Q R M

March 2003

Quinte Amateur Radio Club Inc. Newsletter

PO Box 23039 BELLEVILLE Ontario K8P 5J3

NOTICE OF MEETING:

DATE / TIME: **March 19, 2003 @ 7:30 PM**

LOCATION: Loyalist College (Pioneer Building) **Room P-1 (NOTE ROOM CHANGE)**

PROGRAM: "RIGrunner" the safest way to connect all your 12 VDC equipment to a power source by Eric Reid VE3GSI.

Club Repeater: VE3QAR 146.985 MHz.
2 meter net: Tuesday 7:30 PM on VE3TJU 146.730
QARC HomePage http://www.qarc.on.ca
QARC HomePage http://www.qarc.on.ca/ provided free of charge by:
Lakeshore Internet Services, 199 Front St, Suite 113
Belleville K8N 5H5 (613) 962-9299
Monthly Meetings: 3rd Wednesday 7:30 PM Loyalist College (Pioneer Bldg.) Room P-17
Hams 'n Eggs: SATURDAYS 8:00 AM Quinte Restaurant 135 Cannifton Road
Foxhunt: Sundays at 2PM. Check in on VE3QAR for details.

RADIO AMATEURS OF CANADA ADDRESS:
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QARC EXECUTIVE

PRESIDENT: Peter Hodgson VA3PKH 962-1386 (E-mail: phodgson@kos.ca)
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PAST PRESIDENT: Dave Ackerman VE3UGT 962-3991 (E-mail: ve3ugt@rac.ca)

ROOM CHANGE FOR MARCH MEETING

Peter VA3PKH President QARC

The Sweet Adeline's are meeting on the same night as us this month. They have been given room P1 for their meeting, but all their equipment is in P17. Sandra Campbell VE3HON asked if we would change rooms for the night and I agreed, so we will meet in P1 for March.

Quinte Amateur Radio Club Minutes

February 19th, 2003

Mike, VE3VMP Secretary, QARC

The meeting was opened by our President, **Peter, and VA3PKH** at 7:30 pm and introduced our guest speakers for the **evening Deputy Chief Wayne Tremble** of the Belleville Police Service and **Sergeant Roy Kendall**. They talked about their new digital radio communications system that was recently put into service. Deputy Chief Wayne Tremble apologized for not being able to attend last month but it was unavoidable.

Before he started his presentation he introduced a sample of the new belt that contains all the tools, gun, radio, etc., that a policeman carries around and weights about 30 lbs. It's not light.

The existing radio system was old, it was 1968 technology and required extensive repairs. Approval was given 3 years ago for a new radio system. The old portables that we call Handhelds have a life of 8-10 years and that time had expired. The City hired consultants to recommend a replacement. It was clear that a digital system today is less costly than the conventional analog system. The total system cost the City of Belleville $1.4M. It was pointed out that Motorola took back all the old radio equipment on trade and the City saved about $110K. (The old equipment was worth less than $5K).

The Chief used slides to compliment his presentation. He showed a slide with the frequencies that are used in Public Safety ranging from 138 MHz to 152 MHz. I'm sure we all noticed that our 2M Band is right in the middle of it!

The Chief explained that the old system only covered the city of Belleville; but the new system has a far greater range covering Cobourg to the west, to downtown Kingston to the east to highway 7 to the north and all of PEC to the south.

Slides were shown of the plant visit to the Motorola factory in Chicago. And mentioned that 15,000 people work at this site. Also slides showed the equipment mounted on relay racks. A total of 75 portables and 38 mobiles were purchased. There is a certain amount of encryption built into every radio. One special feature built into every radio is that every radio can be identified, so that it can be disarmed, in case the radio is lost or stolen. An optional feature is that they are capable of connecting to a GPS unit if the need arises in the future. They are also capable of full encryption but would have cost an additional $200K.

The new radio system also can be connected to other agencies using conventional communications such as the Fire department, Public works, Ambulance services and even the City buses.

They notice that the new digital radios are very clear not like the old analog design. This is one of the major benefits of digital technology. The radios are powered by NMH batteries.

There are 3 repeater sites: one at Oak Hills, one at Pineview Towers (Bridge & Palmer) and one at Ann St. A slide showed the 400 foot tower at Oak Hills where the antenna is mounted at the 250 foot level. This site covers the east and north east regions. All sites are leased for a period of 5 years.

Some interesting slides were shown of the actual command center. This command center costs about $300K. There are two stations that are constantly monitoring all activities. Each dispatcher manages 5 monitors and 16 telephones. Each dispatcher handles at least 25,000 calls per year. All calls are recorded.

The command center is backed-up by an Uninterruptible Power Supply (UPS) and a Generator. The Chief mentioned that there is a new Emergency Disaster Protocol that has just been downloaded to the municipalities and each municipality will be required to file an emergency plan with the province in the near future.

One disadvantage to the new radio system is that today's scanners cannot monitor it any more. This prevents people calling in to provide assistance. One the other hand it eliminates "prank" calls caused by unruly citizens distracting them from crime scenes.

The presentation lasted about one hour and an interesting questions and answers period followed for another 35 minutes.

There were 27 in attendance.

Due to the length of the presentation no further business was discussed, except to say that there will be the Community Police Walk-a-thon on March 16th and 5 to 6 volunteers will be required. Please call **Tim VE3UO** or **Ron VE3IVC** to assist. Be at the Loyalist College cafeteria by 9:00am. The event starts at 10:00am.

Following the presentation our traditional coffee and donuts was available a good rag chew was had by all.

The meeting concluded about 9:45pm.

The Second Annual Tour of the County Foxhunt

The hunt will begin at 12:00 noon on **Saturday, May 17, 2003** starting from **Roblin Lake Park** in the village of **Ameliasburgh**. The park is located on County Road 19, behind the Ameliasburgh Township Hall and O.P.P. Satellite Office.

All transmitters will be within the natural boundaries of Prince Edward County and they could be located anywhere within the county. All transmitters will be in a publicly accessible area. This will be a combination of a driving and on foot hunt, although it will be possible to drive to within a few hundred meters of each fox. All foxes will be located along roads which are possible to navigate with a regular vehicle i.e. an SUV or 4-wheel drive vehicle will not be required. This year, weather permitting, there will be at least one fox which will require some hunting on foot although you will not need to trek through miles of bush.

The G.P.S. co-ordinates for the start point are: **44** degrees, **3** min, **30**sec **N**; 77 degrees, **26** min, **1.5** sec **W**

DX CLUSTER UP AND RUNNING

A DX Cluster serving the mid-eastern Lake Ontario Region is now on the air. It is a joint venture between the Quinte Amateur Radio Club and the Prince Edward Radio Club. Dave, VE3BIP and Ian, VE3IEM spearheaded the project using begged, borrowed and recycled radios and computers.

What is a DX Cluster and what does it do?

A cluster is a networked system that tells users when and where interesting HF, VHF and UHF stations are currently on the air. These can be rare DX stations, stations worked during meteor showers or unusual VHF openings or anything else that is out of the normal. Typically, when a ham hears or works an interesting station he sends the call and frequency to his serving cluster. The cluster then sends it on to other associated clusters and they all broadcast it to the logged-on users of each cluster. Each interested user can then tune to the station's frequency and try to work it.

Clusters do other fun things – for example, they give out current WWV information, show who else is connected and provide simple messaging services between users.

Some people are critical of their use but in reality it is no different that using a fish finder – you still have to catch the fish and that's the hard part!

How do DX clusters work?

Each user has a computer with software capable of talking to the cluster. Many logging programs have this software included. The cluster is a central computer that holds the spots, logs in the users and sends and receives information to and from other clusters. The users and the clusters can be interconnected with internet and/or packet radio. The clusters are often arranged in tiers with master cluster computers feeding several others.

There are many features in clusters to keep the spots to manageable levels. For example, only spots originating in eastern North America can be sent out to users in that region because it is not too useful to know that Australians have an opening to Japan.

The user begins by logging on to the cluster. The first time, the cluster asks for a bunch of information about the station and its location so it can provide beam headings and the like specific to the user. Each time the cluster gets a new spot it sends it out to the logged on users. In quiet times there may only be one every few minutes – during major contests the stream of spots is almost continuous. Users are expected to contribute to the flow of dx information. When you hear or work an interesting station, you should generate a spot to help out other stations.

How your cluster is set up and operates.

Today many clusters are primarily accessed by the internet. To be useful users have to be continuously logged in because there is no telling when an interesting spot is going to appear. With high speed internet this is no problem but becomes a real pain with dial-up service, especially if you only have one telephone line. XYL QRM can be a major problem when the phone line is tied up for 5 or 6 hours. Since many potential users are located in rural areas in our region, we decided a packet radio based approach was best.

Our cluster's call is VA3PEC-5 and is co-located with the VE3TJU repeater overlooking the town of Picton. It operates on 145.070 MHz simplex using a Ringo Ranger antenna on the TJU tower. The cluster software is called DXSpider and it runs

under linux. We are hoping that it can be accessed from Brighton to Kingston and up to Highway 7. We will be interested in hearing how far out it can be reached.

Since high speed internet was not available at the site, our configuration is a bit more complex. A node has been established at VE3BIP's QTH in Belleville, which has high-speed access. It is linked to VA3PEC-5 by packet radio. Initially on 2M, this link will soon be on 220MHz. The feed from the master cluster is provided over internet to VE3BIP-7 by VA3MW near Toronto. The end user doesn't have to be concerned by this linking arrangement – it all happens behind the scenes.

How you can use your cluster

The first thing you have to do is get some cluster software. You may have it in your logging program already or you can download a freeware program like RXClus from the net at http://rchalmas.users.ch/rxclus/. You need a 2M radio interfaced to your computer with either a TNC or a sound card interface. The details of setting this all up are beyond the scope of this article but there are lots of people in both clubs that can help you out. You also should go to www.dxcluster.org/main/usermanual.html and download the DXSpider user manual.

Once set up and tuned to 145.070 you begin by issuing a connect to the cluster – c VA3PEC-5. The first time it will ask you for some startup information. Then you can watch for spots and try out the other cluster features.

We think the cluster will really add to the enjoyment of the hobby in our area – give it a try and keep it active. Demonstrations of the cluster are planned for the meetings of both clubs and you will get all your questions answered.

Special Event Station G4OHX

Terry Murphy - VA3TRM va3trm@sympatico.ca

As part of the celebration of 100 years of Military Communications, Sam Kennard, G4OHX, Norfolk, UK, has a special call sign for the month of Feb 2003. It is GB4CEB (translated it is Great Britain for Communications and Electronics Branch). Sam is a member of the Signalers Club of Canada and The Royal Signals Amateur Radio Society (RSARS # 1939). He can be heard mainly at 1700Z on 21.180 USB and on 21.025 to 21.056 CW. He has some excellent QSL cards for the contacts. Anyone wanting to set up a special time for a sked, please let me know and I will pass it on to Sam.

I have applied for the use of a special callsign prefix for ALL Canadian hams for the month of July and August 2003 to celebrate 100 years of Military Communications. Industry Canada has given me a positive response and as soon as I receive their final letter I will inform all.

VE3RCS and VA3SIG can be heard on each Thursday on the Trans Provincial Net, 7.055,from 1000-1100 hrs. Anyone making contact with the station can request a QSL card.

PLEASE PASS THIS ON TO AS MANY HAMS AS POSSIBLE.

Special Event Station VB3MCC

Special Event Station VB3MCC celebrating 100 years of Military Communications in The Canadian Armed Forces will be operational from June 27th until July 4th. The station will be on the air portable from lovely Merrickville Ontario in SSB and CW. There will be a certificate offered for a small fee to cover costs only and we will have a web-site up soon for viewing. This event is brought to you by The DX Hounds that being VE3UUH and VE3GID, hope to meet as many as possible on the air.

You Could Be a Lifesaver

By: Paul Robertson (VE3HFQ)

"VE3HFQ to net control... 11:44... we have a funnel on the ground 8215, 4420 moving north east.....Roger, we will notify the Severe Weather desk in Downsview. All stations we are now in condition red...repeat condition red" What kind of a coded message is this? Actually, it is a typical transmission you could hear on one of the many CANWARN Nets that take place throughout the country during times of severe weather (usually April - October).

The foregoing message is based on CANWARN protocol using the TEL method (time, event and location). Here is the breakdown.... TIME (of the report)... 11:44 (am) ELEMENT (what you see) ...a funnel (tornado) on the ground LOCATION (use the grid atlas coordinates if possible)... 8215,4420 (these are the geographic co-ordinate grid numbers based on the CANWARN Grid Atlas for Southern Ontario. The net controller has declared the net into a "condition red" based on the fact that funnel clouds or tornadoes are occurring. This means that all stations on frequency are to stand down and only report the following conditions:

* Funnel clouds
* Wall clouds
* Tornadoes

As an amateur radio operator, you too could be a CANWARN member. CANWARN is a volunteer organization of amateur radio operators who report severe weather when they see it to Environment Canada. When Environment Canada's weather centres issue severe weather watches or warnings, they alert the CANWARN volunteers at the organization's regional stations in the affected areas. The volunteers contact other CANWARN members on their ham radios, tell them a watch or warning has been issued and ask them to report signs of approaching severe weather. (Lightning, hail (size), cumulonimbus clouds, wall clouds, tornadoes)

Four amateurs formed CANWARN in Windsor back in 1987: Bill Leal (VE3ES), Jerry Beneteau (VE3EXT), Randy Mawson (VE3TRW) and Paul Robertson (VE3HFQ).

CANWARN is organized into local nets or networks. When CANWARN members spot severe weather, they send their reports to the CANWARN network controller who forwards the information to Environment Canada's severe weather centre in Downsview (Toronto) using either the special telephone "hotline" or the CANWARN web page. This web page is unique as the message sent actually "pops up" instantly on the computer screen that is monitored by the severe weather meteorologist in Downsview. At the

severe weather centre, the severe weather meteorologist combines the data from the satellites and radar with the information from the ground to refine the forecast or prepare a severe weather watch or warning in order that the public may take the necessary safety precautions. CANWARN stations are equipped with computers, printers, and ham radio equipment and are usually located in community centres such as airports, police and fire stations.

Environment Canada trains ham radio operators to spot and report severe weather. They learn about the structure of storms, the types of clouds to watch for and what the department's severe weather watches and warnings mean. All CANWARN volunteers are encouraged to sign up for the refresher courses which the department offers each year.

Any licensed ham radio operator may become a CANWARN volunteer. Simply contact your local amateur radio club or e-mail: canwarn@cmc.ec.gc.ca.

Your severe weather report could be a lifesaver!

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Elections of Officers

May is election month. If you would be interested in serving a term on the executive please contact any of the current executive.

Columbia recovery effort over for Texas hams

Ham radio support for the shuttle Columbia debris search and recovery effort in Nacogdoches and San Augustine counties in Texas wrapped up February 12. US Forest Service personnel were scheduled to assume the support role hams had filled in East Texas for nearly two weeks.

South Texas Section Emergency Coordinator Bob Ehrhardt, W5ZX, praised amateurs for their professionalism and dedication. Ehrhardt said the weather often was rainy and cold with some sleet--and the brambles and briars in the forest did not help. Ehrhardt said the agencies the hams worked with were pleasantly surprised, and pleased, too. As he put it: "I know that we changed several minds that we could get the job done."

Hams spent about 12 days in the Columbia search-and-recovery effort, using GPS and off-the-shelf computer mapping software to pin down and report the locations of debris items as they were sighted.

Preliminary numbers reported this week indicated that 198 amateurs logged in at one time or another in Nacogdoches County and 148 in San Augustine County. An estimated 80 percent of the participating amateurs were from outside the two counties. ARRL

Treasurers Report

MONTH TO DATE

Revenue		Expenses	
Membership Dues	$200.00	Insurance	
Coffee	$7.15	Office Supplies	$20.54
50/50 Draw		Donations	
Donations to QARC		News letter printing	$5.87
Interest	$0.17	Name Tags	
		Hall Rental (Field Day)	
		Post Box Rental	
Total revenue	$207.32	**Total Expenses**	$26.41
		Month to Date Income	$180.91

YEAR TO DATE

Revenue		Expenses	
Membership Dues	$1,050.00	Social Events	$21.76
Donations to QARC	$105.00	Post box rental	$77.04
50/50 Draw	$72.50	Office supplies	$164.31
Coffee	$37.15	News letter printing	$63.59
Repeater Move		Door Prizes	
Interest	$1.20	Insurance	$622.08
		Donations	$226.00
		RAC Membership	
		Hall Rental	$30.00
		Incorporation	
		Name Tags	$8.05
Total revenue	$1,265.85	**Total Expenses**	$1,212.83
		Year to Date Income	$53.02
		Cash at July 1/02	$4,453.61
		Cash on Hand	$4,506.63