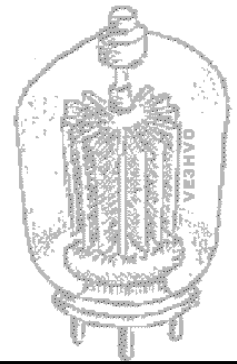


# Kilowatter

**The voice of the KW Amateur Radio Club  
Since 1922**



## Kitchener-Waterloo Amateur Radio Club

Box 34012 Highland Hills Postal Station;  
Kitchener, Ontario N2N 3G2

EDITOR: Paul Cassel VE3SY (519) 634-5139

email: [editor@kwarc.org](mailto:editor@kwarc.org)

Web site: <http://www.kwarc.org>

## MONDAY'S MEETING

**Date :** Monday May 5<sup>th</sup> 2003

**Time :** 7:30pm

**Place :** RCAF Wing 404 Club. End of Dutton Dr. Waterloo. Off Weber St. N

**Topic:** **Camp X**

## Monday's Meeting

Camp X turned out a network of highly trained and very efficient underground agents, who were taken to South America and behind enemy lines in Europe.

Besides that Camp X was part of an integral communications system linking the United States, England and Canada.

The base was built around Ham Radio Operators, and their service to the Allied cause, as part of Camp X, is said to have collectively saved the world one year of war and a million lives.

Canadians have much to be proud of with the contribution that amateur radio has made in shaping the history of the Western World.

Winston Seeney VE3WFS will be our speaker



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**KWARC Directors 2002-03**

<b>President</b>	Bill Graham	VE3ETK	576-3578
<b>Vice President</b>	Ben Sasiela	VE3ST	748-0445
<b>Past President</b>	Dennis Tabbert	VA3DLT	463-9641
<b>Treasurer</b>	Dave Schwartz	VA3DGS	884-3594
<b>Secretary</b>	David Johnson	VA3MRJ	746-8939
<b>Director</b>	Hugh Baird	VE3IYG	684-7257
<b>Director</b>	Tedd Doda	VE3TJD	634-5949

**The Executive Committee**

<b>Program</b>	Wafic Ajoor	VA3WOA	885-7979
<b>Membership</b>	Ben Sasiela	VE3ST	748-0445
<b>Technical</b>	Tedd Doda	VE3TJD	634-5949
<b>Packet Users</b>	Larry Gorman	VE3LGN	884-6782
<b>Database Mgr</b>	Dave Schwartz	VA3DGS	884-3594
<b>Bulletin Editor</b>	Paul Cassel	VE3SY	634-5139
<b>Edu. Co-Ord</b>	Ron Gimbel	VE3DBD	584-2009
<b>Chief Examiner</b>	Vern Stroud	VE3RVS	743-9342
<b>ARES Manager</b>	Larry Gorman	VE3LGN	884-6782
<b>CANWARN Mgr.</b>	Ron Gravelle	VA3TVS	569-8746
<b>QSL Manager</b>	Gord Gibson	VE3NOK	893-5148
<b>Virtual Swap-Shop</b>	Dave Schwartz	VA3DGS	884-3594
<b>Bereavement</b>	Marg Cassel	VE3RE	634-5139

**KWARC Owned Repeaters/Nodes**

Mode	Call	Freq.	PL	patch	Location
<b>Voice</b>	VE3KSR	146.970	Y	open	Baden Hill
<b>Voice</b>	VE3RCK	146.865	Y	open	Kitchener
<b>Packet</b>	VE3KSR-0	145.010			Baden Hill
<b>Packet</b>	VE3KWQ	145.090			Waterloo
<b>Voice</b>	VE3IXY	224.340		NO	Kitchener
<b>Voice</b>	VE3SED	52.370	Y	NO	Baden
<b>Voice</b>	VE3SED	442.200	Y	NO	Baden
<b>Voice</b>	VE3RBM	444.875	Y	NO	Kitchener

**EchoLink IRLP**

**Tone Frequencies (PL) for above are all 131.8**

**Other Area Repeaters/Nodes**

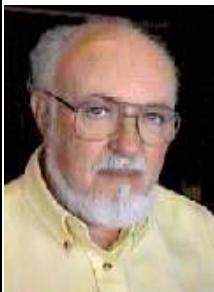
Mode	Call	Freq.	PL	patch	Location
<b>Voice</b>	VE3ERC	444.700	N		Elmira
<b>Voice</b>	VE3KFM	442.000	Y	open	Kitchener
<b>Voice</b>	VE3RND	145.330	Y		Plattsville
<b>Voice</b>	VE3SWR	146.790	N		Cambridge
<b>Voice</b>	VE3WFM	147.090	N	private	Waterloo
<b>Voice</b>	VE3WWW	146.835	N		U of W
<b>Voice</b>	VE3RSS	147.030	N	members	Acton
<b>Voice</b>	VE3BAY	442.350	N		Kitchener
<b>Voice</b>	VE3ZMG	145.210	N	Open	Guelph
<b>Packet</b>	VE3VIQ	145.570			Guelph
<b>TCP/IP</b>	VE3MKY	145.570			Guelph
<b>TCP/IP</b>	VE3UOW	145.570			U of W BBS

The Kilowatter is published 10 times a year (Sept-June) by the Kitchener-Waterloo Amateur Radio Club (KWARC). Opinions expressed or implied herein are those of the authors. KWARC assumes no responsibility for the accuracy or content of any information. Material for inclusion in the next Kilowatter must be in the hands of the editor by the 20<sup>th</sup> of the month prior to publication. The Kilowatter newsletter is also available on-line at <http://www.kwarc.org>.

**Members On-Line are urged to use this medium so as to minimize mailing costs.**

**Message from the President**

**Bill Graham VE3ETK**



antennae can become reality.

Things are looking good for ARES due to extensive work by Larry Gorman, and Ron Gravelle is back with us, already issuing storm warning bulletins. Hey Ron, you gotta do something about bad weather always hitting on club night.

The club nominating committee is looking for at least one person to serve on the board, and the head of the committee, Dennis Tabbert (Past President) has asked me to advise you of this and to contact him if you are interested.

I'm sorry that some of those waiting for the doors to open at the 404 wing last meeting left before the city personell got there. Although a little short, we had an excellent meeting with some good show

and tell (see the on line review), and some good fellowship. Fred Louwe was back with us, looking good, and even picked up doughnuts and made coffee. Just because he did that, don't think it's a long term arrangement.

On the subject of the 404 Wing: There was a real goof-up with the City of Waterloo. I followed up the next day and they have apologized profusely. I'm not going into all of the details here, but they have made provisions in their system of 'back-ups' to avoid this kind of thing in the future. In turn they have cancelled our fees for the night. Very nice of them.

A great big welcome to Dave Sullivan VE3RBA as our Field Day Coordinator for 2003. I didn't get a chance to thank Dave personally at the meeting because we were pushing the time frame pretty hard, but here it is in print. Thanks Dave for taking on this important KWARC role. It is appreciated and I'm sure you will get lots of cooperation from those who have done the job before.

Dave will be looking for various volunteers, band leaders, etc. Do give Dave your support. Field Day is a great event and I cannot encourage to strongly

for those who have not taken part in the past to do so.

By way of thanks also, a great big thanks to Erich Ritzmann VA3XTO for taking over editorship of the Kilowatter. I don't have all the details just now, but I'm sure we will all be hearing more on that shortly.

Our newsletter and the editing of it are such an important part of KWARC, and the key link that keeps us all together as a club.

Ben VA3ST, your VP, received an invitation to attend a pancake breakfast at Doon Heritage Crossroads as a way to thank those who participated in their 2002 program. Ben has passed it on to me, and I will be honoured to represent KWARC at the event. Oddly, it seems it should be KWARC who thanks DHC for letting us use their property for Field Day. If I get a little time I'll do a short 'blurb' on the pancake breakfast for the next newsletter.

I think that covers it for now, so

73  
Bill Graham

**TRVIA:.... The Kilowatter Watermark**



The background image of the 4-1000 tube used in the club newsletter was drawn by Bob Bernard VE3HVO in the mid 1970s. If you look close in areas where the credit is not obscured with text you can see the credit. Has anyone heard of Bob??? He still shows in the RAC database.



# Minutes KWARC Board Meeting April 1<sup>st</sup> 2003

KWARC Board meeting April 1<sup>st</sup> 2003

Present	VA3DLT	Dennis Tabbert	VE3ETK	Bill Graham
	VA3DGS	Dave Schwartz	VA3BNY	Ben Sasiela
	VE3IYG	Hugh Baird	VE3RGG	Gord Gibson ( guest ) Acting Secretary
	VE3TJD	Tedd Doda		

Meeting called to order at 7:30 , by President Bill

There was no old business to be acted on.

## New Business.

Gord Gibson was there to ask for advance on the QSL budget. He explained that postage was a major expense. Also we where in need of more QSL cards.

On a motion by VA3DGS " To advance \$100.00 to QSL manager in direct funds, and the cards to be ordered . They would be charged to the club. Seconded by VE3IYG. Carried.

Action -- This has been done.

## Honourary Membership.

On a motion by VA3DGS " a policy re honourary members " Seconded by VA3DLT.

"That the club institute a policy to have an active member from the external ham community. This person to be nominated by a club member, and approved by to executive. He must not be a member of the club , or live in the region." A suitable plaque to be prepared and presented.

Discussion. Resulted , to review the number of memberships.

As part of the motion covered here, it was requested that this portion not be published until FOLLOWING the next club meeting.

## Flea market

VE3IYG presented a report on the upcoming Flea Market.

Flyers where mentioned and dates of upcoming flea markets . Hopefully people would take them with them.

Jobs were listed and VA3TJD is to look after parking .

Friday is still a set-up day.

Workers are still needed. This will be pushed at the meeting.

Letter from Doon Heritage Village . Our club has been invited as a guest to attend a appreciation Breakfast.

Field Day Chairman still needed.

Motion by VA3TJD To adjurn. 9:00 Seconded by VA3DGS Carried

## Editors Note:

*This is the edited Board meeting minutes as presented to your Editor by the Directors.*

## The Search for Past Presidents Continues .....

In another attempt to retrieve information on the early days of **KWARC**, we ask anyone who can fill in the blanks or offer corrections on the adjacent list of Past Presidents. We have a complete list from 1960 forward, thanks to **Harold VE3DWH** and would like fill at filling in the blanks between 1946 and 1959. Any memorabilia that our members may have that we could copy or photograph such as copies of early Kilowatters, photographs, slides or newspaper articles involving the club would be appreciated.

You can contact the editor by phone at (519) 634-5139 or by email to: [editor@kwarc.org](mailto:editor@kwarc.org) .

1946-1947	N.A. Friedman VE3HM First President
1947-1948	N.A. (Newt) Good VE3CY
1948-1949	Andy McIntosh VE3AOH
1949-1950	
1950-1951	
1951-1952	
1952-1953	Jack Fortune VE3VO
1953-1954	
1954-1955	Bruce Underwood VE3ANU
1955-1956	Gord Mogk VE3DPB
1956-1957	Russ Anderson VE3EHV
1957-1958	Jim Anderson VE3EHY
1958-1959	
1959-1960	Ron Gimbel VE3DBD

## Annual Canwarn Spotter Seminar by Larry Gorman VE3LGN

Ominous black wall clouds filled the screen in the highly animated power point CANWARN presentation put on by the K-W Amateur Radio Club's ARES CANWARN group this year at the University of Waterloo computer research centre..

Ron VA3TVS our CANWARN manager presented the two professional weather analysts from the Ministry of the Environment, Randy Mawson, who some may recall from previous years, and Robert Kuhn. Randy operates from the London office. We were surprised to discovered that Robert lives here in



Kitchener and commutes daily to the Toronto office.

Robert had a completely new selection of some of the more spectacular phenomenon associated with severe weather. Included was a mushrooming Cumulonimbus array spiralling upwards of 20,000 metres, credited to our own Ron Gravelle. The awesome cloud shots were interspersed with illustrations of how microbursts and downbursts compare with Tornadoes. One video insert had cows flying through the air in what appeared to be an F7 tornado!

After a refreshment break Randy VE3TRW pulled the presentation together with a series of instructional

views, on Dos - Don'ts and How Tos when serving as a Ministry approved CANWARN Weather Spotter. Emphasis was placed on the key "Don't". Randy emphasized that Spotters are just that. They are not expected to be, nor wanted to be, Chasers. That is best left to experienced chasers who know the risks involved and what they are doing. Ron VE3TVS is out local expert on this.

How useful are our random spotters to the professionals? Randy stated that, while the weather office has all the latest in technology available to them, some of their best info comes from spotters who can give exact descriptions. This is becoming more important as they work on developing prediction models, which will help to improve future forecasting. All in attendance received weatherproof official Environment Canada Severe Weather Spotter ID cards

Some of the future of forecasting is in fact now. You may have noticed as of April 8, the new "Red Banner" bulletins on the Weather Channel. (16 cable). The original 62 Public Regions covering Ontario have been divided into Sub Regions. Thus Waterloo - Wellington, a very diverse region has been split into 3 Sub Regions. Now Cambridge, K-W and Guelph, which tend to have very different conditions, can be specifically designated. Dufferin County is also a very diverse area. Ontario's "Little Tornado Alley" tends to pass through the Mt Forest->Grand Valley.-> Holland Marsh zone.

The mid April freezing rain-ice pellet warning was one of the first to actually

identify Sub-regions, as well as towns, most likely to be affected.

One of Weather Canada's major concerns is the confusion expressed by some TV viewers over basic weather watch terminology. The following conditions in particular get mixed up.

**Special Weather Statements** - advise of inconvenient or unusual weather in the next two days.

**Weather Watches** - provide advance notice of the potential for severe weather.

**Weather Warnings** - are serious notices about imminent severe weather hazards. After the Spring Equinox this includes very heavy rain, very high winds, severe thunderstorms, and tornado warnings.

These are the phenomena CANWARN Weather Spotters can radio in to Net Control on VE3KSR.

A final reminder. Please free up this repeater (146.970 - Tone 131.8) when a CANWARN weather net is operating. And if you spot a weather situation, call in. Multiple reports help to pin point exact locations. For more weather information, see

[www.weatheroffice.ec.gc.ca](http://www.weatheroffice.ec.gc.ca) or Email:

[forecast.regions.on@ec.gc.ca](mailto:forecast.regions.on@ec.gc.ca)

Larry VE3LGN  
ARES/CANWARN Coordinator

## BAD EMAIL ADDRESSES

The following email addresses are bouncing. If anyone can offer correct address please email [editor@kwarc.org](mailto:editor@kwarc.org)

[terr.v.i.mckenna@rogers.com](mailto:terr.v.i.mckenna@rogers.com) and [pamedic69ca@hotmail.com](mailto:pamedic69ca@hotmail.com)

## Our Last Meeting

### SHOW & TELL NIGHT

The bad weather and the late start getting into the 404 Wing caused us to lose two of our Show & Tell presenters, but it turned into an excellent evening none the less.

The first presenter was Gord EOS who had a wonderful 'war surplus' radio, which he has reconditioned, to show us. Designed by Collins and produced for the

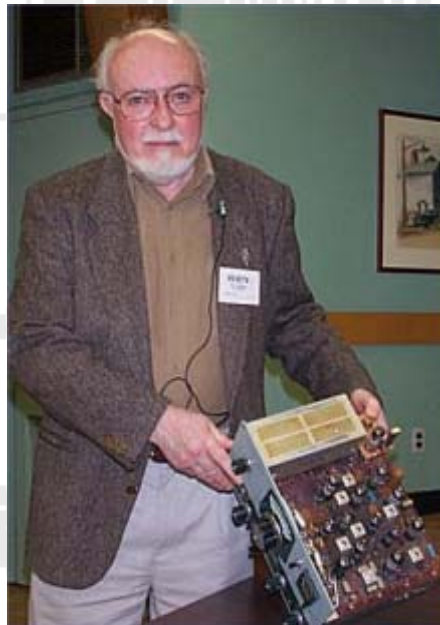


Navy during WWII the set is a masterpiece of both electronic and mechanical engineering. As each frequency of each band is tuned every stage in the set is in turn tuned by racks of ferrite rods moving in and out of each coil. As a result each stage is perfectly (and I do mean perfectly) tuned for the receive frequency. Frequency readout is by a mechanical form of digital display – that is, disks rotate in such a way that

the readout window display the specific frequency tuned. Quite an achievement for the pre-digital world. Gord showed some graphs he had produced on the alignment and sensitivity. Virtually flat response across all of the bands and would you believe, it has a sensitivity of .1 microvolt and will handle S9 +120 without overloading.

Bill ETK was on next and showed us his extensive reworking and mods to a Heathkit HW-32 (20M band).

It all started with the need to stabilize the VFO and so he put in a solid state VFO using the original tuning capacitor and coil, and used the original osc. tube as a buffer resulting in +/- 50Hz drift after 6 minutes. A 100 KHz calibrator was needed and one added, which led to a need to be able to adjust the dial to



adjust it to the calibrator. The set originally tuned only from 14.2 to 14.35 MHz, and through the same process as adjusting the dial, two 'bands' were created: 14.1 to 14.2 and 14.2 to 14.35

now making the set much more useful for DX. A new dial plate showing the two 'bands' was created on his computer. Further use of the set led to the need for better meter reading and so new meter circuitry was added and a new meter plate was also produced on the computer. Bill reports that some nice Dxing has been done with set now.

An impromptu presentation was made by Ron DBD showing us a weather receiver he picked up while on a trip to Florida. Fully programmable to the various NOAA frequencies, and further programmable to the specific county you are in so that if a serious weather emergency occurs an alarm goes off if that emergency is going to cross the county you are in. It tunes to all of the US NOAA frequencies and many of the ones used in Canada. The receiver is



barely larger than most pocket calculators. All of this for US\$14.95.

Considering the weather we've been having the past week we felt that Ron could have bought out the store and sold them here for \$25. All in all it was a very informative and entertaining evening.

## A K W A R C B o o s t e r

Thinking of Selling or Buying a home?

Dave Johnson VA3MRJ recently joined Peter Benninger Realty and would be glad to assist you with any real estate transaction.

Give Dave a call at 742-5800 or e-mail him at [va3mrj@rac.ca](mailto:va3mrj@rac.ca)



**David Johnson**  
Sales Representative

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Kitchener, ON  
Canada N2K 3S2

tel: (519) 742-5800  
fax: (519) 742-5808  
email: [david-johnson@coldwellbanker.ca](mailto:david-johnson@coldwellbanker.ca)  
web: [realtors.coldwellbanker.ca/david-johnson](http://realtors.coldwellbanker.ca/david-johnson)



# K.W.A.R.C Field Day 2003

## June 28 - 29 Doon Pioneer Village



Greetings fellow field day enthusiasts. Another Field Day is fast approaching and the weather gods have promised warm dry weather for one of the clubs biggest events of the year. Some 35,000 people participated in last years event in which K.W.A.R.C. was able to provide some fairly healthy results with 977 contacts and accumulating some 3,574 points overall. Darn good for 7 stations.

Field day is intended to test the emergency availability of portable stations and equipment.

There have been some rule changes and additions to Field day 2003. Most notably concerning the GOTA (Get On The Air) Stn and a new field day category Class "F".

There are some interesting changes to the GOTA and I encourage you to read the 2003 A.R.R.L. Field day regulations and find out what they are.

Class "F" has been established to encourage groups to test and further their working relationships with established Emergency Operations Centers.

There are three modes (Phone, CW, and digital) of operation and each are considered a separate band so there's lots of room for plenty of people to participate.

There may be some non-traditional modes of operation such as SSTV, ATV, and APRS being demonstrated and I already have rumour of a solar powered transmitter in the works, which would qualify under Alternate power. We are also hoping to garner some extra points with a single satellite QSO.

And speaking of rumours, I understand that a couple of radicals are planning something BIG and they are keeping it very SECRET. I wonder what Gord (VE3EOS) and Don (VE3ESE) are up to as well.

There will be an effort to collect a few extra points by passing NTS (National Traffic System) messages and by copying the W1AW Field day Bulletin.

We have some new aspiring hams in the works and Field Day presents a unique opportunity for them to learn some operating skills from the "OM's and YL's to do some live operating on the HF bands prior to obtaining their tickets.

In all it looks like a potentially super year and if you would like to participate, the Band Captain positions are being posted as we receive them, on the K.W.A.R.C. web site under Field Day.

Please contact Dave Sullivan [ve3rba@rac.ca](mailto:ve3rba@rac.ca) or Bob Pelling [ve3xnb@rac.ca](mailto:ve3xnb@rac.ca) and reserve your band and mode today.

Check out the past field day photos by going to [www.kwarc.org/fd-info.html](http://www.kwarc.org/fd-info.html)

## QCWA Fred Hammond Chapter 73 News



### Canadian Amateur Radio Hall of Fame

The QCWA Fred Hammond Chapter President, Tom Atkins, VE3CDM has been elected as a member of the Canadian Amateur Radio Hall of Fame, for his many years of service to both Canadian and International Amateur Radio. This is a small but distinguished group which includes Fred Hammond, VE3HC, Noel Eaton, VE3CJ, Bill Wilson, VE3NR, Bill Loucks, VE3AR, Art Blick, VE3AHU, Burns Getchell, VE1CL, and Doug Lockhart, VE7APU. This award will be presented by Bob Cooke, VE3BDB, who is the Ontario South Director of Radio Amateurs of Canada.



### VE3OU Chapter Membership Chair

We are particularly pleased to announce that Ernie Crump, VE3OU, (Ernie is a KWARC Member living in Cambridge) recently joined the Board as Membership Chairman. He has already put a lot of effort into recruiting new members and chasing up lapsed members. Ernie has also initiated a process where Chapter 73 will accept applications and payment in Canadian Funds for forwarding to QCWA Headquarters. We hope this will make it more attractive for new members to join us.



### Chapter Scholarship

Mary Card, VE3FEB, has worked very hard to prepare a Fred Hammond Chapter Scholarship plan, which she will present to you for approval. A draft of the plan will be presented at the May meeting..

### ARES Presentation

At our Chapter May 3<sup>rd</sup> meeting this Saturday, we are looking forward to hearing from our Guest Speaker, Dave Flarity, VE3DVE, who will tell us about the Amateur Radio Emergency Service and its implementation in the Niagara Region. Dave is a member of our chapter.

*Membership in the Quarter Century Wireless Association is open to any radio amateur licensed for 25 years or more. The Association meets twice each year at the Plainsman Restaurant and sponsors an annual Scholarship fund. Visitors are welcome. See any QCWA member for information*

## This Spring and Summer Hamfests and Fleamarkets

It's that time of year to start foraging off Saturday Mornings for your favourite Hamfest/Fleamarket. Here is a current list from the Radio Amateurs of Canada web site <http://www.rac.ca>

Annual Spring Hamfest & Fleamarket  
Skywide Amateur Radio Club  
**Saturday, May 10**, Etobicoke ON

19th Annual Smiths Falls Amateur Radio Club  
Fleamarket  
Rideau Lakes Amateur Radio Club  
**Saturday, May 10**, Smiths Falls ON

**CENTRAL ONTARIO FLEAMARKET & HAMFEST**  
**Guelph and the Kitchener-Waterloo ARC**  
**Saturday, June 7, Fergus ON**

Mississauga Amateur Radio Club  
Saturday, **June 7**, Streetsville ON

Ontario Hamfest  
Burlington Amateur Radio Club Inc

Saturday, **July 5**, Milton ON

NPARC 1st Annual Tailgate Hamfest & Auction  
Niagara Peninsula ARC  
Saturday, **July 12**, Thorold ON

Hamfest 2003  
Brantford Amateur Radio Club  
Saturday, **August 16**, Burford Ontario ON

VHARA Hamfest  
Victoria-Haliburton Amateur Radio Association  
Saturday, **August 23**, Lindsay ON

Halton Radial Railway Museum - Special Event  
Mississauga Amateur Radio Club  
Saturday, **September 27**,

## Viewing PowerPoint or MS Word Files..... FREE

How many times have you tried to open a .PPS, .PPT or .DOC file only to find you need Micro\$oft Office? MS provides viewers for most of its Office Products FREE for downloading on the Microsoft Web site...

<http://office.microsoft.com/Assistance/9798/viewerscv.t.aspx>

## SARS Safety In Public Places an excerpt from Phillips Medical Asian Division SARS briefing

- So far, all recorded SARS cases have developed the disease only after having prolonged and close contact with a patient (eg. family members, doctors and nurses).
- There are no recorded instances, where the disease was transmitted via casual contact, traveling in public transport etc.
- A person can only pass on the infection after symptoms appear.
- Only a very small percentage of the population have the disease (e.g. 90 out of 4 million), and they are sequestered.
- Therefore, wearing masks in public places and transport will not give any appreciable protective benefit.
- However, if you suspect that you have become infected with SARS, wearing a mask when traveling to the hospital is your civic responsibility.

**Where can I find up-to-date information on SARS?**  
Health Canada Web site: <http://www.sars.gc.ca>  
Ontario: 1-866-797-0007

## Next Month

**Next Month we will have a full and comprehensive review of the YAESU VX7R HT by your new Editor Erich VA3XTO. This is a no holds barred review and tells like it is.**



# Central Ontario Hamfest

Hosted by the Guelph and  
Kitchener Amateur Radio Clubs



## The 2003 - 29th Annual Central Ontario Hamfest

<b>DATE:</b>	<b>June 7, 2003</b>
<b>PLACE:</b>	<b>Once again at the Spacious FERGUS &amp; District Community Centre</b>

- Vendors admitted from 6:00am
- Lots of outdoor tailgating available
- Open to public from 8:00am to 12:30pm

### Tech Report - PLUS - An EchoLink Primer

by Tedd VE3TJD

#### Club Equipment:

During the week of April 14, the tech committee had a look at re-interfacing the ULR system back to KSR. We found that the ULR linking "box" had no power. After repairing that issue, the link repeater (VE3BHR) came back to life and was able to connect to London and other ULR equipped repeaters.

Due to some cabling issues, the link to KSR is still on the drawing board. The new CAT-1000 is not responding as we thought it would, so getting the proper connections from KSR to the ULR network box still has to be worked out. We will be working on this project for the next week or two.

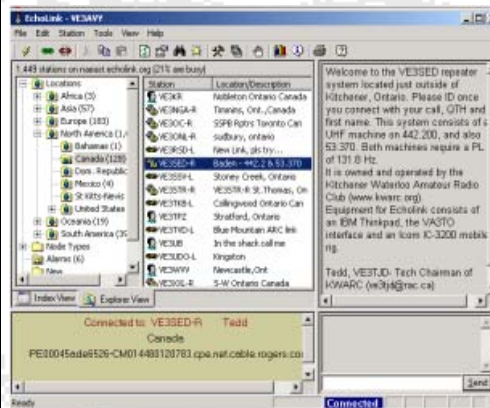
#### Echolink

About 6 weeks ago, I had a visit from Bill, VE3WFR. After a couple coffees and the normal chit-chat, he asked me whether I have played with a program called "EchoLink". Of course, like most hams, I've heard of it but didn't have a clue what it really was. He said it's a VOIP (Voice Over IP) program that lets one Ham talk to another using your computer. I told him that if I want to talk to a Ham I would grab my HT and see who's on KSR :)

Once he told me that it's a FREE download (YES really!), my ears perked up and I navigated to the EchoLink site (<http://www.echolink.org>) to have a look. It looked painless, so I downloaded it. Another couple minutes later, I had it installed and was waiting for the plethora of people trying to contact me. Unfortunately, I had to wait for the software to get registered, which the manual says will take from 2 to 24 hours.

A few more coffees later, the screen listed a bunch of callsigns that were on

line. This was sweet! I was now registered.



Our next item on the agenda was to get my audio levels set up. There is a special tool or conference site called "echo-test". Once connected to echo test, you can transmit to it (by hitting the space bar on your keyboard) and saying something like "VE3TJD testing my EchoLink setup". Once you unkey (by again tapping the space bar), the echo test server will respond with a recording of what you just said. In this manner, you can adjust your microphone level and keep testing until you sound the way you want. There is a TX/RX level indicator on the EchoLink program, and you want to have it average about 75%

For receiving, you can either use the headphone part of your boom mic, or just use the multimedia speakers that are attached to your computer. I prefer the latter (speakers), because I don't sit at my computer most of the time, so I can hear if someone connects from across the room.

My first connect was with VE400, Walt from Brandon Manitoba. Of course Bill took the reins for the first time, and then passed it over to me. That's so cool! After exchanging weather, and family information, we signed off to let this

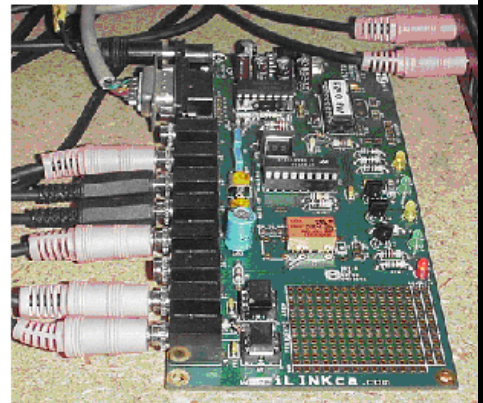
sink in. It brought back memories of the old IBM I-phone program included with OS/2 some 10 years ago!

I got very little work done that day.

A few days later, Bill dropped in again to see how I'm making out. I mentioned to him that I talked to his brother Drew (VE3MAF) in North Bay and that we had a good chat. Then the idea of using Echolink to interface to one of our local repeaters came to mind. If this was done, Bill could talk to his brother from North Bay while cruising around Kitchener!

About 10 minutes later, I ordered the VA3TO interface which is a great little kit, that will allow you to connect a link radio to your computer. This board has a DTMF decoder, and enough audio level adjustments to get your radio link sounding wonderful using VOIP.

The kit took me about 75 minutes to build and test. Most of the time is just stuffing the board. After it was together, it fired right up, and from there on, all you have to do is get some cables made up. As each setup is different, I won't get into that. I "borrowed" my 9 year old sons IBM Thinkpad, and installed the software. This computer is a P120 with





40 megs of RAM, running Win98, so you can see that you don't need a lot of horsepower to run EchoLink.

The next step can be omitted because the EchoLink software has a built in VOX circuit, but I decided to use a signal within my link radio to tell the VA3TO board when the frequency is busy. This is called COR, or Carrier Operated Receive. Whenever the

frequency is busy, the link radio sends a voltage to the VA3TO board, telling it that someone is on the repeater, which in turn tells the EchoLink software to send the audio from the repeater to the user connected on the other end.

EchoLink is connected to the VE3SED repeaters on UHF and 6 meters. See the KWARC owned repeater list for Frequencies and tones required.

Next month I'll give you some DTMF commands useful when entering the EchoLink system from the repeater side. Send me a note if you are an EchoLink user already, and I'll try and connect directly to you from the repeater!

Tedd, VE3TJD  
KWARC Tech Chairman.

## Enhanced SSB Bandwidths "Extremely Inconsiderate" FCC Says

NEWINGTON, CT, Apr 17, 2003--The FCC has sent advisory notices to four enthusiasts of what's become known as "enhanced SSB"--the practice of engineering transmitted single-sideband audio to approach broadcast quality. Letters went out earlier this month to amateurs in Illinois, Florida and New Jersey who are aficionados of enhanced SSB, also known as "upper wideband" and "lower wideband."

"The Commission has received numerous complaints regarding the operation of your station," FCC Special Counsel Riley Hollingsworth wrote **Paul Christensen, W9AC, John Anning, NU9N, Anthony Latin, W4NSG, and Sareno Salerno, W2ONV**, on April 3. Hollingsworth said complaints to the FCC alleged that the bandwidths of the stations' enhanced SSB emissions were "wider than necessary and contrary to good engineering practice."

"Wideband overly-processed audio, especially when coupled with the high intermodulation levels of certain amplifiers, results in the use of bandwidths extremely inconsiderate of other operators," Hollingsworth said. Such transmissions may violate FCC rules and may be at odds with what Hollingsworth described as "the

expectation that the Amateur Service be largely self-regulated."

Occupying more bandwidth than necessary in a heavily used amateur band, Hollingsworth wrote, is contrary to the requirement that amateurs cooperate in using the frequencies allocated to them and make the most effective use of the spectrum. Such "shortsightedness" on the part of those transmitting enhanced SSB signals not only could lead to ill will among operators but to petitions asking the FCC to establish bandwidth limits for amateur emissions.

The FCC defines bandwidth as "the width of a frequency band outside of which the mean power of the transmitted signal is attenuated at least 25 dB below the mean power of the transmitted signal within the band." It imposes no specific bandwidth limits on various amateur modes, however.

Hollingsworth cited §97.307(a) of the Amateur Service rules that requires the signal of an amateur station to not occupy "more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice." Some amateurs have complained that enhanced SSB signals

can take up 8 kHz or more of spectrum, cause splatter and unnecessarily interfere with other stations.

Hollingsworth acknowledged that the FCC encourages amateurs to contribute to the advancement of the radio art, but he recommended that the enhanced SSBers do so in a way "that does not have a negative impact on other amateur stations or their operations." He suggested they might accomplish this by operating at times when the bands are less busy or on bands that are not heavily used.

The many complaints the FCC has been getting--as many as 20 per week--leads to the conclusion that the stations' enhanced SSB operation is having "a negative impact" on the Amateur Service, Hollingsworth said. "In conclusion, no frequencies in the Amateur Service are designated as 'wideband audio' frequencies, either by Commission rule or in any informal band plans," he wrote.

He requested the four amateurs to "fully review the rules" and make sure their stations conform to them.

*(With thanks from the ARRL Letter)*

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One month prior to expiring the top line on your label will read "Expires soon mm/yy. Please renew" where mm/yy is the month/year of expiry. If you miss the first reminder the next month's label will read. "Expired mm/yy. Last bulletin". Those members who receive their Kilowatter via the clubs Web site will receive and e-mail reminder when their membership gets close to expiring. Members who do not renew at the meeting in which their membership expires will receive a personal follow-up mailing reminding them of what they are missing.

This will be the first year of renewals on the new system so a few glitches may occur. Please notify your treasurer of any discrepancies that may occur.

Please cut out the following renewal form and enclose it with your payment as your renewal date comes due.

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<b>City:</b> <b>Postal Code:</b>	<b>Email Address:</b>
<b>Phone Number:</b> (        )        -	<b>Birthdate:</b> <u>    </u> <b>Month</b> <u>    </u> <b>Day</b>
<b>This is a</b> [ <input type="checkbox"/> ] <b>RENEWAL</b> or [ <input type="checkbox"/> ] <b>NEW APPLICATION</b>	<b>Kilowatter Preference</b> [ <input type="checkbox"/> ] <b>MAIL</b> [ <input type="checkbox"/> ] <b>From WEB</b>
<input type="checkbox"/> Full Membership @ \$20.00 + \$5.00 mailed Newsletter <input type="checkbox"/> Family membership adder @ \$5.00 <input type="checkbox"/> Seniors Membership @ \$10.00 + mailed Newsletter <input type="checkbox"/> Student or Challenged @ \$10.00 + \$5.00 Newsletter	<input type="checkbox"/> <b>Associate (non voting) @ \$10.00.</b>  I am a member of the _____ Club.
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