Quinte Amateur Radio Club

Belleville Radio

QRM

P.O. Box 292

Ontario, K8N 5A2.

Newsletter By Don Dalrymple VE3DQN

Meetings:	Location:	Room P 1 Pioneer Building Loyalist College.
	Date:	Wednesday April 15, 1992
	Time:	7:30 PM
	Program:	Syd Horne VE3EGO will talk about Antennas and Towers.

Executive:	President	Mike Papper	VE3VMP
	Vice President	Jim Williams	VE3AGT
	Secretary	Tim Pekonnen	VE3HCM
	Treasurer	Steve Sweetman	VE3WOE
	Past President	Norm Moore	VE3NFD

On going Activities:		
Publicity:	Jim Williams	VE3AGT
	Steve Sweetman	VE3WOE
Property	Al Taylor	VE3WV
Newsletter	Don Dalrymple	VE3DQN
Repeater Committee	Al Smardon	VE3OX
	Norm Moore	VE3NFD
Packet Committee	Al Smardon	VE3OX
	Ross Dryden	VE3AAU
Emergency Coordinator	John Lester	VE3MB
	Don Davenport	VE3BPL
Field Day 1992	Len Brooker	VE3ASR
Amateur Radio Course Director	Al Smardon	VE3OX
Mall Display	Mike Papper	VE3VMP
2 Metre Fox Hunt	Ivan Graham	VE3GTH
	Tim Pekonnen	VE3HCM
H.F. Contest	Bob Mitchell	VE3RRM
Refreshments	Bill Campbell	VE3NFP

H ams and eggs, 8:am each Saturday at the Mirage Restaurant 257 North Front Street Belleville.

2 metre net every Thursday at 7:pm. on repeater VE3KBR. swap net to follow regular net.

Regular meeting, 3rd. Wednesday each month excepting July and August.

Regular meetings for the Prince Edward Radio Club are held on the first Thursday of each month except for the months of Dec. Jan. Feb
A 2 metre net is held by the Prince Edward Radio Club every Tuesday night at 7:00 pm. on repeater VE3TJU 146.730 down 600.

Regular meeting of the North Humberland Radio Association is held on the 4th Thursday of each month in Campbellford.

NHRA 2 meter net is held every Wednesday evening at 8:30 on 145.390

CW TRAFFIC NET PROCEDURES

A tutorial article by : Al VE3WV
net manager Gray Bruce Nets

Formal traffic messages may be sent across Canada, the U.S.A. and to any country with which Canada has a third party traffic agreement. This article is based on operation of the Gray Bruce Nets, which operate as training nets. The nets are not part of the CRRL National Traffic System, however, there is liaison to the NTS, and the same procedures are used.

GBSSN operates daily at 1815 local time on 3645 Khz. followed by GBN which operates daily at 1830 local time on the same frequency. The time of these two nets permit someone to take traffic to the Section nets at 1900 local time.

The way to find out how these things work is to listen for a while before making your first check in. When you get up the nerve to make your first check in The NCS Net Control Station will welcome you to the net and ask for your name and QTH, and if you have not indicated whether you had traffic when you checked in, will ask if you have any traffic and it's destination. CW nets use some Q signals you are not likely familiar with, they are not part of the DOC exam and are used exclusively by CW traffic people, there is no place for them elsewhere in Amateur Radio, and if on a phone net, the correct procedure is to use the spoken word. The International Q signals should be used on voice. On voice you don't say QSL Nr. ___ it is correct to say I acknowledge receipt of your Nr. ___.

What you will likely hear if you tune on 3645 Khz at the appropriate time follows with an explanation of the meaning of the QN signals. Example: CQ GBSSN Gray Bruce slow speed net QND PSE QNZ DE VE3CZA QTC? QNI k.

It is simply a CQ to the Gray Bruce Net from VE3CZA QND means it is a directed net. In other words once you have checked in and been acknowledged by NCS you transmit only when directed to so by NCS. PSE QNZ - please zero beat the net control station, it is essential to operation of the net that all stations be on the same frequency in order to hear each other and be heard by NCS. QTC? NCS is asking you to indicate what traffic you have and its destination. QNI K this is the invitation by NCS to check into the net after the K go ahead signal. All that is necessary to check in is to send one or two letters of your call, which is acknowledged by the NCS sending what he or she heard. In this example of net operation, I am using VE3CZA as NCS. VE3CZA is Shirley Ann McAnn an excellent CW operator, and actually I don't believe she operates on phone not even on two metres. We all call her SAM her initials. Her OM is also a Ham.Assume I am not the first checking into the net, after the QNI K, I sent WV, SAM acknowledges by sending WV, and I go back with de VE3WV ge SAM QNI QRU, SAM answers with ge TNX QNI QNU AS the wait signal. Literal interperation, good evening Al thanks for checking in, QNU, the net has traffic for you wait. Sam continues calling for check ins and listing the traffic, who has it, and its destination.

You will notice a very minimum of conversation. It is necessary as NCS knows who is on, their locations, their ability to take traffic and where they can relay or take traffic to. SAM sends VE3WV and I answer simply with WV, SAM sends OPN? I send C. SAM has asked me if I will go to OPN the Ontario Phone Net and my reply C indicates yes!

Sam then sends VE3WV VE3GSQ U5 U5 opn 1. Both VE3Wv and VE3GSQ acknowledge with a K or G Meaning understood or gon and move up 5 Khz from the net frequency. VE3WV is to receive the traffic for OPN so he finds a spot very close to the 5Khz, that is free of QRM and calls VE3GSQ de VE3WV, just once, is all that is required and VE3GSQ sends VE3WV de VE3GSQ ge Al QRV? meaning good evening Al are you ready to copy. On the net the question mark is unnecessary, it is understood. The response from VE3WV simply QRV K. Gail VE3GSQ another excellent CW operator very seldom heard on phone immediately sends the OPN traffic. If there has been more than one message to be sent WV would simply send QSL Nr ... K after copying the first and Gail would again proceed with the next.

Notice the very minimum of conversation except for the traffic. With passing of traffic complete each return to the net frequency and at the first break indicate their presence by sending only one or two letters of their call sign as when checking into the net. NCS acknowledges them and they will send CLR meaning the traffic has been cleared.

They wait for instructions from NCS, there may be more traffic for either one or NCS may call them VE3GSQ VE3WV both QRU QNX tnx cul. GSQ and WV will sign with 73 ge gn or whatever is considered appropriate. Note: WV went up 5 to find a clear spot, the station that is to receive the traffic chooses the frequency that is satisfactory for reception, least interference.

At the beginning of the preceding paragraph, I referred to NCS sending the two Stations up 5Khz from the net frequency. This can be up or down and on some busy nets, stations are exchanging traffic up or down from the net frequency by 5 or 10 Khz. A first timer checking into the net with traffic will quite often be asked to call someone and send the traffic on the net frequency. This is just in case any assistance is required.

VE3CZA Sam and VE3GSQ Gail are both excellent operators. VE3GSQ is often heard at 1600 hrs local on 7042 Khz the OQND Ontario Quebec Daytime Net and 1945 Hrs 3652 Khz the ECN Eastern Canada Net. VE3FAS Phil is heard on the OQN 3667 Khz and ECN 3652 Khz and is Gail's OM.

I hope I may have helped to remove some of the so-called mystic about message traffic movement. It may be done on voice as well, but Q signals should not be used. Instead the spoken word is correct.

I will be glad to answer any further queries regarding message handling. Greeting traffic is one ham radio's best means of good public relations. It also trains us for emergencies, Which we hope will never happen.

VE3WV A1

**** NOTE ****

Don't forget the Flea Market in Pickering on Saturday April 11, 1992. Doors open at 9:00 Am, and the cost is $5.00 admission.

See you all there.

*** NOTE ***

There will also be a Flea Market held on June 13, 1992 at the Marmora area Curling Club. Admission $3.00

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* SPECIAL NOTE *

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The Foxhunt has been moved to APRIL 9, 1992
due to a conflict with the Wakathon.
The location and time are the same.
Mirage parkinglot 9:00 Am after H ams and eggs.

Canada Gazette Part 1 February 15, 1992

DEPARTMENT OF COMMUNICATIONS

RADIOCOMMUNICATION ACT

Notice No. SMRR-001-92 - Request for Public Comment on the Draft Client Procedures Circular "Environmental Assessment Process Associated with Spectrum Management Activities" (CPC-2-0-03).

The intent of this notice is to advise the public of the availability of CPC-2-0-03 for public comment. This document outlines the responsibilities of applicants for spectrum management services with respect to environmental assessment.

As a result of recent judicial decisions, all government activities are subject to the Environmental Assessment and Review Guidelines Order. Therefore, the Department has developed procedures conforming with this order.

Most activities, such as radio certificate examination, and testing equipment for type approval, have no effect upon the environment. Therefore, applicants for these services will not be required to provide environmental information. However, the authorization of radio stations has the potential to impact upon the environment. The points that will be examined are as follows:

a. compliance of the proposal with the Department of National Health and Welfare's Safety Code 6, which specifies maximum non-ionizing radiation limits;

b. the effects upon the flora and fauna; and

c. land use concerns.

The Department is interested in receiving public comment on this document.

The comment period for this document commences on the date of publication of this notice and will end June 15, 1992. Comments may be sent to Mr. Darius Breau, Acting Manager, Spectrum Management Operations Division, 300 Slater Street, Ottawa, Ontario K1A 0C8. Comments may also be sent by facsimile at (613) 952-9871.

Copies of CPC 2-0-03 are available at any regional or district office of the Department of Communications.

Mr. R. W. Jones
Director General
Radio Regulation Branch

The following paragraph seems to be the part
that pertains to The Amateurs Radio Operators.

An Antenna and Antenna Structure Attestation is not required for those classes of stations for which the Department does not authorize specific installations - i.e., amateur and licence-exempt systems, including General Radio Service (GRS) systems, private receiving stations, TVRO dishes, and other similar types of radio systems. However, if the operation of this type of radio station requires the installation or modification of an antenna-supporting structure or tower which may lead to local objections relating to the location of the structure or other land use concerns, the Department of Communications encourages these radio station operators to consult with the municipality or land-use authority responsible for the area in which the antenna-supporting structure will be erected or modified. Failure to notify and consult with the municipality or appropriate land-use authority could result in the structure having to be removed or altered.

**** Reg Varco Award ****

We are still waiting for nominations for Reg Varco Award.

*** Special Event Station ***

A special event station will be on the air from April 4th to April 12th to remember the 75th Anniversary of The Battle of Vimy Ridge. The CALL SIGN will be VC75. There will be a Special QSL and Certificate. This will be ALL BANDS 24 hrs. per day.

Another Special Event Station will be held on the 30th of May and 30th of June to celebrate the 25th anniversary of CEB Lahr.
Call will be C1W91. All Bands

And for all of the Packet Buffs VE1JO CFB Gagetown will be operating on 14.105

We are still looking for all kinds of equipment and material for Field Day. Also people to man the stations. This is a good time for those that do not have HF qualifications to get some air time under the Club Call.

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I would like to request that all Club
Members send me the date on which
they became a member of QARC
I would like to compile a
list showing this
month and
year

NOTE CHANGE OF CALL SIGN

John Hamilink was VE3JKH he is now VE3VFB (very fine business)

ANTENNA DIRECTIVITY AND BACK-TO -FRONT RATIO

A directional or"beam" antenna's front-to back ratio is simply a measure of it's gain in the "forward"direction compared to it's gain in the "reverse" direction--and is usually expressed in dB.

Thus a Yagi antenna with an 11 dB front-to-back ratio has 11 dB more gain off the "front" of the antenna than it has off of the "back" of the antenna. This is certainly simple enough, but how does it do it? How can an antenna have more gain in one direction than another, and what determines the ultimate pattern of the antenna?

The isotropic model

In antenna theory, the concept of an isotropic antenna a purely theoretical antenna to which all other antennas are eventually compared, is often used as a reference, and as an aid in the definition of antenna patterns. An isotropic antenna is one that radiates (or receives) equally in all directions, resulting in a radiation pattern that looks like a perfect sphere. No conductor of any physical size can really create such a pattern.

The problem with an isotropic antenna, besides the fact that you simply can't build one, is that, even if you could it would't be very practical, because it would not make very efficient use of the available RF energy. It would in effect, transmit or receive signals from all directions equally poorly, including such impractical directions as straight up in the sky and straight down at the ground--directions that we aren't typically interested in for the most communications activities.

But even if an isotropic radiator isn't a practical reality, it does help us to explain the performance of other, more practical antenna systems. If, for example, we were to break a conductor down onto extremely small segments approaching the size of the conductors molecular structure, we could think of each of each of these segments as being a tiny isotropic radiator, each with the capability of radiating with equal strength in all directions.

In reality, however, when each of these small isotropic radiators is physically connected together to form the actual radiating element of a practical antenna, the element begins to take on some amount of physical length, with a resulting radiation pattern that is the vector sum of each of its individual tiny isotropic radiators. A practical conductor will therefore exhibit some type of non-isotropic radiation pattern.

One way to envision why this is true is to remember that any conductor has finite propagation velocity, and as a result, each theoretical isotropic radiator within the conductor is radiating with a slightly different phase from each of the other radiators. This is true of course, because as RF energy begins to excite a small section of the antenna's conductor, this energy must then prorogate down the conductor. This propogation takes a finite amount of time, and as a result, each tiny segment along the electrical length of the antenna is radiating slightly out of phase with every other segment.

The resultant pattern of the overall conductor, will be the vector sum of each individual pattern created by each of these tiny quasi-isotropic radiators within the conductor and will be a radiation pattern that is not spherical, but is a function of the physical geometry (length and diameter) of the conductor, as well as the operating frequency. Whew!

For example, a simple Yagi antenna can be constructed by mounting some number of identical elements in the same plane, and driving them such that the rear-most element is attached directly to the down lead, or feedline. An additional length of feedline, introducing some precise amount of phase delay, is then used to connect that element to the next adjacent element, and so forth down the line until all elements are connected by these additional lengths of feedline.

If the phase delay of each short segment of feedline interconnecting each element is chosen such that the energy feeding each element via the feedline is in phase with the energy arriving via the air from its neighbour to the rear, then we can begin to see that as the signal propogates from back to front in the transmit mode (or from front to back in the receive mode), its signal level is increased as it passes each element in the array. On the other hand, energy arriving (or being transmitted) off the back or sides of the antenna is not offered this same relative gain advantage because the phase relationship between the elements is not correct for any other angle except directly in front of the antenna.

Driven and parasitic arrays

Hence the antenna's gain (relative to isotropic) in the forward direction is much greater than it's "gain" off the back or sides of the antenna--thus defining its front-to-back-ratio. This type of antenna is called a "driven"array, since each element is actually driven by (attached to) a feedline. Another type of array, called a "parasitic" array can also be used with the same result. A parasitic array is one in which only one of the elements is actually connected to the feedline, while the rest of the elements pick up their energy by radiation from that driven element.

Phasing of each element, which was accomplished in the driven array by the length of the short interconnecting feedline between elements, is accomplished in the parasitic array by tuning (cutting to length) the parasitic (non-driven) elements to frequencies that are slightly different from that at which the antenna is designed to operate. Progressively shorter elements (tuned to a higher frequency), called "directors", are located toward the front of the antenna, and progressively longer elements (tuned to a lower frequency), called "reflectors", are toward the rear.

By Chris Bowick,Group Vice President Technology
Jones Intercable

VE3BEL - QARC PACKET

The area map shown opposite will give you an idea of what is available to us in the area around Lake Ontario. There is much more that could be shown but this represents the basic coverage for us. You can go all the way to the east or west coast, or overseas, and down to the southern states.

■ This indicates a "Node stack".

● This indicates a single "Node" or "Digi".

VE3BEL is a 3 Node stack. VE3RTR and VE3KER are 5 Node stacks.

VE3BEL also known as BLVL has a Node on 441050 pointing at RTR, and one on 446800 pointing at KER. The third Node is on 145610 with an omni antenna for local users on 2 meters.

VE3KBR is on 145010 and is a Node for local users and connects to other Nodes also. Each Node requires a transceiver, a TNC (Terminal Node Controller) and an antenna. The antenna is chosen according to its planned use.

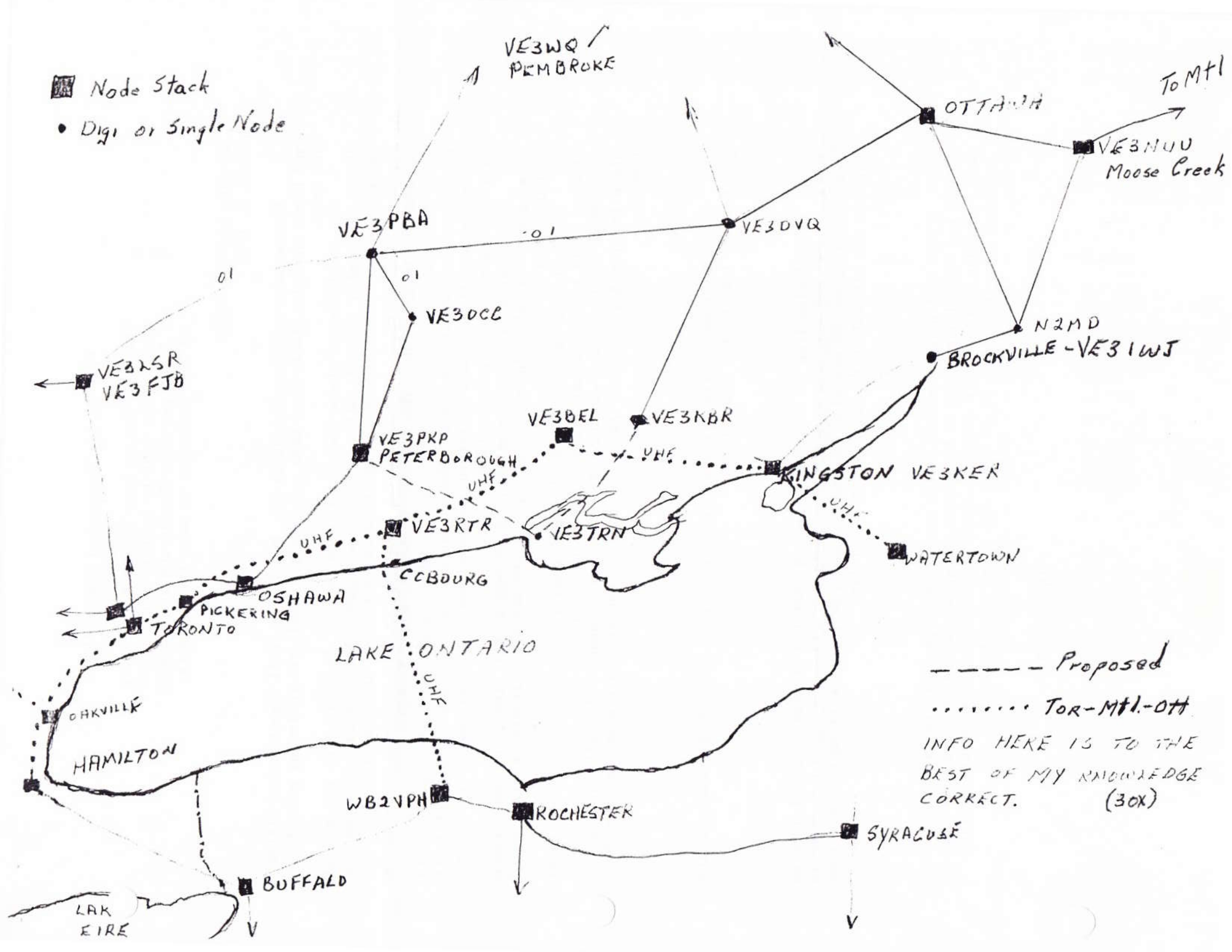
At VE3BEL (at 3AUUs QTH) we have installed 3 transceivers, 3 TNCs and 3 antennae. The TNCsare wired together and they talk to each other at 9600 baud (very fast). The TNCs talk to the transceivers at 1200 baud. That is 1200 bits per second. So what you hear on 2 meters is packet being sent at this speed. On the HF bands you will hear it at 300 baud. VE3BEL will soon be converting the UHF backbone links to 4800 baud in order to speed up the transfer of data on the link.

Some of the local packeteers I have heard at my QTH are listed below, and if you want to know more about packet, I am sure they would be glad to show you.

ALC APF AUU CJG DOP DPP EDG EGO FJJ GSI HNJ HST MB NW NBL OKK OX PBR RMM RSJ RWN SL SV TDT TQR WV

If you are in Belleville and want to talk to a packeteer in Kingston, you simply connect to VE3BEL (on 145.61) then tell VE3BEL to connect to VE3KER-7 and there you are in Kingston on 145.07, the Local Area Network, then you tell the Node to connect to your party there VE3???. It really is quite simple, once you get the hang of it.

Al - VE3OX


Node Stack
Digi or Single Node
VE3WQ / PEMBROKE
To Mtl
OTTAWA
VE3NUU Moose Creek
VE3PBA
VE3DVQ
01
01
01
VE3OCC
N2MD
BROCKVILLE - VE3IWJ
VE3ZSR
VE3FJB
VE3BEL
VE3KBR
VE3PKP PETERBOROUGH
UHF
UHF
UHF
KINGSTON VE3KER
VE3RTR
VE3TRN
UHF
WATERTOWN
COBOURG
OSHAWA
PICKERING
TORONTO
LAKE ONTARIO
UHF
OAKVILLE
HAMILTON
WB2VPH
ROCHESTER
SYRACUSE
BUFFALO
LAK EIRE
Proposed
TOR-Mtl.-OTT
INFO HERE IS TO THE BEST OF MY KNOWLEDGE CORRECT. (30X)

*****To Any Interested Member****

The Club Has an Icom 735 HF Transceiver
that is for rent by members for the sum
of $1.00 per day. Please contact a member
of the Executive to make arrangements.

By John Lester VE3MB
April 2, 1992

When a radio amateur applies to the M.O.T for "Call Sign Licence Plates" and finds that the plates have been previously issued, the following procedures are used.

The local bureau claim they don't know what to do. They give you a Head Office 800 number to call, with an extension number. These people give you the correct people to call, known as the "Automobile Licence Assistance Office" Ask for Mr. David Avdickuk. He will handle your problem. Mr. Avdickuk may also be reached at 416-235-4756. The A.L.A.O. number is 416-235-2999.

The trouble currently is that the imposed fines against licence plates have been dumped on the licence bureau. The bureau will not re-issue a plate until all claims against it have been satisfied. Mr. Avdickuk is the only way to get around this difficulty at the present time.

Until recently, the bureau would give you a "hot line", or "assistance line" number to call, where the red tape in the way of re-issuing a plate would be unravelled.

is plainly a case of "LOTS OF LUCK" when you apply for licence plates showing "call signs" or any other personal choice plates.

This is the reason why John Hamilink had to change his call sign as the plate bearing his old call had been issued, but the call sign had not been issued.

We would like to thank Browns Fire Protection for the discount on the purchase of last months door prize.

I would also like to remind all members that Len Brooker is still looking for equipment and anything else you have to loan the Club for Field Day which is coming up in June. We are also looking for names of people willing to spend some time on the air and to do logging for field day.

I hope that a large number of the members will participate in the fox hunt. VE3ASR and VE3DQN are going to be a team and we are building a circular quad to use. Get busy and get your antennas ready as you still have plenty of time. I know for sure that there is at least one other team ready.

VE3DQN Don D.

H I S T O R I C B Q F O X H U N T B S C
C R H O C U E D G N I H C T A M D P D R
D E T S E G G U S O F S E M Q B M S A E
G D F J Q J M E M B E R S H I P F N P
R R E G V S C I N O R T C E L E F V S R
E E C N E W S L E T T E R V E I E T B I
C M N R E T T I M S N A R T L L S E T N
T R E B E B P M W M L A E I O V N R T T
I U I J Y T X V W A X P T P A C K E T U
O E R T H O U S A N D A E U H I D D E N
N T E Y A G I P J C T R M W R A Q S Q R
A A P X A T A L M I S L O M X E P J Y V
L M X Y F D U Y O O Y T D I L T N I O J
L A E S O S C N N Q C J O R M U X G D Y

ENVELOPE
TRANSMITTER
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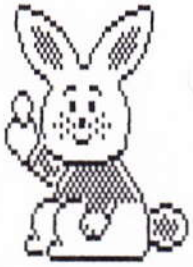
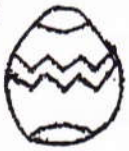
NEWSLETTER
ELECTRONIC
FOXHUNT
COMPUTER
PACKET
NATURE
MEMBERSHIP
EXPERIENCED
SUGGESTED
MERGER
HISTORIC
AFFILITATION
JOINT
MATCHING
THOUSAND
REPRINT
PERSON
YAGI
DIRECTIONAL
AMATEUR

April, 1992



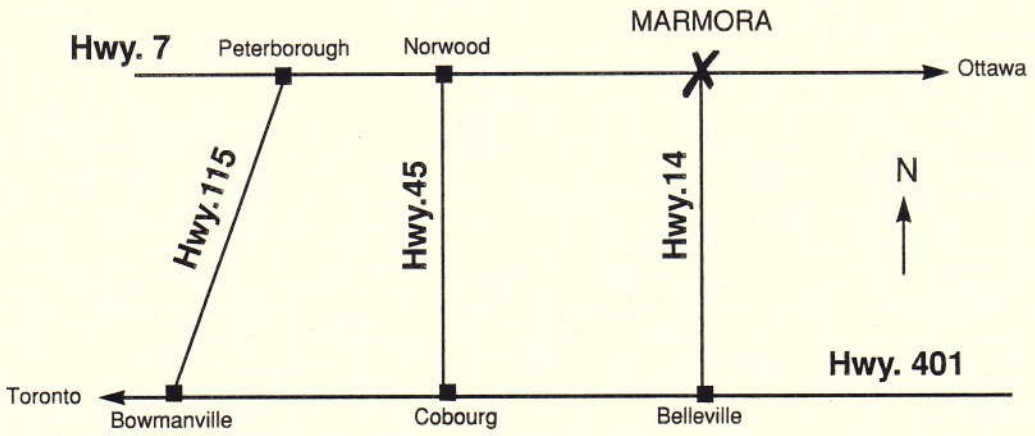
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 NARA Campbellford 2 Meter Net 8:00 Pm 145.390	2 PERC Meeting 7:00 QARC 2 Meter Net 7:00 Pm. 146.985	3	4
5	6	7 PERC 2Meter Net 7:00 Pm. 146.730	8 NARA 2 Meter Net 8:00 Pm. 145.390	9 QARC 2 Meter Net 7:00 Pm Swap Net 7:30 Pm 146.985	10	11 Don't forget the Pickering Flea Market Doors Open 9:00 Am. Admission $5.00
12	13	14 PERC 2 Meter Net 7:00 Pm. 146.730	15 NARA Club Net 8:00 Pm. 145.390 **QARC** Club Meeting 7:30 Pm. Room P1 Loyalist	16 QARC 2 Meter Net 7:00 Pm. Swap Net 7:30 Pm. 146.985	17 Good Friday Have a Nice Day	18
19  EASTER SUNDAY	20	21 PERC 2 Meter Net 7:00 Pm. 146.730	22 NARA 2 Meter Net 8:00 Pm 145.390	23 QARC 2 Meter Net 7:00 Pm. Swap Net 7:30 Pm. 146.985	24	25
26	27	28 PERC 2 Merer Net 7:00 Pm 146.730	29 NARA 2 Meter Net 8:00 Pm. 145.390	30 NARA Club Meeting 7:30 Pm *QARC* 2 Meter Net 7:00 Pm Swap Net 7:30 Pm.		

MARMORA AMATEUR RADIO CLUB
presents

EASTERN ONTARIO HAMFEST

JUNE 13, 1992

MARMORA AREA CURLING CLUB
CRAWFORD DRIVE, MARMORA



Doors Open: 9 a.m.
Vendors: 7 a.m.

ADMISSION $3.00
INDOOR
TABLES $5.00
OUTDOOR
TAILGATE $2.00

TALK IN VE3TZW
146.655/055
INFO & TABLES
CALL:
VE3SVI Bill
(613) 472-5867 or
(613) 472-6008
or
VE3NKJ George
(613) 472-5948