QUINTE QRM NEWSLETTER - JUNE 2000

PO Box 23039 BELLEVILLE Ontario   K8P 5J3

NOTICE OF MEETING:

DATE / TIME: Wednesday, June 21, 2000. @ 7:30 PM

LOCATION: Loyalist College Pioneer Building, room P-17

PROGRAM: An update for some and introduction for others on APRS.
              Marc Pichette VA3DRV will present this. We may also get
              a tour of his 18-wheel ham shack.

              WWW Link for Marc's current location:
              http://map.aprs.net/va3drv-9

Club Repeater: VE3QAR 146.985 MHz

Monthly Meetings: 3rd Wednesday 7:30 PM
                     Loyalist College (Pioneer Bldg)
                     Room P-17

Hams 'n Eggs: SATURDAYS   8:00 AM
                     Northway Restaurant
                     205 N. Front St, Belleville

Weekly Net: Wednesdays 7:00 PM VE3QAR 146.985

SWAP NET: Sundays   7:30 PM VE3QAR 146.985
                     To list an item for sale or swap,
                     contact Jim VE3RTV jimbarb@sympatico.ca

OUTGOING QARC EXECUTIVE: (1999-2000)

PRESIDENT: Dave Ackerman   VE3UGT   962-3991
(e-mail: ve3ugt@blvl.igs.net)

VICE-PRESIDENT: Brian Credico   VE3GRA   966-1546
(e-mail: credico@mercury.kosone.com)

SECRETARY: Peter Hodgson   VA3PKH   962-1386
(e-mail: va3pkh@rac.ca)

TREASURER: Don Dalrymple   VE3DQN   968-9242
(e-mail: ve3dqn@rac.ca - Packet BBS: VE3HQR)

PAST PRESIDENT: Dave Ward   VE3BIP   966-9982
(e-mail: dward@kos.net)

INCOMING QARC EXECUTIVE: 2000-01 (As of July 1, 2000.)

PRESIDENT: Peter Hodgson   VA3PKH   962-1386
(e-mail: va3pkh@rac.ca)

VICE-PRESIDENT: Bill Milligan   VA3WOW   969-7154
(e-mail: va3wow@rac.ca)

SECRETARY: Tim Pekkonen   VE3UO   969-8012
(e-mail: ve3uo@rac.ca)

TREASURER: Don Dalrymple   VE3DQN   968-9242
(e-mail: ve3dqn@rac.ca)

PAST PRESIDENT: Dave Ackerman   VE3UGT   962-3991
(e-mail: ve3ugt@rac.ca)

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          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

          The QARC HAM TRADE CENTRE is also accessible through our
          home page. If you would like to list an item send e-mail
          to: hamtrade@qarc.on.ca

Subject: Semi Annual CARAB meeting in Ottawa.

On April 27, 2000, RAC President Ken Oelke, VE6AFO Co-Chaired the 14th
Meeting of CARAB. In attendance were First Vice President Ralph Webb, VE7OM,
Vice President of Government and International Affairs Ken Pulfer, VE3PU,
Atlantic Director William Gillis, VE1WG, Quebec Director Daniel Lamoureux, VE2KA
 and Jim Dean, VE3IQ. Officials in attendance from Industry Canada were
Darius Breau, Manager of Operational Policies, Radiocommunications and
Broadcasting Regulatory Branch, Tom Jones, Chief, Authorization and Harold
Carmichael, Program Manager, Certificates and Examinations, Quebec Region.

The following were highlights of the meeting:

Industry Canada is to provide an information document outlining the process
for Morse code testing in order that physicians can have a better understanding
of what may constitute a disability.

Industry Canada has asked RAC to prepare a formal proposal, regarding reduction
of Morse code speed from 12 wpm to 5 wpm, for the Department's consideration.

Industry Canada gave an update regarding antenna support structure issues and
suggested that RAC continue to liaise with the Federation of Canadian Municipalities.

The 220-222 MHz sharing agreement with the USA is now signed. A paper interpreting the
agreement has been prepared by Graham Ide, VE3BYT, Chair of the RAC VHF/UHF Band Planning
Committee, and has been posted to the RAC Web Site.

RAC's request for a primary allocation on 2.4 GHz and a VLF allocation on 135.7
to 137.8 kHz, is still under review by Industry Canada.

Although the provisions in Schedule IX of the Contravention's Act apply,
Industry Canada agreed to examine the Radiocommunication and Contravention's
Act Regulations witha view to clarification of the relevant article relating
to address change for amateur stations. As a consequence of this review,
it will be determinedif the inclusion of a specific contravention will
be necessary to address this point.

Guy Charron VA3FZA
Bulletin Editor Radio Amateurs of Canada
Email: va3fza@rac.ca Packet: va3fza@ve2wxk

PSK31

Our speaker David Beach VE3STI gave us an introduction to PSK31. PSK31
is a new way to send text via amateur radio.

Based on an idea by SP9VRC and developed by Peter Martinez, G3PLX a new Amateur
Mode called PSK31 is emerging. Instead of keying using Frequency Shift, FSK,
this mode uses Phase Shift Keying, PSK. It uses an alphabet similar to Morse,
which gives a text speed of about 50-wpm. Our experience to date shows that even
without an error-correcting algorithm, copy is as good as any and better than most
at low signal levels. It is a particularly attractive mode since it requires no lock
condition or handshaking with a second radio station, and roundtable QSO's with
more than two stations can be ejoyed. Since the bandwidth is equal to the baudrate
and the chosen baudrate is 31.25 we can now use a bandwidth of 31Hz and narrow
CW filters can be employed. This is good news because it can work at much lower
signal levels in the crowded digital bands. The normal bandwidth of other modes is
in the order of 300-500Hz. It uses the Sound card of the computer
instead of a TNC and the software can be downloaded from:

     psk31sbw.. ftp://det.bi.ehu.es/pub/ham/psk31/

     psk31sbw.. http://www.aintel.bi.ehu.es/psk31.html

     psk31sbw.. http://www.kender.es/~edu/psk31.html

     psk31sbw.. http://www.n2ty.org

     psk on Linux..http://hul.harvard.edu/~edson/phaseshift.html

The simplest and quickest computer to radio interface is to connect the Line
Output from the Sound Card to the transceiver audio input with a 100:1 voltage
divider to reduce the voltage output, and the Sound Card Line Input to the audio
output of the radio. You can use the VOX to switch from Receive to Transmit. To
setup this arrangement, adjust the sound card output level using the computer
mixer' control until maximum transmit power is reached, and the ALC is just
starting to read. Then tune to a strong carrier and adjust the soundcard-input
gain until the red line goes away as observed on the spectrum display.
(Waterfall indicator) This procedure is covered in
great detail in the PSK31 Help files under "setting up the sound card".

KINGSTON ARES FLEAMARKET

At Glenburnie United Church Hall, 1028 Unity Road, Kingston.
(6Km North of Highway 401 at exits 617 and 619.)

Time: Saturday, June 17th Vendors 07.30 hrs Public 09.00hrs

Admission 2.00 dollars a donation to the church funds. Tables $5.00 dollars for an 8ft.

Talk-in 146.940(-)

Table Reservations: Roy Clarke ve3vjf 613-384-5900 and at ve3vjf@king.igs.net

FIELD DAY 2000

Field Day will be held at the Vanderwater Conservation Area on Hwy 37 just
south of Tweed. If you have any comments, questions or suggestions contact
Dave Vance VA3DGV 962-2198 e-mail dvance@hpedsb.on.ca, or
Tim Pekkonen VE3UO 969-8012 e-mail ve3uo@rac.ca.

It looks like there is going to be a good turnout this year. Please come out even
if you can only stay a short while.

Get 100 bonus points for originating National Traffic System (NTS) style
formal message to your Section Manager or Section Emergency Coordinator by your
group from its field day site. Include the club name, number of participants,
Field Day location and number of ARES operators involved with
your station. The message must be transmitted during the Field Day period and
a fully serviced copy must be included in your submission, in standard NTS format
or no credit will be given.

For complete Field Day rules see May 2000 issue of QST.

REG VARCOE AWARD

This award was overlooked again this year. If you would like to nominate someone
for this award please give your nomination to any of the executive prior to the
start of the next meeting. If there are no nominations at the June meeting and
you think of a possible candidate it can be awarded at the September meeting.

The following are the Rules and Guidelines for the Reg Varcoe Award:

a) This award was instituted by Mr. Reg Varcoe VE3RR (in 1961) to encourage
Amateurs to take part in emergency work, experimenting, or any other activity that
will add to the prestige and pleasure of the Amateur Radio fraternity.

b) The trophy is awarded annually covering the period ending June 30. It is awarded
to the club member or associate member (including officers and directors) who, in
the opinion of the membership, has made the greatest contribution to Amateur
Radio in general or to the Quinte Amateur Radio Club.

c) The trophy may be for outstanding work in any of the following:

     - Emergency service;

- Assistance to members in obtaining their license;

- Pioneering work on unused frequencies or new techniques;

- Traffic handling;

- Or any other outstanding Amateur Radioactivity or service to the community.

d) The award shall be a plaque to which a tab shall be added each year showing the name of the winner, his callsign and the year. The winner may keep the plaque for one year. In addition to the plaque, there will be a subscription for one year to an Amateur publication as selected by the Executive. This subscription will be paid for by the Reg Varcoe Fund.

e) Nominations will be submitted in writing to the Executive, stating the reasons for nomination, and signed by two members or associate members, including officers and directors, of the Club. The winner shall be decided by a ballot of the members present at the May Meeting of the QARC.

QARC / KARC BREAKFAST IN NAPANEE

On Saturday June 3 members of the Kingston and Quinte Radio clubs assembled in Napanee for a combined breakfast at Angie's Restaurant on Industrial Blvd. A good time was had by everyone and it is hoped that this will become a semi-regular event in the future.

Thanks to the Napanee group for acting as host for this event.

The following people attended the breakfast:

VA3KOC Mike - Kingston

VE3GO Ron - Kingston

VA3KGB Chip - Yarker

VE3JPW Warren - Napanee

VA3ERN Ernie - Marlbank

VA3BTM Barb - Marlbank

Megan - Marlbank (Barb's daughter)

VE3IVC Ron - Belleville

VE3VJF Roy - Kingston

VE3FFR Doug - Kingston

VA3WM Willis & XYL - Napanee

VE3UWP Dan - Napanee

VE3VMP Mike - Belleville

VE3YD George - Port Colborne (Mike's brother)

VE3UO Tim - Belleville

VA3PKH Peter - Belleville

VE3CJG / HON Glen & Sandra - Belleville

VE3TQE Bob - Napanee

VE3GSI / HBR Eric & Marlene - Napanee

CANADA UNITED STATES RECIPROCAL AGREEMENT

The following information may be useful to amateurs planning to visit the
United States this vacation season.

Canada and the United States have signed a reciprocal amateur radio agreement.
In the terms of the agreement, amateurs may operate in the host country in
accordance with the rules and regulations of the host country.

Canadian amateurs operating in the USA, have the same privileges as at home
with the following limitations:

 - All operations must be in accordance with FCC Part 97 Rules, and particularly;

 - Amateur operation may not exceed the U.S. band edges [97.301(a)].

 - FCC mode restrictions must be followed [97.305].

There is no need for paperwork or other formalities when exchanging visits
between Canada and the United States. Under the terms of the agreement, the
visitor should give his or her call sign and location, e.g. VE3FRS/W9 or N9CFX/VE3.
However, it is unlikely that anyone would complain if the form VE3/N9CFX were used.

(From the RAC web site) For information about regulations, licensing,
traffic handling, call signs and much more, the RAC website (www.rac.ca)
has it all. Join RAC to access the "members only" pages which give you
even more information.

440 BAND INTERFERENCE

Please be advised that there is a car security alarm (www.compustar2w.com -
Firstech, Inc. an Alaska company, Canadian distributor in Calgary) being sold
that operates on 447.700 MHz as the link between key fob and car. It boasts a range
of a 1/4-mile and can also be used as a remote car starter.

Their use of the ham frequency is legal under Industry Canada RSS-210 and FCC
part 15 due to its low power output. Unfortunately, while the signal strength
qualifies under the specification as unlicensed, it is strong enough to be heard
through my Toronto repeater from random cars in the vicinity of a few kilometers.
Most time of the day or night, the data bursts from one car or another can be heard.

The Compustar device is supposed to be momentary, active only when there are
changes in status or an alarm condition. However, perhaps due to the Korean-English
instruction manual, or inexperienced installers, a few Toronto area firms have
been installing the alarm device miswired so that they transmit continuously while
the vehicle brakes are depressed... for a repeater in a large city, there are
always many cars to be heard. In Toronto, due to dysfunctional traffic patterns,
brake pedal application exceeds throttle application. The Compustar effects
are audibly worst during "rush hour" when most traffic isn't moving.

The interpretation of the alarm's "momentary" nature is the main issue and the way
it can be erroneously installed. While hams can cry fowl about the use of 447.700,
(it really is unfortunate) this isn't an issue according to current regulations.
Firstech/Compustar could have legally picked a public safety frequency too. Rather,
it is how the alarm device shares the frequency (or lack thereof).
Once there are enough of these alarms in existence, the frequency becomes
unusable for incumbent repeater input applications.

FCC documents stipulate:

15.231(a3) Periodic transmissions at regular predetermined intervals are not
permitted. However, polling or supervision transmissions to determine system
integrity of transmitters used in security or safety applications are allowed
if the periodic rate of transmission does not exceed one transmission
of not more than one second duration per hour for each transmitter. and,
15.231(a4) Intentional radiators which are employed for radio control purposes
during emergencies involving fire, security, and safety of life, when activated
to signal an alarm, may operate during the tendency of the alarm condition.

FCC web pages provide the test report on this device (as well as pictures,
schematics, certificate), and list it as compliant. Industry Canada's Toronto
District Office was notified about this interference.
IC inspectors were most helpful, quickly confirming the emissions and
investigating the importer. They noted that the Compustar device has not been
submitted to IC for approval under RSS-210. Its operation in Canada is, at the

time of this memorandum, illegal. Under scrutiny from IC, further importation has been voluntarily ceased by the distributor until the device gains IC approval. However, this is usually a formality. Submission of the FCC lab report often provides all the necessary information for a rubber stamp approval in Canada. The Ottawa certification lab has been made aware of the "momentary" issue and will examine it further.

Once the instruction manual is clarified, and steps are taken by the Compustar distributors to ensure miswiring doesn't occur, this alarm will be granted Canadian approval and will continue to proliferate.

Unfortunately, the damage has been done. Many miswired alarm units are already in the hands of consumers. They will not be removed from service unless they fail....

It follows that with many of these car alarms now on the road, the Toronto Repeater VA3BMC 442.700+ PL 103.5 Hz has been rendered unusable. The repeater has always been PL access, which has hidden the problem until it was unbearable. The Compustar data bursts can be heard between transmissions or competing with a conversation. Repeater sensitivity is affected. Digital emissions don't mix with voice and are annoying. It seems prudent that the long process of requesting a new repeater frequency (in Toronto, there aren't any available..) is undertaken. There are also no guarantees that any other ham frequency may not someday fall prey to such a device.!

Link for more information: http://www.qsl.net/va3bmc/

TREASURER's REPORT
(VE3DQN)

MONTH TO DATE: Revenue

Membership Dues: $100.00

Coffee: $10.05

50/50 Draw: $9.05

Donations to QARC: $0.00

Repeater Move: $1000.00

TOTAL REVENUE: $1119.10

Month to date INCOME: $1047.89

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MONTH TO DATE: Expenses:

Bank Charges:	$8.14
Office Supplies:	$31.24
Newsletter printing:	$20.33
Awards:	$11.50
TOTAL EXPENSES:	$71.21

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YEAR TO DATE: Revenue:

Membership Dues:	$1480.00
Donations to Club:	$66.50
50/50 Draw:	$92.55
Coffee:	$55.74
Repeater Move:*	$2030.00
TOTAL REVENUE:	$3724.79 (TOTAL)
Year to Date: Income:	$2168.52
Cash on Hand:	$3768.31

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YEAR TO DATE: Expenses:

Bank Charges:	$80.19
Post Box Rental:	$77.04
Office Supplies:	$270.71
Newsletter Printing:	$241.75
Door Prizes:	$18.73
Insurance:	$432.00
Donations:	$100.00

RAC Membership: $39.95

Awards $11.50

Cost of parts (Y2K Ant) $284.40

Year to Date: Expenses: $1478.24

QARC Newsletter is edited by Dave Ackerman VE3UGT . (ve3ugt@rac.ca)

Your articles and contributions are welcome !

END QUINTE QRM NEWSLETTER - June 2000.