

The QSO



June/July 2004

<http://www.sarl.ca>

Special Double Issue!!

Volume 2004, Issue 3

Summer is Here!!

Devon Racicot VE5DWR (Editor)



Welcome to this special double issue of The QSO! As I'm typing this column, the rain is just pouring down here in Saskatoon. It is great to see the moisture this year, hopefully it will help the Province's Producers in growing bumper crops.

We decided that as a prelude to the upcoming SARL Annual General Meeting and Flea Market, that we would try and put together something a little bit different which we can use to promote SARL at the event. This issue is just about double the size of a regular issue. We couldn't make it any bigger as we would have had to increase the amount of postage on the envelope.

We take a look at various topics in this issue. Computers and Internet are becoming commonplace in today's "shack" and so Chris Morgan VE5BAR took the time to write an article on computer security for the average user. Information on a rocket carrying amateur radio, a new Morse Code character, news from around the Province and many other features are contained within this issue of *The QSO*.

Also, Field Day plans are in full swing across the Province as we take a look at the various activities planned by clubs and ARES groups.

Plan to be in Saskatoon on July 24th. The Saskatchewan Amateur Radio League will be hosting the Annual General Meeting and in

conjunction with the meeting, we will hold a flea market and a few special presentations. The event will be at Walter Murray Collegiate Institute and more details can be found on the poster at the back of this newsletter.

As per usual, I wanted to remind everyone that I am always looking for articles to put in the newsletter. No article is too big or small. The more input I receive from across the Province, the better quality and more interesting this will be. For those that did submit articles for this issue, I thank you!

This will be the last issue until mid-September, so I want to wish everyone a great summer and take advantage of the weather.

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**The Saskatchewan
Amateur Radio League**

The QSO

The Fine Print

The QSO is published on a regular basis for the membership of the Saskatchewan Amateur Radio League (SARL). The purpose is to provide Saskatchewan and other amateurs, and those interested in radio communications and electronics, with information on matters related to the science of communication. Unsolicited articles, reviews, features, letters to the editor, criticisms, photographs and essays are welcome. Manuscripts should be legible and include the name and address of the contributor. A signed article expresses the view of the author and not necessarily that of SARL.

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From the President's Desk

Derek Bereza, VE5SD



Some ideas for the future of SARL...

Sasklink

"Sasklink's purpose is to connect the amateur radio communities in the province of Saskatchewan and promote emergency preparedness, foster experimentation, operation, maintenance and repair of amateur radio communication systems and to further the art of radio astronomy.

Controller Class

An amateur radio course like no other! Different levels of instruction ranging from Basic Operator, Advanced, and Master. Each level of accomplishment builds up to the next level of radio operation, maintenance, repair and design. Earn your T-shirt with each level of completion! A very practical, hands on experience for amateur radio operators who want to learn -- beyond turning on the switch!

Saskatchewan Radio Handbook and CD

This initiative is designed to promote amateur radio throughout the province and help clubs and groups fundraise. With the help of SARL an opportunity to help contribute information, ads, reports, articles, etc... to produce a first class amateur radio handbook and CD to be sold for operators to use and enjoy. We are taking the annual call book to new heights of information and impact!

Section 2 (*excerpt from the project*)

"Repeaters in Saskatchewan:

Over the years there have been many pioneers experimenting with repeaters and linking in the province. The purpose of this section is to document some of the efforts of those amateurs and clubs who have contributed to this facet of

the hobby. If you would like to contribute to this project and have information, pictures, etc... please contact sasklink@sarl.ca.

To Begin off with some of the repeater systems first entered onto this database is the VE5UB repeater system, Lakeland and Linked Terrestrial Network. The descriptions about the various repeater systems history, equipment, operating features and access codes etc...will be updated, as soon the information is made available. If you use this CD and have direct access to the Internet, click on UPDATE for the latest available information.

Utilizing a number of different communication medias ranging from HF/VHF/UHF, QSO Newsletter, www.sarl.ca website, sasklink@sarl.ca email reflector, www.saskhamfest.com hamfest and flea market promotion website, IRLP, IPARN and frequency agile remote bases, ARES, CANWARN, etc...SARL hopes to foster an active amateur radio community in the province of Saskatchewan. A great deal of information is available on the Internet, and many links to these websites are utilized throughout this CD."

Most things begin with a dream, thought, idea, problem, or a situation. We have an opportunity in our province to create a vital, energetic and worthwhile amateur radio fraternity once again! With many of us contributing in our own special way, in the matter that we feel safe and rewarded, we can create an exciting Mecca of amateur radio activity!

Would your club or group be interested in having an email list set-up to help communicate more effectively? Would you be interested in having a monthly "bear-pit" session where you can get on the air and have your questions answered by "Elmers"?

I look forward to seeing you this summer at our AGM, and discussing and implementing an awesome future!

A Look at Computer Security

Chris Morgan, VE5BAR

Most of us are connected to the Internet in some fashion these days. It could be by dial up or a high speed cable or (D.S.L) Digital Subscriber Line service. The Internet has become a dangerous place for unprotected computers and some preventive measures need to be implemented to guard your computer against attack or theft of your personal information.

There are several ways your computer can be compromised.

1. Virus - "A parasitic program written intentionally to enter a computer without the users' permission or knowledge. The word parasite is used because a virus attaches to files or boot sectors and replicates itself, thus continuing to spread. Though some viruses do little but replicate others can cause serious damage or effect program and your system performance. A virus should never be assumed harmless and left on a system." - Symantec

2. Trojan, or a Trojan Horse, is a destructive program that masquerades as a usable application. Unlike viruses, a Trojans does not replicate itself. Examples of a Trojan horse are a program that claims to find and delete viruses, but instead it introduces a virus on your computer or a small game or joke a friend sends you that contains a hidden program. Some of these programs will transmit passwords and your personal information back out on to the Internet without your knowledge.

3. Worm – These are very similar to viruses in that they are computer programs that replicate themselves and that often, but not always, contain some functionality that will interfere with the normal use of a computer or a program. The difference is that unlike viruses, worms exist as separate entities; they do not attach themselves to other files or programs. A worm can spread itself automatically over the

network from one computer to the next. Worms take advantage of automatic file sending and receiving features found on many computers.

There are others that are combinations of the above threats but for this decision we will focus these.

A virus is usually sent in an email that contains an attachment. In the last while the viruses have become very sophisticated. They can infect your computer then take address from your email address book and mail copies of itself to those in your address book. It can also change the address fields so the person receiving the email has no idea from where the mail originated. The best protection against viruses is an anti-virus program like Symantec Anti-Virus or McAfee Virus Scan. This software will scan incoming and sometimes out going email to make sure the virus are not attached. Be warned that some virus will arrive as an attached zip file. The Anti virus software can't tell if the file is infected until you actually open the file. If you receive a zipped file (ending in zip) check with the person that sent it to you to make sure they really did send it. If you don't recognize the address of the person that sent it, always delete the file immediately; don't take the chance of opening it up.

Trojan, or a Trojan Horse software is usually circulated as innocent looking jokes or games that arrive in an email. Your anti virus software does provide some protection against this threat but again your best protection is not to use or load software from unknown sources. Even some downloadable software from the Internet has been known to contain Trojan Horse software.

Protection against worms is quite different. You need either a hardware firewall like a Dlink, SMC, or Linksys router or a software type firewall like Symantec, MacAfee or Zone Alarm. Software firewalls have an added benefit for laptop users that you don't have to carry a separate unit around with you. The

hardware firewalls are better for home networks as they can protect several computers at once. The way the firewall works is it allows information to flow from your computer out on to the Internet and will only allow information back through that you requested. This way the worm never will see your computer and get a chance to infect it. The worm will be blocked at the firewall wither it be of the software or hardware type. Sometimes employing both a hardware router and software firewall is of benefit. A software package like ZoneAlam can warn you when information is beginning sent back to the Internet without your knowledge. You then decide if you want to allow this or not.

Here are some other things you can do to keep these unwanted security threats out of your computer.

Keep your virus definitions up to date so you will be protected against newly released threats.

Never disable your virus scanning software.

Don't open attachments until you confirm with the person at that sent it that it was really sent by them.

Do not use file sharing programs like Kazaa and WinMX. Many of the songs and files contain viruses or Trojans.

If you have a hardware router, make sure you are running the latest firmware. Check with the web site of the manufacturer to see what the latest release is.

We all get caught with our guard down from time to time but by following these steps we can safely enjoy the vast amount of information that the Internet provides. And remember if you get a suspicious email DON'T CLICK on it, delete it, better to be safe then sorry.

International Lighthouse/Lightship Weekend – August 2004

Mike Dalrymple, GM4SUC

This highly popular annual August event attracts hundreds of amateur radio stations at lighthouses and lightships (369 in 48 countries for the 2003 weekend.) world-wide. It is organized by Mike, GM4SUC, and Kevin, VK2CE is the web-master. This year the period of the event is from 0001 UTC on Saturday 21 August until 2359 UTC on Sunday August 22, 2004.

The event is NOT a contest. It is a special event weekend when amateur radio stations are established at lighthouses or lightships, they do not have to be adjacent to salt water, and each group decides how it will operate the station with regard to modes and bands. Participants are not committed to being on the air during the entire period - operate as much as you can. There are no restrictions on aerials or power. We wish operators to enjoy themselves and have fun while making contact with as many stations as possible whilst giving priority to other lighthouse/lightship stations. Please take some time to work the slow operator, the newly licensed and QRP stations.

As available space in many lighthouses is filled to capacity, participation in this activity does not have to take place inside the tower itself. Field day type set-up at the light or other buildings next to the light or adjacent field is OK. Permission MUST be obtained from any interested parties.

The International Lighthouse/Lightship Weekend is used to obtain maximum exposure for our hobby. We invite the press and, QTH permitting, also the public and try to underline the parallel between the international aspects in lighthouses, lightships, and amateur radio. As from last year, the World Lighthouse Day is held on the Sunday of the event and lighthouse keepers/managers/caretakers all around the world open their lighthouses to the public.

<http://www.lighthouse.fsnet.co.uk/events/intlighthouseday.html>

We use the event segment of the 5 Classic bands, consider the following as a range of suggested frequencies.

CW

80m: 3.510 - 3.540 kHz

40m: 7.005 - 7.035 kHz

20m: 14.010 - 14.040 kHz

15m: 21.010 - 21.040 kHz

10m: 28.010 - 28.040 kHz

PHONE

*80m: 3.650 - 3.750 kHz

*40m: 7.040 - 7.100 kHz

20m: 14.150 - 14.290 kHz

15m: 21.150 - 21.250 kHz

10m: 28.300 - 28.400 kHz

* Some of the frequency ranges listed above are NOT legal in the United States of America. As a substitute, USA operators should consider these alternatives.

USA PHONE

80m: 3.950 - 3.990 kHz

40m: 7.250 - 7.290 kHz

However because the ILLW is NOT a contest, you can operate on any authorized QRGs as per your license, including the WARC bands. Please be sure to observe band limits for your class of license and your country.

To assist other stations in the identification of lighthouse/lightship stations, we request that participating stations using CW add LS after their call-sign at a lightship and LT at a lighthouse. SSB and other modes should use LIGHT, LGT, LIGHTHOUSE or LIGHTSHIP after their call. UK stations normally obtain a GB call-sign with the letter L in the suffix and USA stations can request a Special Event call-sign from the ARRL.

A list of the lighthouses/lightships of the world, currently 10,764 in 209 DXCC countries, plus

their Amateur Radio Lighthouse Society (ARLHS) Number can be found at <http://arlhs.com/awards/arlhs-umbers.html>

The list is constantly being updating and added to as more data become available. You can help: If you see a correction or an addition needs to be made, please send an e-mail with the information to K2JXW@arrl.net

If you decide to join us, please register on-line at <http://illw.net/index.html> with details of your name, call-sign to be used, lighthouse/lightship, Country, QSL route etc. Although registration is not compulsory, doing so enables us to maintain a detailed list of participants at <http://illw.net/2004.htm> showing QSL address, web site and any special event calls they may be using. E-mail addresses will be modified with "Unicode" to minimize harvesting by spammers.

So come and join us in the fun of the weekend, already 80 stations have confirmed their participation, establish a station at a lighthouse, lightship or maritime beacon. If you are unable to find a lighthouse/ship you can still join in the fun by contacting the special lighthouse/ship stations. The more the merrier.

Symbol Added to Morse Code

The Associated Press

Morse code is entering the 21st century -- or at least the late 20th. The 160-year-old communication system now has a new character to denote the "@" symbol used in e-mail addresses.

In December, the International Telecommunications Union, which oversees the entire frequency spectrum, from amateur radio to satellites, voted to add the new character. The new sign, which will be known as a "commat," consists of the signals for "A" (dot-dash) and "C" (dash-dot-dash-dot), with no space between them.

The new sign is the first in at least several decades, and possibly much longer. Among ITU officials and Morse code aficionados, no one could remember any other addition. "It's a pretty big deal," said Paul Rinaldo, Chief Technical Officer for the American Radio Relay League, the national association for amateur radio operators. "There certainly hasn't been any change since before World War II." The change will allow ham radio operators to exchange e-mails more easily. That is because -- in an irony of the digital age -- they often use Morse to initiate conversations over the Internet. "People trade their e-mail addresses a lot," said Nick Yocanovich, a Morse code enthusiast who lives in Arnold, Md.

Morse code uses two audible electrical signals -- short "dots" and slightly longer "dashes" -- to form letters, numbers and punctuation marks. Created in the 1830s by Samuel F.B. Morse, who invented the telegraph, the electronic signaling system spread across the world, and until the past few decades, it was used widely by the public, industry and government. "It was the beginning of the Information Age," said Gary Fowlie, Chief of Media Relations and Public Information for the ITU, which has its headquarters in Geneva, Switzerland. When Morse died in 1872, more than 650,000 miles of telegraph wire circled the globe. By the early 20th century, Morse messages were being sent wirelessly, via radio. Perhaps the most famous Morse communication is the international distress signal S-O-S. It consists of three dots, three dashes, and three more dots.

But with the proliferation of digital communications technologies such as cell phones, satellites and the Internet, Morse code has lost its pre-eminent place in global communications. "There's really no reason to use it anymore," said Robert Colburn, research coordinator for the History Center of the Institute of Electrical and Electronics Engineers. Today it's largely the province of ham radio operators, including 700,000 in the United States. While not all of them communicate regularly in Morse, almost all are

familiar with it. Some ham operators wouldn't mind more changes to spice up the language. While Morse code has a period, a question mark, and even a semicolon, it offers no simple way to articulate excitement. "I was hoping they'd add a character for the exclamation point," said Yocanovich, who is active in the International Morse Preservation Society. "It expresses an emotion that's difficult to get across any other way."

Something to Think About...

Author Unknown

The older I get, the more I enjoy Saturday mornings. Perhaps it's the quiet solitude that comes with being the first to rise, or maybe it's the unbounded joy of not having to be at work. Either way, the first few hours of a Saturday morning are most enjoyable.

A few weeks ago, I was shuffling toward the basement ham-shack with a steaming cup of coffee in one hand and the morning paper in the other. What began as a typical Saturday morning turned into one of those lessons that life seems to hand you from time to time.

Let me tell you about it.

I turned the dial up into the phone portion of the band on my ham radio in order to listen to a Saturday morning swap net. Along the way, I came across an older sounding chap, with a tremendous signal and a golden voice. You know the kind; he sounded like he should be in the broadcasting business. He was telling whomever he was talking with something about "A Thousand Marbles." I was intrigued and stopped to listen to what he had to say.

"Well, Tom, it sure sounds like you're busy with your job. I'm sure they pay you well but it's a shame you have to be away from home and your family so much. Hard to believe a young fellow should have to work sixty or seventy hours a week to make ends meet.

Too bad you missed your daughter's dance

recital," he continued. "Let me tell you something that has helped me keep a good perspective on my own priorities." And that's when he began to explain his theory of "A Thousand Marbles."

"You see, I sat down one day and did a little arithmetic. The average person lives about seventy-five years. I know, some live more and some live less, but on average, folks live about seventy-five years." "Now then, I multiplied 75 times 52 and I came up with 3900, which is the number of Saturdays that the average person has in their entire lifetime."

"Now, stick with me, Tom, I'm getting to the important part.

It took me until I was fifty-five years old to think about all this in any detail," he went on, "and by that time I had lived through over twenty-eight hundred Saturdays. I got to thinking that if I lived to be seventy-five, I only had about a thousand of them left to enjoy. So I went to a toy store and bought every single Marble they had. I ended up having to visit three toy stores to round up 1000 Marbles. I took them home and put them inside a large, clear plastic container right here in the shack next to my gear."

"Every Saturday since then, I have taken one Marble out and thrown it away. I found that by watching the Marbles diminish, I focus more on the really important things in life. There is nothing like watching your time here on this earth run out to help get your priorities straight."

"Now let me tell you one last thing before I sign-off with you and take my lovely wife out for breakfast. This morning, I took the very last Marble out of the container. I figure that if I make it until next Saturday then I have been given a little extra time. And the one thing we can all use is a little more time."

"It was nice to meet you, Tom, I hope you spend more time with your family, and I hope

to meet you again here on the band.

This is a 75 Year Old Man, K9NZQ, clear and going QRT, good morning!"

You could have heard a pin drop on the band when this fellow signed off. I guess he gave us all a lot to think about. I had planned to work on the antenna that morning, and then I was going to meet up with a few hams to work on the next Club Newsletter. Instead, I went upstairs and woke my wife up with a kiss. "C'mon honey, I'm taking you and the kids to breakfast!"

"What brought this on?" she asked with a smile.

"Oh, nothing special, it's just been a long time since we spent a Saturday together with the kids. And hey, can we stop at a toy store while we're out? I need to buy some Marbles..."

Rocket Carrying Ham Radio Payload Reaches Space!

Source: www.arrl.org

NEWINGTON, CT, May 17, 2004--An amateur rocket carrying a ham radio avionics package reached the edge of space May 17. Launched from Nevada's Black Rock Desert, the 21-foot Civilian Space Xploration Team (CSXT) *GoFast* rocket quickly attained the 100 km altitude to make Amateur Radio and amateur rocketry history. Two earlier CSXT attempts to reach space--the last almost two years ago--were unsuccessful. A jubilant Avionics Team Leader Eric Knight, KB1EHE, called the successful launch "a phenomenal experience."

"It just roared off the pad and flew into space," said Knight, who lives in Unionville, Connecticut. "Everything went like clockwork this morning, and it was an awesome experience. We're all kind of on an adrenaline high right now."

The *GoFast* vehicle--named for one of the project's commercial sponsors--lifted off from

the desert floor at approximately 11:20 AM PDT. The CSXT team plus observers from the Federal Aviation Administration, were up and at the launch site several hours beforehand, however, and Knight said the rocket crew--which includes several radio amateurs--did a "dress rehearsal" prior to the actual countdown and launch.

Knight said several West Coast hams who learned about the rocket launch from ARRL news accounts showed up to assist in locating the vehicle, which was estimated to have returned to Earth some 26 to 30 miles downrange from the launch site. Knight said Monday evening that the rocket had not yet been recovered, but the ham radio telemetry package was continuing to transmit.

"We have a telemetry beacon telling us where it is--that it's alive and waiting to be found," Knight said. The rocket transmitted telemetry on the 33-cm amateur band and color Amateur TV pictures on 2.4 GHz. An HF special event station, K7R (for "rocket") didn't get much airtime, Knight said, "because we've been really focused on the mission."

"Everything came together very well," Knight said. His avionics crew includes eight Amateur Radio licensees, most of who also were involved in the 2002 launch attempt. Former Hollywood stunt man--Ky Michaelson of Minnesota, directs the 18-person CSXT team.

Cold Lake Amateur Radio Association – Help Wanted!

CLARA is asking for assistance from any ARES member that is available to assist the club with communications for the Cold Lake International Air Show at 4 Wing Cold Lake.

The event takes place on July 17th & 18th, 2004 in Cold Lake, AB. Amateurs that are interested can obtain more information at:

<http://www.coldlake.com/airshow/>

Repeater Relocated

The QSO Staff

The repeater on 146.670 (-600) MHz which was at the Lizard Lake repeater site was taken off the air on May 17. Unfortunately this leaves a hole in repeater coverage along the Yellowhead Highway between Langham and Maymont, an issue that hopefully will be addressed soon.



The equipment is going to be moved to Turtle Lake, which is approximately 120KM north of North Battleford. This repeater will remain on the same frequency and will be located on the west side of the lake. It is

anticipated that coverage will be fairly localized within a 30 to 40KM radius, depending on the time of year and foliage. The height of the antenna will be 48 feet at the base. The call-sign will be VE5TLK.

The relocation is expected to occur before the end of June.

The repeater will be open for all to use and eventually will have an open auto-patch. Plans are already in the works to implement an RF link to Meadow Lake to the 147.330 (+600) repeater, VE5MLR, which has IRLP and auto-patch access. This repeater is located on the water tower in Meadow Lake and has a good coverage area. A pass through site will be required.

As things progress, more information will be supplied to *The QSO*.

RARA Ham Classes – Fall 2004

Source: www.qpfn.sk.ca/hobbies/rara/



We are scheduling Basic classes for the 2004 fall season. We will be using the City of Regina Programs facilities. We have requested a 7:30 pm time slot any day of

the week except Wednesdays.

Classes will run 8 weeks from late September to late November 2004. Time and location will be determined later in June 2004. People can register for classes in mid September through their local community association. Please check with them for exact date. There will be a fee of \$50.00, which includes the RAC Basic study guide.

FYI - the RAC basic is 36.50 plus tax and shipping and the community association charges 5.00 for membership. They look after the meeting room, likely a school library, and all the registration activities.

For further information, please contact: Bill Wood, VE5EE wwood@accesscomm.ca.

Astronauts Invited to Field Day

Source: www.rac.ca

The ARRL will hold its annual Field Day event the fourth full weekend in June. This year, Field Day will run from Saturday, June 26 at 1800 UTC (2 pm ET) to Sunday, June 27 at 2100 UTC (5 pm ET). Both Mike Fincke, KE5AIT, and Gennady Padalka, RN3DT, have been invited to participate in the event. The ARISS team should learn in the next couple of weeks as to whether they will be participating in Field Day.

Get to know your Neighbors

Over the past few years, we've seen the Provincial Linked Network slowly dissolve due to various reasons, however, in most areas of the province, we now have IRLP to take it's place. No, it does not take the place of RF links for emergency purposes, but it does make the world and province seem a little bit smaller.

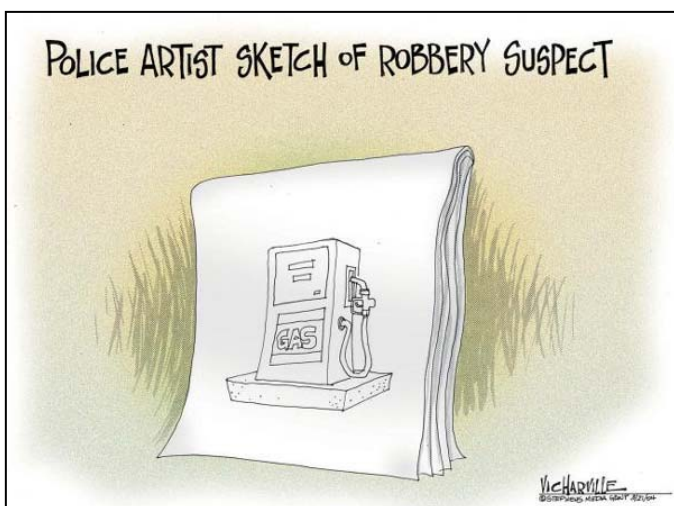
Let's try something... why not link your repeater or repeater network up to the Saskatoon Reflector on Sunday afternoons? Chat with your neighbors and learn about what is happening in other areas of the province.

Starting in July, the SARL will be promoting a Sunday Afternoon informal net. No net controllers, no check-ins, but just hams visiting with hams.

So on Sunday July 4th, Dial 9300 on your local IRLP node and *get connected!!*

For more information, see the website of the Saskatchewan Amateur Radio League.

www.sarl.ca



Field Day Plans Underway in Saskatoon and the Lakeland Area

The QSO Staff

Clubs across the Province are beginning their Field Day plans. Here is what The QSO has learned:

Saskatoon ARC

Western Development Museum

Talk In: VE5SK 146.640 –

Lakeland ARA

Tweedsmere Hill

Talk In: VE5LAK 146.610 –

MARS News

Devon Racicot VE5DWR



It has been a while since we've written anything about what is happening with our club, so there is no better time than the present.

We are approaching our Annual General Meeting and Elections and a lot of things are in the works. We are currently working on moving the VE5SKN repeater to another location in Saskatoon, which will provide better coverage for east side users and it will work out better for our long term plans.

Currently, the VE5SKN is on 145.290 (-600). The repeater and IRLP system is open to all amateurs to use. The Saskatchewan Provincial Link is also accessible now and we have been providing IRLP network access to the Provincial system for net purposes as the VE5CC node is being moved.

We have begun raising funds for the club by making available coffee mugs. They are \$5 each and can be ordered from our website or by contacting a member of the club. Photos of

the mugs are available on the site as well. Please visit www.qsl.net/ve5ufo/ for details.

We are still actively involved in planning the 2005 Saskatchewan Hamfest with the Saskatoon Amateur Radio Club. Anticipated updates to the www.saskhamfest.com website will be complete in the near future.

We are planning on attending the SARL Flea Market in July and will have a table set up for people interested in learning about the club and purchasing coffee mugs. Our membership dues are at their all time lowest, being \$20 per year. This is in effort to gain a larger membership.

We are not planning on any Field Day activities this year, but several of our members will be joining the Lakeland Amateur Radio Association at their Field Day location on Tweedsmere Hill.

Have a great summer!

SARL E-Mail Bulletin List

The QSO Staff

The SARL is currently working on an E-Mail Bulletin list for members and non-members alike. The list will act as a "broadcast list" only, and not like a traditional e-mail reflector. The list will be similar to that of the Radio Amateurs of Canada.

We anticipate that the list will be up and running in the next month or so, and will be available to the SARL Executive to send information of importance or interest across the Province.

Anyone that has supplied an email to SARL in the past will automatically be placed on the list. If for some reason you do not want to be on the list, please contact SARL and indicate this. You will also be given instructions how to unsubscribe once the list is activated.

Don't Miss "RUN with RAC"

Source: www.rac.ca



On July 1st, Radio Amateurs of Canada (RAC) will once again run its very popular Canada Day contest, and QRP-Canada will parallel run its QRP contest called "RUN with RAC".

There are 15 possible categories available and you could win a beautiful colour certificate. Ken, VE3ELA, the person who did such a fine job creating the Fox Hunt Team plaque has designed the handsome certificate for "RUN with RAC". You can see the rules and categories on the new QRP-Canada web pages at:

<http://www.qrp-canada.com/>

Remember, all you have to do is operate in the RAC Canada Day contest on July 1st and you are automatically taking part in the "RUN with RAC" contest provided you are using 1 watt maximum power (the DX and Club categories can run 5 watts maximum power).

AR Newsletter hit by computer failure

Source: www.rac.ca

Jim Taylor VA3KU, who distributes a weekly e-mail newsletter called the Canadian Amateur Radio Bulletin, has had some bad luck.

On Monday evening May 31st, both his computers crashed due to a lightning strike. As of June 3rd, he reports that one computer is back up and running. However, he has lost the "database of e-mail subscribers...over 1500 at last count.

If you subscribe to Jim's newsletter, and wish to continue to receive it, he asks that you send e-mail to webmaster@hfradio.net with the word subscribe in the subject line.

More Countries Drop CW

Source: ARNewsline

More restructuring has taken place in Europe. The GB2RS News Service reports that Finland has now officially dropped the Morse code requirement for that nation's hams to have access to the High Frequency bands. GB2RS says that Finland actually deleted the Morse requirement on the 1st of November of 2003. Now, with the latest rules revisions there are now there are only two classes of amateur license in that European nation.

Also from GB2RS word that former French Class 2 licensees with F1 and F4 call-sign prefixes are now being heard on the High Frequency bands. According to the French national amateur radio society, this change was implemented on May 16th.

But C-W is far from dying or dead on the other side of the Atlantic. In fact the fourth European High Speed Telegraphy Championships take place the 15th through the 19th of September in Montenegro and Serbia. (GB2RS)

URI Employee Invents New Technology

Source: <http://www.uri.edu/news/releases/?id=2659>

Rob Vincent, an employee in the University of Rhode Island's Physics Department, proves the adage that necessity is the mother of invention.

An amateur radio operator since he was 14, Vincent has always lived in houses situated on small lots. Because he couldn't erect a large antenna on a confined property, he has been continually challenged over the years to find a way to get better reception.

"I was always tinkering in the basement. Thank goodness, my parents were tolerant. I can still remember my poor father driving up our driveway after a hard day's work to see wires wrapped around the house," Vincent recalls.

"The Holy Grail of antenna technology is to create a small antenna with high efficiency and

wide bandwidth," explains Vincent. "According to current theory, you have to give up one of the three—size, efficiency, or bandwidth—to achieve the other two."

After decades of experimentation, combined with a 30-year engineering career and Yankee ingenuity, Vincent has invented a revolutionary antenna technology. The distributed-load, monopole antennas are smaller, produce high efficiency, and retain good to excellent bandwidth. And they have multiple applications.



With this technology it will be possible to double, at minimum, the range of walkie-talkies used by police, fire, and other

municipal personnel. Naval ships, baby monitors, and portable antennas for military use are other applications. An antenna could be mounted on a chip in a cell phone and be applied to wireless local area networks. Another application deals with radio frequency identification, which is expected someday to replace the barcode system.

"It could even make the Dick Tracy wrist radio with all the features, such as Internet access, a possibility," Vincent says.

The inventor pursued his quest to build a better antenna in earnest eight years ago when he and his significant other moved into a house situated on a 50-foot by 100-foot lot in Warwick. There was nothing on the commercial market that could fit the lot that would provide the performance Vincent needed to be heard in distant lands and that would be acceptable to his neighbors. All the small antennas being sold were inefficient and

lacked bandwidth, which resulted in low performance and high frustration.

Vincent looked at the techniques that were currently used to reduce antenna size and realized something was missing in the way everyone was approaching the problem.

He began to model various combinations into a computer program called MathCad. His first attempt produced a 21 MHz band antenna that was 18 inches high. Normally, antennas for this band are 12 to 24 feet high.

Vincent installed the antenna in his back yard. The legal limit that amateurs can operate is 1,000 watts with the norm being 100 watts. The amateur radio operator experimented with 5 to 10 watts. He reached a station in Chile and made contacts in various European countries. Meanwhile he kept adding power until it reached 100 watts. That's when things suddenly went bad. Walking outside in the backyard, he understood why. The antenna had melted.

After examining the molten matter, Vincent wasn't discouraged. This was only a small model and not designed to handle much power. The part of the antenna that failed proved to be the key to the design. After analyzing the failure, Vincent realized that he was able to transform a lot of current along the antenna with even relatively low power.

"Antennas radiate by setting up large amounts of current flow through various parts of their structure," he says. "The larger the current the more radiation and the better the output of the antenna."

Vincent went back to the drawing board and continued to improve the technology. Relying on his nearly 30 years at Raytheon Co. and at KVH Industries in Middletown R.I., which provided him with a diversified background in electronics and electronic systems, Vincent overcame a myriad of problems and succeeded.

He established three test sites for various prototypes. Antennas were placed in Westport, Mass. in a salt marsh, the best ground for transmission and reception. Another set of antennas was placed on rocky ground in Cumberland, R.I., the worst kind of site, and at a Warwick site which is in between the two in terms of grounding. The antennas, which resemble flagpoles, worked well at all locations.

Tests confirmed that Vincent has created antennas at one third to one ninth of their full size counterparts. Normally smaller antennas are only 8 to 15 percent efficient. Vincent's antennas achieved 80 to 100 percent efficiency as compared to the larger antennas.

A patent is pending on Vincent's technology. The inventor has made the University of Rhode Island and its Physics Department partners that will benefit from any revenue his invention earns. "The University and its Physics Department has been very supportive and given me time and space to work on this project," says Vincent who was recently presented the 2004 Outstanding Intellectual Property Award by URI's Research Office. "I couldn't have done this without the University's support. It's only fair that it share in the profits."

The Land of the Living Skies Award

The QSO Staff



Some amateurs may not be aware, but the SARL sponsors an "on-air" operating award called the Land of the Living Skies. It has been a while

since this information appeared in *The QSO*, so we thought it was time to send it out again.

This award is open to any licensed amateur in the world. Recipients of the award will receive an attractive, suitable for framing certificate in return for a complete log of contacts. No QSL

cards are necessary, however proof may be requested.

The rules for the award:

1. Only contacts made after January 1, 2000 will be accepted.
2. Contact Requirements:
 - a. VE5's must make 30 contacts in the Province of Saskatchewan, any band, any mode.
 - b. Other Canadian stations must contact 25 VE5 stations, any band, any mode.
 - c. USA stations must contact 20 VE5 stations, any band, any mode.
 - d. DX stations must contact 10 VE5 stations, any band, any mode.
3. Repeater contacts (linked or otherwise), IRLP, IPARN, and packet network contacts are all accepted.
4. Non SARL members must include S.A.S.E. or equivalent IRC's.
5. There is no charge for this award.
6. Log Submissions: SARL Inc, 3922 Centennial Drive, Saskatoon, SK S7L5L1
7. The Saskatchewan Amateur Radio League, Inc., reserves the right to reject any log from any amateur if it is deemed necessary by the SARL Awards Committee.

Watch for New Look

Devon Racicot, VE5DWR

This issue completes my first year of editing *The QSO*. Over the last number of months, I have given some thought in ways to change the appearance of the newsletter, but not too drastically.

The font, headlines and bylines will remain the same, but I am looking at some sort of better organization throughout the newsletter. For the first fall issue, you'll see new areas, such as Local, National, International, and technical sections, which will contain their respective articles. I would also like to see at the SARL

AGM we develop some sort of reporting method from the area Directors.

Also, I would like to solicit input from the readers. If there is something that you would like to see changed, or something that you would like to see continue, then please feel free to contact me and let me know. I am open to any type of input, positive or negative, all I ask is that you let me know.

Suggestions or comments can be sent to qso@sarl.ca.

VO1MRC 60-Meter Experiments Set for 19-20 June:

Source: www.eham.net

Marconi RADIO CLUB OF NEWFOUNDLAND

The Marconi Radio Club of Newfoundland's VO1MRC will conduct an experiment on 60 meters Saturday and Sunday, June 19-20, from 0000 to 2400 UTC (ie, starting the evening of Friday, June 18, in North America). During this period, a CW beacon will be in operation on 5269.5 kHz to determine the relative performance of high and low radiation angle antennas. The antenna in use will be identified by a code in each transmission.

"The low-angle aerial is a vertical, and the high-angle one is an inverted V," says RAC Newfoundland-Labrador Section Manager Joe Craig, VO1NA. He's coordinating the 60-meter experiment in Canada and will be the primary operator for the antenna tests. Craig will use the club's Marconi CH-150 for simplex QSOs, for the beacon and as a transmitter for split operation.

VO1MRC will open briefly for two-way contacts with stations authorized to transmit on 60 meters starting at 0000 UTC each of these days, operating CW on 5260.5 kHz (US stations may not transmit on this frequency, nor may they use CW on 60 meters). VO1MRC will listen on 5346.5 kHz USB. Following this

VO1MRC will transmit on 5327.5 USB and receive 5346.5 USB and 3807.5 kHz LSB.

"For split operation," Craig said, "I will be using a manual T/R switch, so it's going to be a bit awkward and patience will be needed from those looking for QSOs." He invites signal reports from all stations via e-mail to Joe Craig, VO1NA vo1na@rac.ca;

Proposed by the Marconi Radio Club of Newfoundland, the 5-MHz experiment has been endorsed by Radio Amateurs of Canada <http://www.rac.ca/> and authorized by Industry Canada, which approved resumption of the 60-meter experiments in February.

US licensees unfamiliar with the rules for operating on 60 meters may consult the "60 Meters - Frequently Asked Questions" page <http://www.arrl.org/FandES/field/regulations/faq-60.html> on the ARRL Web site. For further information, visit the MRCN Web site <http://www.ucs.mun.ca/~jcraig/mrcn.html> and The VO1MRC 5 MHz Experiment page <http://www.ucs.mun.ca/~jcraig/5megex.html>.

Net Listings

Saskatchewan Linked Net

Mondays and Wednesdays
9PM CST/0300UTC
Linked Repeater/IRLP Network

IPARN Trans-Canada Net

Wednesday Mornings
9AM CST/1500UTC
Saskatoon Reflector Channel 3, 9303

Saskatchewan Public Service Net

Daily
7PM CST/0100UTC
3.744 MHz

The Aurora Net

Daily
5:30 & 7:30PM CST/2330 & 0230UTC
7.055 MHz