



# The **NEWSCASTER**

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

April 2011

IRLP # 1066 on VE4WRS 145.450-

VE4BB

## **Home Brew Night** *Bring along your projects for Show & Tell*

Date: Monday, April 11, 2011  
Time: 7:30 PM  
Place: Dakota Collegiate - (In the theatre)  
661 Dakota Street (At Beliveau Rd.)

### **Other Important Dates...**

Newscaster: Deadline April 27, 2011

WARC: Monthly Meeting Dates  
May 9, 2011—Power Pole Party  
June 13, 2011—Elections

MRS: Annual General Meeting  
April 14, 2011

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

ARES: April 20, 2011  
(May be cancelled due to flood operations)

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
Past President	Geoff Bawden	ve4baw@rac.ca

### **And now a word from the President** *By Mark, VE4MAB*

It's great to see the membership stepping up to participate when it comes to our monthly meetings, the Flea Markets held in the spring and fall, Field Day in June, and the "Home Brew" nights coming up at our April meeting. Make sure to bring along a project for "Show & Tell" and if it's TOO big such as your antenna farm, bring along a picture!

WARCs election of officers at our June meeting is just a few months away and joining the executive is another way you can participate!

This past year, after a few years of less than a full executive, we had each position filled thanks to Jim, VE4SIG, Bob, VE4RCJ, Garth VE4GWB, Craig VE4CDM and Ed VE4EIH, and with thanks for the support from our past President Geoff VE4BAW.

After serving on the executive doing my part for a few years I continued to stay on the executive during the few years when we didn't even have a full slate of candidates because I didn't want that vacant position be mine!

For me it certainly has been a challenge due to the many conflicts with my uncertain work schedule and so now after 9 years on the WARC executive it's time for me to step aside, reduce some of those work related stresses.

Now it's your turn!

With the vast range of experience throughout our membership WARC has a lot of potential. So between now and June when the nominating committee calls, consider letting your name stand for the 2011-2012 executive!

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,  
March 14, 2011  
Taken by Jim, VE4SIG**

Called to Order 1936 hrs

**Introductions** – to spice things up attendees were asked to say their favorite mode as well as the usual name and call sign

Approval of the Last Minutes – moved by VE4GWN and seconded by VE4DL

**Reports**

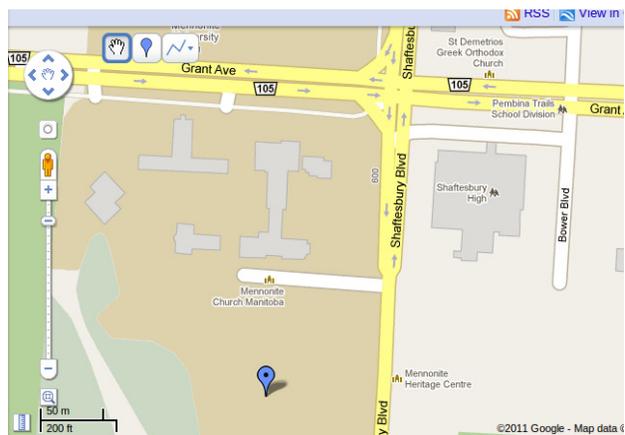
**Secretary** – nothing to report

**Treasurer** – at the end of February we had \$4005.09 in the TD bank account (about to be closed) and \$881.90 in the ACU account.

**Membership** - we currently have 110 members with 6-7 coming from Shaftesbury High School.

**Field Day** – VE4GWB is coordinating for this year. Our planned location is the field just south of Canadian Mennonite University (CMU) (see map). With the event being held in the city we expect to get better attendance from the public and media. VE4GWN asked if the event would be better publicized than previous years and VE4SIG ensured everyone a Media Plan was

in place. VE4OK mentioned he was involved with Navy Cadets and would like to bring them to the event which was welcomed.



**Field Day Location**

**Programs** – VE4CDM reported that the following program were in place or planned

March (Tonight) and History and Tour of Canadian Mennonite University

April – Homebrew Nite

May – Power Pole Party – bring your Power Cables and get Power Pole Connectors installed on them



June – Elections and ????

**Flea Market** - VE4HK reminded everyone that the Spring Flea Market is scheduled for April 17<sup>th</sup>

0930 -Doors Open for coffee and eyeball QSOs

1030 – The selling begins

1130 – Draws being

1200 – Finished and we pack up

There's only 5 tables left so if you want one get it soon!

MRS will have test equipment on hand to test your rig or any you are considering purchasing as well as helping people get their radios' programmed with any tones needed (bring the manual for the radio!)

The club is raffling off a brand new Icom IC-80 D-Star ready HT

(<http://www.icomamerica.com/en/products/amateur/dstar/ic80ad/default.aspx>). The unit has been graciously donated by MicroHighTech and funds raised will be used to offset the increased insurance costs. Tickets can be purchased from any member of the executive and are \$5 each or 3 for \$10.



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

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

**ARES** – VE4MBQ reports that he only needs 10 more volunteers for the Marathon. The volunteer form in on both the WARES and WARC Websites. The previous month ARES members supported the Boy Scout Klondike Derby at Camp Amisk.

Flood Preparations – the plan is to disseminate information via an Information Net to be held every night at 1800 hrs.

**DX** – VE4SN reports 20M is open almost all the time with openings also on 15 & 10M

**UMARS** – VE4SCH, the President of the University of Manitoba Amateur Radio Society was in attendance and reported they had a good turnout for the “My First QSO” event they held and they hope to make it an annual event.

**Good & Welfare** - VE4JNF reminded everyone that the “Fishing for the Cure” event is being held on June 4<sup>th</sup> this year at Selkirk Park and volunteers were needed.

VE4HK reminded everyone that the Manitoba Repeater Society AGM is to be held April 14<sup>th</sup> at Norberry-Glenlea Community Centre. (26 Molgat Ave)

VE4DAR – remarked that he sat in this very room 51 years ago while attending Teachers College.

Motion to Adjourned moved by VE4HK and seconded by VE4VZ

VE4CDM gave a very interesting presentation on the history of the building we were in followed by a tour.

## **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***

## **WPGARES**

*By Jeff, VE4MBQ  
Emergency Coordinator*

Fourteen Amateur operators provided volunteer communications SAT 5 MAR & SUN 6 MAR for the Scouts Canada Klondike Derby at Camp Amisk. Thanks to our volunteer operators VE4s:

RLF, WTF, HAZ, GWN, TRO, GWB, JAH, KAZ, CIB, HK, JHJ, DWG, MAQ and MBQ.

Special thanks to Bob VE4MAQ for coordinating the event & moving our Boler trailer around and thanks to Glen VE4GWN for setting up cross-band repeat in his vehicle.

Kent VE4KEH led a very interesting discussion on Equipment Considerations for Rural Deployments at our MAR General Meeting. A few more members & affiliates also deserve a “Thank-You” this month:

—Jim VE4SIG for donating a bunch of PL-258 Couplers

—Irv VE4UG for donating a flat screen monitor for the VA4DIG Repeater Rack

--Darcy VE4DDW for reprogramming our Phoenix Radio in Mobile Kit #4

—Tom VE4SE for getting the Mobile Kit out of the WFPS Mobile Command and Luke VE4WTF for getting it to Darcy (who reprogrammed it overnight and put in into my hands at 0730h the next morning).

VE4EOC is a permanent Amateur Station that is set-up 24/7 X 365. By the time folks are reading this article our temporary stations should have already been established at the Reception Centre for possible evacuees as well as the two Volunteer Registration Centres that the City of Winnipeg is planning to open.

All Winnipeg ARES-owned equipment is ready for Flood Operations, a 14 page PDF was recently circulated within the membership outlining our Mobile Radio Kits, contents & programming. Some Winnipeg ARES members have been pre-identified for:

Reception Centre  
Volunteer Registration Centres  
VE4EOC.

For the most part, our VE4EMO Team is comprised of Winnipeg ARES members too. Grassroots Amateurs in Winnipeg who are interested in supporting municipal Flood Operations this spring should look for the separate article elsewhere in this newsletter.

If you are not personally involved in communications for 2011 Flood Operations or are a victim of flooding please consider visiting the Winnipeg ARES Table at the WARC Flea Market SUN 17 APR – Craig VE4CDM and his team have a terrific Silent Auction lined up!

Our next General Meeting is scheduled for 1900h WED 20 APR at Sir Wm Stephenson Library 765 Kee-watin Street. Glen Napady VE4GWN is scheduled to discuss cross-band repeating like what he did at Klondike Derby followed by a round-table discussion of Flood Operations to date. The 20 APR meeting is subject to cancellation – please check the WPGARES website leading up to the meeting and listen for a “Go/No Go” message on VE4WPG at 1800h WED 20 APR.

### *Manitoba Marathon*

*By Jeff, VE4MBQ*

The volunteer briefing for Amateur Radio volunteers will be TUE 14 JUN 1900h Norwood Community Centre 87 Walmer off Lyndale Drive.

If you have volunteered for the Marathon and are not able to attend the briefing please let me know in advance which Marathon volunteer who is attending the briefing will be picking up your t-shirt and information package.

We are still in need of two volunteers as back-up operators:

One Amateur who lives south of the Assiniboine River  
One Amateur who lives east of the Red River.

### *Manitoba Marathon Volunteer form is available at*

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

### *Seniors Club Elects Officers*

*By David, VE4DAR*

At a special meeting held March 16, the Winnipeg Seniors Citizens Radio Club elected their officers and governing board. All will serve until November when the next regular election will be held.



Forty eight persons attended the meeting at the Canad Inn on McPhillips. The meeting opened with a moment of silence in remembrance of persons who became silent keys since the last meeting. Each of the following officers was elected by acclamation:

President, Ed Oakes  
Vice President, Adam Romanchuck  
Secretary, Gil Frederick  
Treasurer, Sue Collings

Then 16 persons were elected to the Governing Board. Alf VE4ALF reported the results of a telephone survey of members. Of the 76 persons reached, 47 indicated they wanted to be considered active and 19 persons were removed from the active list. Other information gathered can assist the governing board in their planning.



The meeting was skilfully chaired by Adam VE4SN involving many members in meaningful discussion.

Best wishes to the new Executive and Board.

**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



## Contest Calendar

Extracted From

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

### For April...

Montana QSO Party	0000Z, Apr 9 to 2400Z, Apr 10
JIDX CW Contest	0700Z, Apr 9 to 1300Z, Apr 10
PODXS 070 Club PSK 31 Flavors Contest	1200-1800 local, Apr 9
New Mexico QSO Party	1400Z, Apr 9 to 0200Z, Apr 10
EU Spring Sprint, CW	1600Z-1959Z, Apr 9
Georgia QSO Party	1800Z, Apr 9 to 0359Z, Apr 10 and 1400Z-2359Z, Apr 10
SKCC Weekend Sprint	0000Z-2400Z, Apr 10
UBA Spring Contest, SSB	0600Z-1000Z, Apr 10
Hungarian Straight Key Contest	1500Z-1700Z, Apr 10
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Apr 13
CWops Mini-CWT Test	1100Z-1200Z, Apr 13 and 1900Z-2000Z, Apr 13 and 0300Z-0400Z, Apr 14
NAQCC-EU Monthly Sprint	1800Z-2000Z, Apr 13
RSGB 80m Club Championship, SSB	1900Z-2030Z, Apr 13
TARA Skirmish Digital Prefix Contest	0000Z-2400Z, Apr 16
Holyland DX Contest	0000Z-2359Z, Apr 16
ES Open HF Championship	0500Z-0859Z, Apr 16
CQ Manchester Mineira DX Contest	1500Z, Apr 16 to 2359Z, Apr 17
Feld Hell Sprint	1600Z-1800Z, Apr 16
EU Spring Sprint, SSB	1600Z-1959Z, Apr 16
Michigan QSO Party	1600Z, Apr 16 to 0400Z, Apr 17
Ontario QSO Party	1800Z, Apr 16 to 1800Z, Apr 17
YU DX Contest	2100Z, Apr 16 to 1700Z, Apr 17
ARRL Rookie Roundup, SSB	1800Z-2359Z, Apr 17
Run for the Bacon QRP Contest	0100Z-0300Z, Apr 18
RSGB 80m Club Championship, Data	1900Z-2030Z, Apr 21
10-10 Int. Spring Contest, Digital	0001Z, Apr 23 to 2359Z, Apr 24
SP DX RTTY Contest	1200Z, Apr 23 to 1200Z, Apr 24
Helvetia Contest	1300Z, Apr 23 to 1259Z, Apr 24
Nebraska QSO Party	1700Z, Apr 23 to 1700Z, Apr 24

Low Power Spring Sprint	1400Z-2000Z, Apr 25
SKCC Sprint	0000Z-0200Z, Apr 27
QRP to the Field	1500Z, Apr 30 to 0300Z, May 1
Florida QSO Party	1600Z, Apr 30 to 0159Z, May 1 and 1200Z-2159Z, May 1
BARTG Sprint 75	1700Z-2100Z, Apr 30

### Into May...

AGCW QRP/QRP Party	1300Z-1900Z, May 1
RSGB 80m Club Championship, SSB	1900Z-2030Z, May 2
ARS Spartan Sprint	0100Z-0300Z, May 3
MIE 33 Contest	1100Z-1500Z, May 4 and 2300Z, May 4 to 0300Z, May 5

### More Contest Info..

May 7, 2011 is the "ZQP" Zeroland QSO Party Contest.

The object is to contact as many stations as possible with a focus on contacting stations in Zeroland (Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota).

Contest Period: 16:00 UTC Saturday to 04:00 UTC Sunday. <http://www.zerolandqsoparty.com>

### Good Luck In The Contest!



### Why Join RAC?

### Why Join a RAC Affiliated Club??

Maintaining a "valid" membership in a RAC Affiliated club means you are covered by the RAC liability insurance during club activities.

By maintaining a "valid" RAC membership you are also covered under the liability insurance for your personal radio activities.

Consider Joining RAC Today!

<https://www.rac.ca/store/membership-form-e.htm>

## *News From The Net*

### *RAC Bulletin 2011-008E*

#### *Development of A Canadian Field Organization*

Winnipeg, Manitoba April 2, 2011

In RAC Bulletin 2010-032 - Vision Statement 2010-11-14, RAC committed itself to the "education and emerging of new Hams", and supporting "the training and coaching of RAC volunteers to achieve exemplary results, at the municipal, provincial and national levels." The new RAC Field Training program is the recognized tool leveraged by our ARES groups.

On December 9, 2010, Vice President Field Services with the support of the Section Managers formed a "Vice President Field Services Council".

The Council made the commitment to develop a Canadian "Field Organization". A major part of the new Field Organization will be the existing Field Service, which is key to providing services to the public and the Amateur Radio community. It will also incorporate new functions to better represent our interests to governments at the provincial and municipal levels, provide a strengthened public relations capability, expand the Affiliated Club program with a view to improving the input of Canadian Amateurs with respect to RAC policy development, and bring focus to promoting technical developments. On 24 March, 2011 the RAC Board unanimously approved implementation.

It is envisaged that each Section will form a similar council to oversee development of the Field Organization concept, taking into consideration its unique relationship with provincial governments, geography, relationships with existing regional associations, and the requirements of the individual clubs.

At its second meeting held on 13 January, 2011, the Council approved in principle an ARES Training Management System with the following six objectives:

- 1- Create a just-in-time training programme that delivers task-related skills and knowledge needed by the radio operator or team leader on the first day in a new assignment;
- 2- Develop the radio operator's abilities through a structured programme of practical training under the supervision of a mentor;
- 3- Standardize qualifications through a family of control documents that identify job tasks, skills and knowledge, to specified standards, and supplies trainers with prepared course materials;

4 - Promote ARES and NTS interoperability with emergency management authorities by embracing the Incident Management/Command System philosophy and exploiting provincially approved IMS/ICS courseware and certifications whenever possible;

5 - Institute training quality control and continuous improvement mechanisms; and,

6- Incorporate a professional development approach designed to groom the leaders of tomorrow.

The Council, through a working group, is developing an updated mission statement for the ARES. A second working group under the chair of the Ontario Section Manager has begun development of a "Specification", the foundation document in a training management system. While the focus is initially on modernizing the ARES in order to stay in step with rapidly developing national and provincial emergency management initiatives, ultimately this document will be expanded to include all roles within the RAC Field Organization.

The President and Vice President of Field Services extend an open invitation to all Amateurs with expertise in any aspect of developing the Field Organization to make contact with their Section Manager. Contact information can be found at

<http://rac.ca/en/rac/public-service/section-managers/>

Geoff Bawden, VE4BAW  
President, Radio Amateurs of/du Canada

### *RAC Bulletin 2011-007E*

#### *Ontario South Director's Election 2011-03-17*

Two nominations were received for this position. Following a review of the documentation submitted and taking into account the constitutional and election process requirements the Committee determined that the nomination papers were complete and in order for Mr. Jeffrey Stewart, VA3WXM, and Mr. Nelson D.H. Jenking, VA3NDJ.

The Committee recommended a Ballot by Mail pursuant to Article 6 (Method of Election) in the Constitution, for Director, Ontario South Region for the completion of the 2010-2011 term. Ballots will be mailed to the applicable postal codes from the RAC Office in the near future.

Paul Burggraaf VO1PRB  
RAC Corporate Secretary

## ***Information for Grassroots Amateurs Interested in Supporting Municipal Flood Operations in Winnipeg***

***By, Jeff Dovyak VE4MBQ [ve4mbq@rac.ca](mailto:ve4mbq@rac.ca)***

At times ARES Units are able to support their served agencies on their own without additional volunteer support. At other times like when major operations may be anticipated an ARES Unit may be more of a coordinating body than just the “doers”. Large-scale flood operations are one of those instances where Winnipeg ARES is stretched awfully thin and we need the active support of the Amateur Community. Our willingness and abilities as amateur radio operators to assist the various levels of governments at these times of Emergency has contributed to maintaining our share of the radio spectrum and closer to home, the exemption of amateur radio equipment in the Manitoba “Distracted Driver” legislation.

The City of Winnipeg Emergency Preparedness Program will be communicating with Winnipeg residents in a number of ways but one direct way is via EmergWeb: <http://www.winnipeg.ca/emergweb/>

Once Winnipeg ARES becomes actively involved in municipal flood operations or is about to become actively involved, Winnipeg Amateurs should expect an information announcement daily on VE4WPG 147.390+ 127.3 Hz (alt VE4CNR 146.760-) at 1800h. That announcement will briefly outline expected activities next day and solicit help from certified Amateurs with a working 2m HT and a spare battery pack. Those HTs must be capable of transmitting a 127.3 Hz CTCSS Tone to activate VE4WPG. They should be programmed for VE4WPG, VE4CNR, VE4UMR 147.270+ (for operations in south Winnipeg), VE4ARS 145.350- (for operations in north Winnipeg – ARS is expected to be back on the air any day now) and simplex frequencies 146.520 MHz and 146.580 MHz.

The Winnipeg ARES–Winnipeg Amateur Radio Club “loaner” traffic vests will be available for loan – they will likely be available for pick-up from the ARES members stationed at one of two City of Wpg Volunteer Registration Centres (one is planned for north Winnipeg and one is planned for south Winnipeg), at press time it is uncertain exactly when those centres will open or their exact locations.

Civic Authorities have mentioned several times how helpful it is to have Amateur Radio Operators at the various sandbag sites thru the city advising on generally what’s happening, apparent volunteer size, diking completion, etc. Please do not self-dispatch yourself to any location– VE4EOC must know where every Ama-

teur Volunteer is assigned to and when they go on and off duty (accountability in other words). If there is a day or days that VE4EOC is not active the operation will be controlled by the ARES operators at one of the Volunteer Registration Centres and they will be using Winnipeg ARES callsign VE4YWG.

An up-to-date Sherlock Street Guide and layered clothing appropriate to the day’s weather conditions will almost complete what you need to bring. A snack is a good idea. I have told civic authorities that all certified Amateurs should have a wallet-sized copy of their Industry Canada Operator’s Certificate – volunteers should definitely have government issued photo-ID in their possession.

The 2009 Winnipeg ARES Flood Report is posted on our web-site:

<http://www.winnipegares.ca/documents/Flood/flood2009.htm>

If you think that you might want to help out this spring but have some questions please don’t hesitate to contact me soon – once operations get underway many of us will be pretty busy!

### **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 eyeball 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](mailto:ve4se@mts.net) or call 204-837-6915

To volunteer or for info—Contact Dick Maguire VE4HK at [ve4hk@rac.ca](mailto:ve4hk@rac.ca) or at 204-256-3143

## **UMARS News**

*By Dario Schor, VE4SCH*

The University of Manitoba Amateur Radio Society (UMARS) was very active during the month of March holding a very successful workshop and the Annual General Meeting.

On March 27, 2011, the UMARS partnered with the University of Manitoba IEEE Student Branch (UMIEEE) and the IEEE EduManCom Chapter to hold an Embedded Systems Workshop to introduce students to the principles of embedded design using the MSP430 LaunchPad. Ben Bergman, Troy Denton (VE4TRD), Dario Schor (VE4SCH), Matthew Sebastian, Frank Serafin (VE4FHS), and Matthew Woelk (VE4MDW) guided a sold-out group of 23 students through a five-hour workshop that began with a presentation by Troy (VE4TRD) on the fundamentals required for the workshop.



Then, students were taught how to solder components and make a single LED blink on their board. Following the lunch break sponsored by the IEEE Winnipeg Section and the University of Manitoba Student Union, the students worked on a larger project that included interfacing components and programming the MSP430 microprocessor to create an LED-Chaser (i.e., connect multiple boards together and make lights blink like a wave in a stadium). Although the project proved to be too ambitious for the one afternoon, the students were very pleased with the



The University of Manitoba Amateur Radio Society had a very active year with many successful events and is looking forward to continue its activities during the 2011 summer and 2011/12 academic session.



workshop and thrilled to be able to take all the components home with them to continue to experiment and learn about embedded systems.

Overall, the event was very successful and plans are already underway to offer it during the upcoming academic year as a three part series for beginners, intermediate, and advanced students.



Two days later, on March 29, 2011, UMARS held its Annual General Meeting where Dr. Kinsner (VE4WK) was recognized for his efforts reviving UMARS and promoting amateur radio at the UofM. The meeting highlighted the events from the year and some of the upcoming plans for the summer that include, (i) mounting antennas donated by Alan (VE4YZ), (ii) setting up new workstations for packet radio, (iii) completing a balloon launch, and (iv) participating in the Manitoba Space Adventure Camp to promote amateur radio to high school students.

***The SHAFTESBURY HIGH ALTITUDE ROBOTICS PROJECT Continued from March By, Robert Striemer, VE4SHS***

The first problem to be settled was the payload weight. Caution required redundancy. We had two APRS transmitters, two GPS sensors and two, 12 volt lithium battery packs. There was no time left to cut weight elsewhere. With some trepidation the students decided to remove one beacon. For days the wind had been straight out of the west. Two very big lakes are straight east of Erickson. The heaviest radio and GPS were stripped from the payload box. We took some consolation in the realization that when our payload fell into the lake, we would only lose half our hardware. When SHARP's "Geek Squad" had completed wiring the FTU, we broke for dinner.



Alan Thoren used a program called BalloonTrack to predict the flight path based on upper air winds. We waited nervously for his twice daily e-mails showing the latest predication. As the students and staff sat down for dinner in the lodge, I checked my e-mail. The simulated trajectory, on the evening of October 21, showed a landing zone just south-east of Portage la Prairie. This was very good news. The conversation at the dinner table that evening was very upbeat. It seemed we might miss Lake Manitoba by as much as 20 km. After dinner the teachers briefed the students on Alan's weather and predicted flight path. Iain Riffel delivered a pep talk saying the only thing standing between SHARP and its goal was a few more hours of preparation. The last decision made by SHARP that evening was to attempt a maximum altitude flight and hopefully get a picture of space. The nominal burst altitude of our balloon was 105 000 feet. With the launch at 10 AM, the students would set the FTU to cut the payload free at 11:45 AM. Given an ascent rate of 1000 feet/minute, the balloon should be close to the burst altitude at cut down. We returned to the workshop with renewed enthusiasm.

Just before leaving the school, the camera team realized that the firmware modifications to the flight camera had not been successful. The camera would only

record for one hour and this certainly would not get us the picture of outer space that was our primary goal. However, just before we left the school for Ericson, our student photographer convinced the Graphic Arts teacher to lend him an old Sony digital camera for the weekend. The students now set to work cutting a new camera bay into the payload box. Then they installed the larger camera using a good deal of duct tape. Running on two lithium cells and with a 32 GB memory card, this old camera would record video for over three hours and provide the proof that it had reached space.

The students mounted the FTU circuit and stopwatch inside the capsule. They connected the shroud lines and then ran hook-up wire through the top of the parachute to the nichrome scissor on the balloon line. The last task that evening was to remass our payload and adjust the mass of our dummy weight which tells us when the balloon has achieved the correct lift. After some final radio tests, we packed the cars and went to bed.

Derek Hay (VE4HAY) and Mark Blumm (VE4MAB) had alerted the local ham community of our planned flight. Manitoba hams would back us up. Bruce Feaver followed the flight from his office at Southport (Portage la Prairie aerodrome) and Craig Martin monitored the flight from his office at CMU (Canadian Mennonite University). Alan would be waiting for us in Portage la Prairie.

Bill Simm (VE4ALW), a Portage la Prairie ham, runs an APRS internet gateway, weather station and repeater in his home. Portage is between Erickson and Winnipeg so Bill would receive the SHARP beacon and forward the packets to <http://aprs.fi> and repeat to local hams. Having an APRS repeater near the predicted landing zone is ideal. The closer the repeater to the landing, the more accurate the last position recorded by the system. There are not a lot of APRS repeaters in Manitoba and a beacon will not likely "hit" a repeater as it nears the ground. However, if you know roughly where the object will land, you might be able to use local resources and set up repeaters in the landing area.

The weather on the morning of October 22 was ideal. The air was clear and cool. The airfield's wind sock indicated a light north-east breeze. Preparations went without a hitch. As the balloon was filling we tested the camera and radios. The payload box was sealed at 9:50. The students connected the parachute and finally they attached the line to the balloon. A countdown to launch started and at exactly 10 AM the balloon was released. It ascended rapidly and in two minutes it was out of sight. Bruce was notified. He made the phone call to NAVCanada as we loaded the chase vehicles. We monitored the flight using the mobile and we consulted the road map. Then, we got into the cars and headed south-east making for Portage on PTH 16.



The balloon was getting ahead of us. At times it hit speeds of over 160 km/h. We watched the GPS in the car intently as 11:45 approached. By 11:50 it was clear the balloon was still ascending. The flight termination unit had failed. We were not really upset by this. The balloon was not ascending as quickly as expected and height was our goal. A few minutes later, we could see the payload was on its way down. It had reached an altitude of 107 348 feet (over 32 km). Now we became even more excited. Would we be able to recover the camera? The chase vehicles assembled again just east of Portage for a quick conference. The SHARP capsule, trailing the burst balloon, was falling rapidly and moving east at a clip. When everyone was briefed, we set off again heading west on the Trans-Canada highway.

I was not able to drive the car and use a radio at the same time. Bohyun (VE4BHL) was the only other ham in our group and she was in another car. The student next to me used a cell phone to stay in touch with the other chase vehicles and talk to hams that were following the flight online. We only had the one mobile radio, which was giving us payload position reports. We did have two HTs but they couldn't be used inside the vehicles. We hadn't had much opportunity to develop our radio skills anyway but with the help of the ham community, GPS navigators in the cars and cell phones, we were able to communicate well enough. Just west of Winnipeg we turned south and headed for Starbuck. Alan had caught up to the group. The APRS had worked beautifully near Winnipeg. The final position report at 12:40 PM put the payload at an elevation of 234 metres. SHARP-1 had landed. We had five crews all very eager to be the first to spot the space capsule. Finding the payload was much easier than we had anticipated. It came down in a freshly ploughed field, obvious from the section road near Sprinsteen. After a 2 hour and 40 minute flight, the payload had traveled a distance of about 190 km and landed less than 20 km from our school. As each car arrived, students and teachers piled out and ran to the capsule. When all were assembled around the payload, the students opened the box and to our great relief and joy; the camera was still recording.....

10 *To Be Continued in the May issue!!*

#### 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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