





Quinte Amateur Radio Club Inc. Newsletter

PO Box 23039 BELLEVILLE Ontario K8P 5.13

NOTICE OF MEETING:

DATE / TIME: January 15 2003 @ 7:30 PM

LOCATION: Loyalist College (Pioneer Building) **Room P-17A**

PROGRAM: Deputy Chief Wayne Tremble of the Belleville

Police Service will be giving a presentation on the new Radio Communication System recently

installed.

Club Repeater: VE3QAR 146.985 MHz. 2 meter net: Tuesday 7:30 PM on VE3TJU 146.730

QARC Home Page http://www.garc.on.ca

QARC Home Page 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:

Radio Amateurs of Canada Administrative Office 720 Belfast Road, Suite 217 Ottawa, Ontario K1G 0Z5

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QARC EXECUTIVE

PRESIDENT: Peter Hodgson VA3PKH 962-1386 (E-mail: phodgson@kos.ca)

VICE-PRESIDENT: Bill Milligan VA3WOW (E-mail va3wow@rac.ca) SECRETARY: Mike Papper VE3VMP 969-1744 (nancy@lks.net)

TREASURER: Don Dalrymple VE3DQN 968-9242 (E-mail: ve3dqn@rac.ca)
PAST PRESIDENT: Dave Ackerman VE3UGT 962-3991 (E-mail: ve3ugt@rac.ca)

Quinte Amateur Radio Club Minutes

November 20th, 2002

Mike, VE3VMP Secretary, QARC

The meeting was opened by our President, **Peter**, **VA3PKH** at 7:30 pm. Peter reminded all that next month we will have our annual Christmas Dinner in place of the regular meeting. The dinner will be at the Northway again this year. There was two choices for the dinner, either Roast Beef or Pepper Chicken and must be chosen in advance.

Updates on Committees:

Antenna: Tim, VE3UO: no news on the repeater relocation. We are still waiting for approval by Bell Canada to proceed with this project.

ARES: Ron, VE3IVC: Thanks to those that participated in the Walk-a-Thon es Halloween Night. There will be a live ARES exercise in either May or June 2003. More info to come later.

Syd, **VE3EGO** mentioned that you could obtain free software for SSTV, if interested send **Syd** an e-mail: **SHORNE@MAGMA.CA**

The 50/50 draw was won by Ron, VE3IVC; congratulations, just in time for Christmas, hi, hi.

The executives are looking for Entertainment for the upcoming meetings. One suggestion was to visit Trenton Plane museum and this was well received.

January 2003 the Local Police Dept. will talk about their new Digital Radio System, that has just be installed.

New Business: Syd, VE3EGO said that he videoed, using VHS, last months presentation on **AMSAT** and anyone can borrow it at anytime. Thanks **Syd**.

Our guess speaker this evening is our own **Dave Ward, VE3BIP**. His topic tonight is **Wireless Networks**. Dave used slides to compliment his presentation and these slides are enclosed in these minutes. He started by briefly defining what a **Local Area Network** or LAN is that includes at least two or more computers and printers, as we know it. The wireless data goes over an RF link. The access point is the main component, and it costs about \$250 at the local shops. The frequency is 2.4 GHz or 5.7Ghz. For portables or Laptops there is a PCMCIA card version of this access point.

Some of the characteristics are:

- Up to 50mbps (half duplex)
- There is no license required
- Maximum power is 1 watt
- The radiated power is restricted to avoid interference
- Distance is about 300 meters, with more power you could almost go a city block.

In the Point-to-Point Mode u can connects two houses for example. You can use external antennas on access points and a power amplifier is optional. You can reach a distance of up to 20Kms at line of site.

There are many Protocols for the RF link, but the most common is that created by **IEEE** – **802.11** (this is older) and **802.11B**, that is most common. The speed of this protocol is approximately 10,000 times faster than 1200 baud!! This version overlaps with the amateur band and Dave was not sure about the ruling on this. There is also **802.11A** that uses a higher frequency up to 54mpps at 5.7Ghz. **Spread Spectrum** techniques are used in this application and the benefit is that it is less susceptible to noise. (By the way, Spread Spectrum will be a topic at one of our meeting in the New Year). In **802.11B** the frequency is spread over 22 Mhz of bandwidth.

Frequency Hopping: the transmission begins on one frequency and then transfers to another frequency and jumps many times in a second.

Direct Sequence: A high frequency random binary signal is used to modulate and spread the carrier spectrum. A narrow band receiver would not hear a 100-mw signal of energy spread over 22 Mhz.

Wireless Networks falls under the category of **ISM** (Industrial, Scientific, Medical) and no license is required for this application. However an Amateur Radio License is required. So an amateur is not allowed to encrypt a signal. However, you can send encrypted signals if you are not licensed. The only benefit as an amateur is to run more power. Another consequence is security, but it is not very good. In commercial places they add another layer of security on top of what the RF link provides. You can publicly access an Internet connection if you are not too far from the access point. People in Silicon Valley provide this access for their neighbors.

For Wireless PDA's there is a special mark on the sidewalk to identify a location to an access point.

An interesting question and answer session followed Dave's FB talk.

There was 26 in attendance and the meeting adjourned at 9.05 pm.

Don't forget **Saturday Morning Breakfast (Hams & Eggs**): Our traditional Saturday am breakfast meeting has been moved to the **Quinte Restaurant** at the corner of College and Cannifton. So if you missed us at the Northway, now you know why! The Hams arrive at about 7:45 am.

Stolen Radio

Please keep your eyes and ears open for an FT-8100 s/n 0H370140 with a dual band Diamond mag. mounted antenna. Eric Larson, VA3ETV, had his stolen recently. Should you come across this unit, he can be reached at 905-857-1578. Tnx es Happy New Year to all.

Message From Doug Leach VE3XK

RAC Director for Ontario North and East

First let me wish all of you a Happy and Healthy New Year.

Those of you located in Eastern Ontario in the RAC region of Ontario North may be interested in looking at the Ontario North web site I have prepared as your elected RAC Regional Director, as a service to all the amateur radio clubs in this Region. It is at http://www.igs.net/~ve3xk/ and contains speakers/topics, club project suggestions, club resources, info on how RAC works, etc.

Please pass on this information to your club web master so he/she can install a link to that web site from your club web site, as has now been done by a number of the clubs.

Thank you for taking a look and passing it on.

Core Values of Radio Amateurs of Canada

Core Values define an association's most essential beliefs and characteristics. Prospective members need a clear sense of an organization's core values if they are to support it through membership. RAC membership really is much more than a subscription to a great magazine!

- 1. We seek to reach all Radio Amateurs to help them improve their knowledge of Amateur Radio and their operating skills.
- 2. We encourage the careful use of the radio spectrum needed to support our radio activities.
- **3.** We actively seek and protect adequate spectrum and antenna space for Amateur Radio activities and work in cooperation with other organizations and governments to ensure their availability at all times.
- **4.** We believe that Radio Amateurs have a responsibility to use their radio facilities to assist those in their community, especially in times of emergency or distress.
- **5.** We recognize the importance of good radio regulations in spectrum management as well as the active representation of the interests of Radio Amateurs in both domestic and international environments.
- **6.** We believe Amateur Radio is enriched by the diversity of backgrounds and perspectives found in Radio Amateurs.
- 7. We are called upon to keep Radio Amateurs informed and up to date on Amateur Radio matters of interest to them by means of a magazine published regularly, regular information updates on the web site and by special news bulletins distributed when required.
- 8. We believe Amateur Radio in Canada is enhanced and harmonised by a strong national association aided by local and provincial clubs and associations

The Signalers Club of Canada

As we actually get into the year 2003, which is the celebration of 100 years of military communications, information will be provided about the activities of VE3RCS and VA3SIG as we plan to be very active, leading up to the actual reunion taking place in Kingston on Labour Day weekend of 2003.

At the suggestion of Sam Kennard, an avid Amateur Radio Op who is a member of the Sigs Club and lives in England, and at the request of the Sigs Club, the Radio Society of Great Britain (RSGB) "Special Events" call has been assigned for the year 2003 to Sam Kennard, (G4OHX), to be used during the following periods for the purpose shown below.

He will be operating from England using VOICE and MORSE on the 80 - 40 - 30 - 20 - 17 - 15 - 12 and 10 metre bands for the periods 1 - 28 Feb and 1 - 28 Aug 2003. His purpose is to make as many world-wide contacts as possible, to inform others of and about the upcoming 2003 Canadian National Reunion and other C&E Centennial Events. The times at which he will be active on our behalf are dependant on band conditions, but he will bear in mind the time differences around the world, so hopefully, the call will find its way into many Canadian Radio Amateurs' log books, besides the log books of other contacts around the world. He will be sending a special QSL card to everyone he makes contact with and the Royal Signals Amateur Radio Society, (of which he is a member), has allocated special membership number "F222" to him for this exercise.

NOTE: This "Special Event" is sponsored by the Signalers Club of Canada. Terry Murphy

Prince Edward County ARES

ARES has taken a step forward in Prince Edward County with the appointment of Doug Monk VE3ZDG as Emergency Coordinator. Doug, a new resident, has been introduced to the workings of ARES over the past several months by Bill Milligan VA3WOW, who was unofficially performing the ARES leadership role.

In a series of meetings with police, fire and other municipal officials Doug and Bill have sized up the emergency preparedness situation in Prince Edward County. They are now approaching volunteers for various roles. After the PERC meeting on 5 December when Doug turned in a progress report, Ian Morrison VE3IEM, Al Law VE3LAW, Mike Grainger VE3ADC, and Tim Pekkonen VE3UO all signed up as field operators. More field operators and many home operators are needed. At this point the group expects to handle police, fire and ambulance requests as well as personal "welfare" traffic in the event of a disaster that disables the telephone system.

Provincial law, enacted recently, has started the municipality on the process of completely revamping their emergency plan, and ARES will be involved in the process, Fire Chief George Pettingill told Doug Monk last Thursday. The Prince Edward Radio Club ARES group will make its new plan in conjunction with the County's new plan, in meetings beginning in March. In the meantime ARES will be busy getting its team together. The ARES report will be discussed further at the PERC January meeting on January ninth.

Treasurers Report

MONTH TO DATE

Revenue		Expenses	
Membership Dues	\$25.00	RAC Membership	
Coffee		Office Supplies	
50/50 Draw		Incorporation	
Donations to QARC		News letter printing	
Interest		Insurance	
		Social Events	
		Donations	
Total revenue	\$25.00	Total Expenses	\$0.00
		Month to Date Income	\$25.00
	YEAR 7	ГО DATE	
Revenue	Expenses		3
Membership Dues	\$425.00	Social Events	\$21.76
Donations to QARC	\$105.00	Post box rental	\$77.04
50/50 Draw		Office supplies	\$131.77
Coffee		News letter printing	\$37.10
Repeater Move		Door Prizes	
Interest	\$0.86	Insurance	\$622.08
		Donations	\$226.00
		RAC Membership	
		Hall Rental	\$30.00
		Incorporation	
		Name Tags	\$8.05
Total revenue	\$606.06	Total Expenses	\$1,153.80
		Year to Date Income	-\$547.74
		Cash on Hand	\$3,658.33