canadian Mennonite University
Shaftsbury & Grant (See Map below)

Other Important Dates...

Newscaster: Deadline March 30, 2011

WARC: Monthly Meeting Dates
April 11, 2011
Home Brew Night

MRS: Annual General Meeting
April 14, 2011

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

ARES: March 16, 2011 (Note date change)
Rural "Go Team" Equipment

Other: WARC Spring Flea Market
Sunday, April 17, 2011

WARC Executive for 2010-2011...

President	Mark Blumm	ve4mab@rac.ca
Vice-Pres.	Ed Horton	edhorton@hotmail.com
Treasurer	Bob Jacobs	rcjacobs@hotmail.ca
Secretary	Jim Sutton	Jim.Sutton@AAAalarms.ca
Membership	Garth Blumm	ve4gwb@gmail.com
Programs	Craig Martin	cmartin@cmu.ca
Director @ Large	Vacant	
Past President	Geoff Bawden	ve4baw@rac.ca

And now a word from the President By Mark, VE4MAB

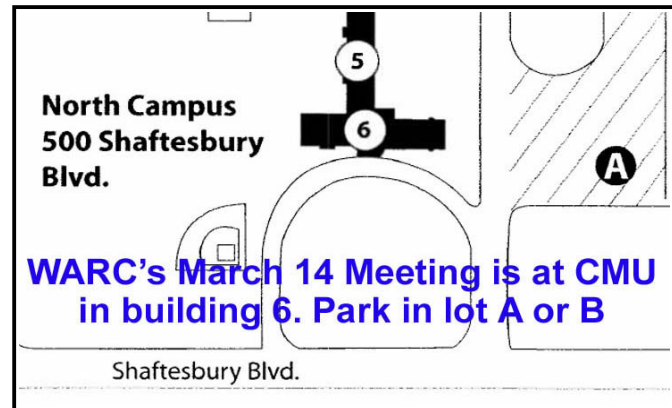
With all these cold snaps I know you will find this hard to believe, but spring is just around the corner!

Our next meeting, March 14, will be at the old "Wireless School" with a presentation by Craig which I'm sure you won't want to miss. See the map below or tune to the WPG repeater for directions.

Home Brew Night is in April so there is lots of time to work on a project to bring for "Show & Tell". And while working in your shack keep in mind our Spring Flea Market is just about a month away so you can turn some of that "Junque" into cash. Even with nothing to sell, there is always lots to buy, including the goodies from "Ruth's Kitchen".

Garth, VE4GWB, is in the planning stages for this year's Field Day at a location yet to be decided. Some of the locations besides Birds Hill that we are looking at are the grounds of either the CMU, UofM and even Kapyong Barracks, so we'll see what can be worked out.

Stay Tuned



Our Vision

To increase public awareness and respect for Amateur radio; to provide education and support in all aspects of the hobby to our members in a social atmosphere

***WARC Meeting Minutes,
February 14, 2011
Taken by Garth, VE4GWB***

7:30 Call to order @ 1935hrs 48 in attendance

Introductions –

VE4DAR welcomed new ham Ernie VE4EOG, round of applause for the ladies

Secretary' Report -

Not available

Treasurers Report -

TD account \$4057.39 outstanding internet account leaving \$4003.92, Assiniboine account \$3129.30 Cheque written to MRS for \$2335.90 that covers WARC's portion of the storage container. Leaving \$790 in the Assiniboine account

Programs -

Tonight VE4DWG on D-STAR. Next month will be a field trip to the Canadian Mennonite University with the history of the north campus. April will be Home Brew night, Between May & June, Power Pole Party and ???

Flea Market -

Dick VE4HK announced Flea Market on April 17th at Heritage Victoria Community Club. Doors open 0930 for eyeball QSO's. Vendors 0945. Buyers 1030. 4 Tables left. Admission \$3.00. Small change preferred at the door. Talk-in on VE4WPG repeater. Door prize \$100 and \$50. ARES has silent auction. Parking not allowed on Sturgeon Rd

Field Day -

Looking into various locations for the 2011 Field Fay, between CMU or Kapyong Barracks. Garth VE4GWB will be organizing.

ARES -

VE4MBQ spoke on flood preparations and the upcoming Manitoba Marathon on Fathers Day June 19th, currently have 48 signed up and need about 30 more volunteers. VE4SE asked if the EOC had been moved yet, not till 2012 Currently still in basement of council bldg.

Minutes-

Minutes from last month approved, VE4GWN motioned, VE4HK seconded.

RAC –

VE4HAY talking about possible changes with mem-

bership categories changing, adding youth category, family membership changes. Looking at TCA going electronic in some form as well as paper version. VE4MBQ enquired on family members appearing on the members search and RAC working on looking into why not showing up. RAC also getting out of online store. ARES products purchased as needed.

Derek also brought a \$25 gift certificate to RAC as a door prize for a RAC member. Betty VE4BTY, Ruth VE4XYL, Sue VE4SYM, Rosi VE4YYL received flowers from Derek.

DX Report-

VE4VZ 10m open sunrise to noon for Trans Atlantic traffic/North American and in afternoon into North/South America, Caribbean. 15/20m spotty. 40 some activity all day. 80 usual night traffic, more am on 80/160 band

Door prize –

Electric screwdriver won by VE4SE Flashlight won by VE4RHW RAC certificate won by VE4GZ

Good and Welfare -

David VE4DAR has 2 study books from the last class, one is Basic Study Guide 8 and the other is the Ham Study book.

Dario spoke on My 1st QSO. A event taking place at the U of M on Monday Feb 21, 2011. Where new hams from the class will be paired with seasoned hams using the UMR repeater and simplex.

Dick VE4HK reminded everyone that the MRS AGM will be Thursday April 14th at 7pm, Norberry Glenlea Community Club. If you want to run for office on MRS get in touch of VE4HK ASAP

Excellent presentation by VE4DWG on D-STAR wit discussion afterwards.

Moved to adjourn VE4GWN seconded VE4VZ

**DIAMOND
IMAGE**

Floyd Rolph VE4 FDR

835 Cavalier Drive

Tel: (204) 888-3227

Winnipeg, MB R2Y 1C6

Fax: (204) 831-6400

- South Western & Victorian home decor

- ty Beanie Babies

- Balloon bouquets & decorating

- Gifts

- Printing eg: Business cards, letterhead, envelopes

- Wedding invitations



The "D-RAFFLE"

On Monday March 14, 2011 WARC will begin raffling off A Icom IC80AD hand-held digital transceiver. Tickets can be purchased from Garth, VE4GWB or one of the executives at the meeting or as you run into them at coffee etc.

Tickets are also available at Micro-Hightech Communications @ 197 Leila Ave, who graciously donated the radio. Tickets will be sold for \$5.00 each or 3 for \$10.00. Thank you in advance for participating and good luck in the contest.

Draw to be held at the WARC Spring Flea Market !!

Winnipeg Amateur Radio Club
Lottery Licence # MGCC 5179-RF

Download it, fill it out, and submit it as an attachment to Jeff, VE4MBQ at: ve4mbq@mts.net

News From The Net

RAC Bulletin 2011 002E :

New National Affiliated Club Coordinator Appointed: Robert Critch VE3QTH joins RAC Team

2011-02-01

Winnipeg Amateur Radio Club Spring Flea Market

**Sunday April 17, 2011
Heritage Victoria Community Club
950 Sturgeon Road, Winnipeg, MB
(2 Blocks north of Ness Avenue)**

CASH Door Prizes

1st Prize - \$ 100

2nd Prize - \$ 50

(Must be present to win)

Admission \$3.00

Doors open for coffee and socializing 9:30 am

Vendor Setup 9:45 am-10:30 am

Doors open for buyers 10:30 am-noon

Prize Draws—11:30 am

Fill your pockets with loonies and toonies for the Winnipeg Ares silent auction.

Don't stop enroute at Timmies, or the golden arches or other coffee places. Ruth's kitchen will have the best coffee and muffins in North America. Enjoy an eye-ball QSO before the buying frenzy begins!

**Tables: \$5.00 each for WARC members
Commercial & non WARC members \$10.00**

For Tables—Contact Ruth Mills VE4XYL by e-mail at ve4se@mts.net or call 204-837-6915

To volunteer or for info—Contact Dick Maguire VE4HK by e-mail at ve4hk@rac.ca or call 204-256-3143

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

Winnipeg ARES meetings have moved to the 3rd Wednesday of the month thru May due to the library expanding an internal program.

Our February General Meeting featured City of Winnipeg Emergency Preparedness Coordinator Randy Hull who gave us an excellent, detailed briefing on Possible Flood Operations – much appreciated since Randy was working on a response plan for an evolving situation at the time of our meeting. We have several scenarios to be prepared for by the end of March. Thanks to Richard VE4KAZ for suggesting that our Mobile Radio Kits be thoroughly checked – I found two surprises that I would not have appreciated finding during an operation. Our HTs are in pretty good shape – I observed one bad pack when getting the HTs ready for the UMARS Seminar – that pack has already been rebuilt.

If we do get involved in Winnipeg-based operations Amateurs should expect a brief announcement at 1800h on VE4WPG (alt VE4CNR) outlining the next day's plan and canvassing for Volunteer Operators. I am not planning to register any new Winnipeg ARES members until Flood Operations conclude or it becomes clear that they will not be required. Non-ARES members can help us on the front-lines, just not likely inside any Operations Centres or Command Posts due to credentialing reasons.

Fifteen Winnipeg ARES members along with several other Amateur operators participated in a seminar MON 21 FEB with newly certified Amateurs belonging to the University of Manitoba Amateur Radio Society (UMARS). UMARS President Dario Schor VE4SCH and his team did a great job in putting the session together. Derek Hay VE4HAY gave a very good presentation to the group explaining how repeaters work and what new users ought to know. Although we had 11 Winnipeg ARES-owned HTs on hand only three were required to be loaned out for the afternoon. Winnipeg ARES members who participated were VE4s:

HAY, GKS, RCJ, SIG, BN, GWN, YYL,
EWN, JAH, CDM, TNT, SE, HK, HAZ and
MBQ.

Hopefully Dario will have an article in this newsletter but if not there is some event information posted at: <http://sites.ieee.org/winnipeg/2011/02/02/my-first-qsl/> Personally I am hoping that the new UMARS members are able to get organized & equipped such that they can offer the University's Disaster Management

Director an ARES-like group for the Fort Garry Campus.

Susan VE4SYM recently advised that Radio Gear Harnesses from Nifty Ham Accessories had arrived and that she would be contacting purchasers. The ARES Vests that were recently ordered are also ready for distribution and there are a few more still available for \$30 each.

Our next General Meeting is WED 16 MAR, 1900h at Sir Wm Stephenson Library 765 Keewatin Street. Kent VE4KEH will be giving us a presentation on "Equipment Considerations for Rural GO Teams".

I am negotiating with a few PASPC staffers regarding CANWARN Spotter Training – we will likely put that training off until late May. In future years we should get Spotter Training done by mid-MAR to avoid possible flood operations.

Manitoba Marathon**By Jeff, VE4MBQ**

Recruiting has gone very well in the past month. At this point we only need approximately 10 more Amateur Radio operators including 3 on stand-by unless needed. For those stand-by operators we are looking for an operator:

South of the Assiniboine –
living in Fort Rouge/River Heights/Fort Garry
North of the Assiniboine –
living in Down town/West End/St James
East of the Red –
living in St Boniface/St Vital.

In other words we don't want the stand-by operators to have to cross a bridge in case they are called upon by Net Control to cover a suddenly open assignment.

The Volunteer Registration form is available for download from both the WARC and Winnipeg ARES web-sites. Please download it, fill it out and e-mail back to me.

Manitoba Marathon
Volunteer form is available at

<http://www.mts.net/~warc/VE4-Volunteer-2011.doc>

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

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

Contest Calendar

Extracted From

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

AGCW YL-CW Party 1900Z-2100Z, Mar 1
 QRP Fox Hunt 0200Z-0330Z, Mar 2
 QRP Fox Hunt 0200Z-0330Z, Mar 4
 NCCC Sprint 0300Z-0400Z, Mar 4
 ARRL Inter. DX Contest, SSB 0000Z, Mar 5
 to 2400Z, Mar 6
 Wake-Up! QRP Sprint 0600Z-0629Z, Mar 5
 and 0630Z-0659Z, Mar 5
 and 0700Z-0729Z, Mar 5
 and 0730Z-0800Z, Mar 5
 Open Ukraine RTTY Championship
 2000Z-2159Z, Mar 5 (Low Band)
 and 2200Z-2359Z, Mar 5 (Low Band)
 and 0800Z-1159Z, Mar 6 (High Band)
 DARC 10-Meter Digital Contest 1100Z-1700Z, Mar 6
 SARL Hamnet 40m Simulated Emerg Contest
 1200Z-1400Z, Mar 6
 RSGB 80m Club Championship, Data2
 000Z-2130Z, Mar 7
 ARS Spartan Sprint 0200Z-0400Z, Mar 8
 QRP Fox Hunt 0200Z-0330Z, Mar 9
 CWops Mini-CWT Test 1100Z-1200Z, Mar 9
 and 1900Z-2000Z, Mar 9
 and 0300Z-0400Z, Mar 10
 AWA John Rollins Memorial DX Contest
 2300Z, Mar 9 to 2300Z, Mar 10
 and 2300Z, Mar 12 to 2300Z, Mar 13
 QRP Fox Hunt 0200Z-0330Z, Mar 11
 AGCW QRP Contest 1400Z-2000Z, Mar 12
 ARCI HF Grid Square Sprint 1500Z-1800Z, Mar 12
 EA PSK31 Contest 1600Z, Mar 13 to 1600Z, Mar 14
 Idaho QSO Party 1900Z, Mar 12 to 1900Z, Mar 13
 North American Sprint, RTTY 0000Z-0400Z, Mar 13
 SKCC Weekend Sprint 0000Z-2400Z, Mar 13
 UBA Spring Contest, CW 0700Z-1100Z, Mar 13
 Wisconsin QSO Party 1800Z, Mar 13 to 0100Z, Mar 14
 NAQCC-EU Monthly Sprint 1800Z-2000Z, Mar 14
 CLARA HF Contest 1700Z, Mar 15 to 1700Z, Mar 16
 and 1700Z, Mar 19 to 1700Z, Mar 20
 QRP Fox Hunt 0100Z-0230Z, Mar 16
 RSGB 80m Club Championship, CW
 2000Z-2130Z, Mar 16
 NAQCC Straight Key/Bug Sprint
 0030Z-0230Z, Mar 17
 QRP Fox Hunt 0100Z-0230Z, Mar 18
 SARL VHF/UHF Analogue Contest
 1600Z, Mar 18 to 1000Z, Mar 20
 10-10 Int. Mobile Contest 0001Z-2359Z, Mar 19
 BARTG HF RTTY Contest
 0200Z, Mar 19 to 0200Z, Mar 21
 Feld Hell Sprint 1200-1400 local, Mar 19

Russian DX Contest

1200Z, Mar 19 to 1200Z, Mar 20

Oklahoma QSO Party

1300Z, Mar 19 to 0200Z, Mar 20
 and 1300Z-1900Z, Mar 20

AGCW VHF/UHF Contest

1400Z-1659Z, Mar 19 (144)
 and 1700Z-1759Z, Mar 19 (432)

North Dakota QSO Party

1800Z, Mar 19 to 1800Z, Mar 20

Virginia QSO Party

1800Z, Mar 19 to 0100Z, Mar 21

UBA Spring Contest, 6m

0700Z-1100Z, Mar 20

SKCC Sprint

0000Z-0200Z, Mar 23

RSGB 80m Club Championship, SSB

2000Z-2130Z, Mar 24

CQ WW WPX Contest, SSB

0000Z, Mar 26 to 2400Z, Mar 27

UBA Spring Contest, 2m

0600Z-1000Z, Mar 27

QRP Homebrewer Sprint

0000Z-0400Z, Mar 28

More Contest Info..

March 19-20, 2011 is the ND QSO Party Contest. Contest rules to be released the 1st week of February 2011. They have changed a little. Go to www.w0nd.com for updates.

Good Luck In The Contest!

Amateur Radio Service Centre
 Industry Canada

P.O. Box 9654, Postal Station T

Ottawa, Ontario, K1G 6K9

Telephone: (613) 780-3333

Toll free: (888) 780-3333

Fax: (613) 998-5919

E-mail: spectrum.amateur@ic.gc.ca

http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/en/h_sf01709e.html

IRLP Node 1066

145.450 MHz -600 KHz

(VE4WRS)

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

News From The Net

RAC Bulletin 2011 0005E

*Results of the 2010 IARU HF World Championship.
2011-03-04*

The results links are available at: <http://www.iaru.org/contest.html>

Thanks to Dave Sumner, K1ZZ for the information.

Forwarded by:

Daniel A. Lamoureux, VE2KA
Vice-President International Affairs - Radio Amateurs of Canada

RAC Bulletin 2011-004E - Request for Information, Interference from Plasma Television Sets.

2011-02-24

According to members of the Niagara Peninsula Amateur Radio Club, noise and signals originating from Plasma Screen digital television set are causing considerable interference to their HF activities and have asked RAC for help. Complaints of this nature require specific and detailed information before RAC can consider taking this matter to Industry Canada.

To gather this information, RAC invites its members that own a Plasma Screen television to report their experiences of interference from such products. Specifically, reports should describe the make and model of TV, a description of their HF station and antenna system and the exact nature of the interference (what bands, what sound etc).

Remedies should also be tried and reported such as using ferrite chokes on power lines cords and signal cables if interference is detected. Amateurs with advanced instrumentation such as spectrum analyzers and calibrated antennas should measure signal intensity levels at given distances; these measurements will add credibility to our investigation.

We also want to know from amateurs that can attest that operation of their own plasma TV causes no noticeable interference to their amateur radio operations. All digital domestic equipment, including Plasma and LCD television sets must comply with Industry Canada standard ICES 003 (interference causing equipment standard for digital equipment) to be marketed in Canada. Alternately, TV sets with tuners may be certified under Industry Canada BETS 7 standard. Please indi-

cate in any report submitted that a label on the TV or notation in the manual indicates it is indeed certificated and compliant under current issues of ICES 003 and/or the BETS 7 standards.

Send reports to Norm Rashleigh, VE3LC, VP Industrial Liaison, ve3lc@rac.ca

Norm Rashleigh, VE3LC
VP Industrial Liaison - RAC

<http://www.rac.ca>

Support the Organization that
Supports YOU! Join RAC Today!



Are you a
RAC member??

<http://www.rac.ca>

Submitted by Derek, VE4HAY

Extracted from the ..North Dakota ARRL Section News for December 2010.

If you've been around ham radio for even a year or two, you've no doubt heard or participated in the debate as to whether or not ham radio is dying.

Recently, this was a topic of discussion on the ARRL PR mailing list. Allen, W1AGP, the ARRL's Media & PR Manager, generated a chart to show that ham radio is NOT dying.

It showed the number of licenses in the U.S. every year from 2005 to 2009:

2005 -	661,000
2006 -	655,000
2007 -	655,000
2008 -	662,000
2009 -	681,000
2010 -	694,000

So Ham Radio is GROWING, not dying!

Eyeball QSO at the Arches

Saturdays and sometimes Sundays
McDonald's—St. James and Ellice
0745-0930 hours

Start your weekend right!

Get together with your fellow hams, talk tech, and learn from others about the latest rigs.

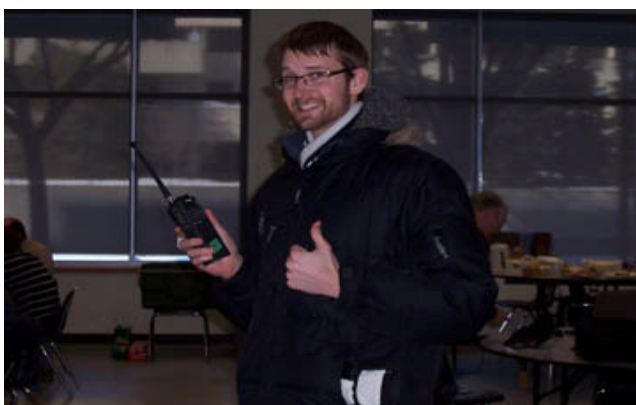


A Look back at "My 1st QSL"

On Monday, February 21, 2011, the University of Manitoba Amateur Radio Society (UMARS) hosted 33 students and WARC members for "My 1st QSL". The event introduced many new hams to the real practical aspects of amateur radio and help students overcome the jitters of pushing the PTT switch during their first QSL.



The afternoon began with a keynote presentation from Derek Hay, VE4HAY on communication protocols and repeaters, followed by a short introduction to handheld radios by Jeff Dovyak, VE4MBQ. Then, the mentors from the Winnipeg Amateur Radio Club were paired with students from the University of Manitoba or Shaftesbury High School for a hands-on exercise. The mentors guided the students through their first QSL using simplex communication and then experimenting using the VE4UMR repeater.



A special thank you to Dr. Witold Kinsner, VE4WK, Alan Thoren, VE4YZ, Jeff Dovyak, VE4MBQ, Derek Hay, VE4HAY, and Mark Blumm, VE4MAB for their assistance in making this event possible.

UMARS would like to thank all the mentors for sharing their time, knowledge, and radios with the students. The event could not have been possible without your help. The enthusiasm, theoretical, and practical experience shared by all the mentors has inspired many students to get more involved in the world of amateur radio.



UMARS hopes to make this an annual event open to all new hams in Winnipeg. Plans are already underway to improve the hands-on exercise by providing more structure and goals for all the student-mentor pairs to achieve during the allotted time.

The more realistic goals will require each group to make 3 contacts on simplex at predetermined times (thus reducing the traffic on certain frequencies), 3 contacts using a repeater by monitoring who else is on the line, and to check-in to a net organized for the event.

For more pictures from the event, please visit...

<http://winnipeg.ieee.ca/my-first-qsl>.

Sincerely,
Dario Schor, VE4SCH
dario_schor@umanitoba.ca

D-Star Is On The Air In Winnipeg !!!

D-Star mobile and handheld Amateur radios are available from your Winnipeg ICOM Dealer...

Micro-HighTech Communications Ltd.

197 Leila Avenue, Winnipeg, MB
204-783-1885
Contact George Hill, VE4GDH

Visit Icom on the web..

<http://www.icomcanada.com/products/amateur/amateur.html>

*Come See Us At our
New Location*

Hey! How'd you get your Call Sign on the back of your hat?

By Jim Sutton, VE4SIG

A number of people have commented on my Call Sign that is embroidered on my hat so I'll tell you how I did it.

It's actually a military nametape that you stick on your uniform. Normally it has your last name on it but you can custom order them with anything on them from CPGear in Fredericton..

http://www.cpgear.com/StoreBox/embr/1028_0.htm

It comes with a Velcro on the back (the hook type) so all you have to do is sew (or glue for those of us not proficient with a needle and thread) a matching piece of fuzzy Velcro to whatever you want to stick it to (in addition to the one on my hat I've got another stuck on my ARES Bug-Out Bag) . Being Velcro you can pull them off and move them to something else if needed (weather too cold for a ball cap – stick it on you toque?)

They do a wide variety of custom patches and even accommodate “out of band” requests (I order my tapes in tan (they call it Coyote Brown) which is normally only embroidered with a slightly darker tan thread but I asked if mine could be done with black thread to make it a little more readable and they happily did this).

Jim, VE4SIG

Blast From The Past *Photos by Derek, VE4HAY*

Sputnik 1 was the first Earth orbiting artificial satellite to be launched on October 4, 1957 that ultimately began the “Space Race”.



Derek submitted these photos of the Sputnik Exhibit at the museum...



For more info visit ...

http://en.wikipedia.org/wiki/Sputnik_1

Don't Forget *WARC's April 11 meeting is...* **HOME BREW NIGHT**

Bring along your projects for
“Show & Tell”
and if it's wayyyy to big, bring
along a picture!

The SHAFTESBURY HIGH ALTITUDE ROBOTICS PROJECT

By, Robert Striemer, VE4SHS

In June of 2009, Mike Friesen, the librarian at Shaftesbury High School discovered that a group of students in Europe had taken photos of space from a weather balloon. Mike and I decided that a balloon project could be a challenging engineering adventure for our students. Hanging a camera from a weather balloon would be the easy part. Tracking and recovering the camera would be the real challenge. There were two common methods used to track these so called BalloonSats. One method involved a smart phone. The other more popular method involved amateur radio and the Automatic Packet Reporting System (APRS).



We discovered a program in Manitoba where teachers and students, with the assistance of professionals, had already sent payloads to near space, the region of the Earth's atmosphere between 65,000 and 350,000 feet. This program was part of a larger initiative called WinCube backed by Manitoba Aerospace (<http://www.wincube.ca/>). The WinCube BSats employed the APRS. In July 2009, we took some Shaftesbury students to a Space Camp at the University of Manitoba, supported by the Faculty of Engineering, WinCube and some key ham volunteers including Dr. Witold Kinsner (VE4WK) and Alan Thoren (VE4YZ). From this experience, we learned how the APRS could be used to track BalloonSats. In November of 2009 some Shaftesbury students witnessed a WinCube launch. I felt I had seen enough to take the idea to the students to see if there was interest in a Shaftesbury BSat project. Mike and I and two other science teachers met with students one noon hour in November. About twenty-five students showed up to the first meeting and the club was formed. We called it SHARP for Shaftesbury High Altitude Robotics Project.

SHARP's first priority would be fundraising. Could we generate the funds needed for radios and GPS receivers, a camera, parachute, balloon and helium? We split

the large group into smaller teams. One team wrote grant proposals. Another team studied electronics and learned soldering. Another group studied radio. In the spring of 2010 six students and I took an amateur radio course sponsored by WinCube and run by Jeff Cieszecki (VE4CZK), a teacher at Maples Collegiate.

The amateur radio course was challenging, especially for our students who had almost no knowledge of radios, electrical theory and radio wave propagation. However, after some twelve Saturday mornings, Shaftesbury had acquired three call signs including grade 11 student Bohyun Lee (VE4BHL), Erin Shin, our student council president (VE4EHS) and myself Rob Striemer (VE4SHS). By this point grant money was coming in. SHARP purchased an APRS transmitter (<http://www.byonics.com/>), a mobile transceiver (Kenwood TMD-710A), and a GPS sensor. One evening at a WARC (Winnipeg Amateur Radio Club) meeting, some students and I were introduced to a couple of hams who would later give invaluable service to SHARP. They were Bruce Feaver (VE4BDF) and Craig Martin (VE4CDM).

At noon hour SHARP meetings, students were cutting foam board insulation for our first capsule. The foam board was cut with a hot nichrome wire then hot glued to build a resilient box. The payload box was tested by throwing it off the gymnasium roof. To the students' delight, it bounced off the asphalt parking lot like a rubber ball. The glued joints were tested in a cooler of dry ice. As the end of the school year approached, we had the basics of a payload including a small digital camera. Two 1200 gram weather balloons had arrived and our APRS tracking tests were promising. Students designed a SHARP logo and printed T-shirts. Finally, Alan Thoren a key friend of SHARP, made a very generous donation of radios, T-line, antennas, rotator and computer for a balloon and satellite tracking station which was set up in a portable classroom and became our base. We'd made a good start.

Back to school in September 2010, the administration informed us that they wanted a flight before the end of October. Their deadline served to increase our anxiety but also our effort. We were still short a few critical systems. We had no cut-down or Flight Termination Unit (FTU) and we had no parachute. At this point, with only a few weeks until launch, we received timely help from Craig and Bruce. Craig was given the FTU circuit diagram and the electronic components ordered from Digi-Key. He quickly assembled the FTU circuit. Bruce visited the school too. He worked through parachute design calculations with the students. Based on coefficient of drag, payload weight and descent rate, a design was selected. Finally, Bruce sewed the parachute

in Shaftesbury colours of red, white and blue. Students cold tested their payload electronics in the dry ice cooler. I ordered up a cylinder of helium and Jeff Cieszecki (VE4CZK) lent us the WinCube balloon filing apparatus. We were nearly ready.

Bruce had earlier suggested we launch from the air-strip at Erickson near Riding Mountain National Park. This seemed like a good launch location given the challenging geography in the Winnipeg area. Winnipeg has two very large lakes to the north, Canadian Shield with the requisite forest, ridges, lakes and bogs to the east and the U.S. border is just to the south. Given the prevailing north-west wind, Erickson could give us margins. With luck, the SHARP payload might even land near Winnipeg. Bruce took care of filing the NOTAM (notice to airman) for our flight with NavCanada. Shaftesbury principal, Iain Riffel, called in a favour from his brother-in-law in Elkhorn and was able to get us rooms at the wonderful Elkhorn Resort and Spa for the night of October 21. All looked promising but as our "to do list" got shorter, our anxiety with respect to weather increased. Alan's early prediction of the flight path gave a significant probability of the payload landing in Lake Manitoba, directly east of Erickson.

On Thursday, October 21 twenty students and five teachers loaded up everything we might need into five vehicles. Then we drove to Erickson, roughly 250 km north-west of Winnipeg. At about 1 PM we arrived at the airfield and set-up on the apron in front of the flying club. We spread our tarp and did a dry run of the launch scheduled for 10 AM next morning. The students filled a garbage bag with helium. One student connected the gas line and controlled the flow of gas. Another carefully held the balloon on the end of the nozzle. When the bag was full of gas another student zip-tied the bag closed. Another student stepped in with a blunt nosed wire cutter and trimmed off the ends of the zip ties. Then another student wrapped duct tape around the pointed ends to prevent a puncture. Everyone had a task, including starting the electronics (radios, GPS, camera), starting the cut-down timer (Wal-Mart stopwatch), attaching parachute lines and sealing the foam board capsule with hockey sock tape. After the practice, we loaded up again and we drove north to Elkhorn. We checked in to the resort and immediately setup a workshop in the boys' chalet. Out came the tools, soldering station, wire, multimeter, kite string and a balance. That afternoon we had to make a difficult decision and fix some problems. The payload was overweight. We had a camera issue and we still needed to complete the construction of the FTU and install it. The wind direction was still cause for worry.

*To Be Continued in the...
April issue of the Newscaster!*

VHF Nets

**MRS Nets - 147.390 Mhz +
Sundays & Thursdays at 9:00 pm**
This net covers Winnipeg and the MRS linked repeater system, and includes various announcements on amateur radio activities, plus Dick's "Swap and Shop"

**Seniors Morning Net 147.390+ Mhz
Weekdays at 9:00 am**
This net covers Winnipeg and hams of all ages are welcome to join in this net which is always a lot of fun!

**IRLP (Internet Radio Linking Project)
Net - 145.450 Mhz - Node # 1066
Wednesdays at 7:00 pm**
This net connects you with the world using your VHF rig and using the internet as the backbone!

**Six Meter Net - 50.238 Mhz
Wednesdays at 9:00 pm**

HF Nets

**MB Evening Phone Net - 3747 Khz
Daily at 7:00 PM CT**

**Prairie Traffic Net (CW) 3660 Khz
Daily at 01:30 UTC**

**Aurora # 2 Net 7055 Khz
Daily at 02:30 UTC**

**MB Wx Net 3743 Khz
Daily at 8:30 AMC**

**ARES Manitoba Monthly Readiness Net
4TH Sunday of each month
4:00 PM to 4:20 PM -7,075 Khz
4:00 PM to 4:15 PM -3,675 Khz LSB
Also.. VE4WRS IRLP, VE4ARC/TEU, Interlake, VE4FFR Flin Flon, IRLP Reflector 9003 to Flin Flon/Swan River/Pinawa, VE4SIX/DARC repeater, VE4TPN/VHF Thompson.**

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Please send your submissions/comments to the editor
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