



# The Monitor



February 2004



## Upcoming Events

- TSRC Meeting Feb. 14, 2004, 9:00am  
EBAs, Hanover, NH
- Milton Hamfest Feb. 28, 2004, 8:00am to noon  
Milton HS, Milton VT
- TSRC Meeting March 13, 2004, 9:00am  
EBAs, Hanover, NH

## TSRC ARRL SWEEPSTAKES- 2004

Once again, a small group of club members met at our home in Strafford to participate in the annual ARRL VHF Sweepstakes contest. This year it ran Saturday and Sunday, January 24 and 25. We worked four bands this year- 6M, 2M, 222 Mhz and 70 Cm. Fortunately, there was some opportunity to improve the antenna situation before the contest, and we were able to erect a second tower on the garage, so that the rear tower had the 2M beams and the new front tower housed the 70 Cm yagi donated by Dave KA1UAG. I was able to move the club tower/trailer on site early and that held the 6 m beam loaned by Mill K1IB. We installed hard-line on the 70 Cm and 6M beams and saw significant reductions in SWR on both. The station setup included 1KW on 6M, thanks to Mike N1JEZ, 300 wts on 2M, thanks to Ken AC1H, 100 wts on 70 CM, thanks to Rex AA1KL, and 75 wts on 222 Mhz, thanks to Chip W1AIM.

We did computer logging on 6M and 2M, being the most active bands and paper logs on 222 and 70Cm. All the data was merged later for submission to ARRL for score.

We noted two differences between this year and last- propagation on 6M and 2M seemed to be down with 6M stations popping in and out at rapid rates during the contest. Also, there seemed to be fewer stations on than last year. The validity of both observations will have to wait for the QST report later this year.

Our claimed score was about 12, 700 with a total of 194 QSOs and 58 grids worked. While we didn't achieve the high scoring of last year, plenty of effort and long hours went into the results. I have to report that the turkey did not survive the contest weekend!! It was a 20 pounder at the beginning and a pile of bones and skin at the conclusion!

## Disclaimer

Opinions expressed in The Monitor are those of the individual authors and do not reflect the opinions or policies of The Twin State Radio Club, Inc.

The contest weekend was very cold with temps in single digits above and below zero and some wind most of the time. Fortunately, we didn't have any antenna problems that required going up towers for repairs. The rotor on the 6M/222 tower acted up some in the extreme cold, but always broke loose after a little persuasion.

Operators included AC1H, WA1ZCN, KU1R, W1AIM, AA1KL, and WB1BRE and Rich W1HZN made the roving contacts. Our thanks to Dot KA1LDS and Mary Ann N1DMW for the meals and coffee and general support. Overall, this was a good contest event and I think that all participants enjoyed the weekend and we can now look forward to the next set of antenna improvements for next year's contest!

73, Bill WB1BRE

## OXBOW EXPOSITION AT RIVERBEND HS.

Each year there is a mid-winter jobs and careers exposition at the Riverbend High School in Bradford, Vermont. We have again been invited to setup a Ham Radio demonstration in the school for this event. The exposition will be Friday, March 5, beginning at 3PM and all day Saturday, March 6. The setup is an HF station and usually a 2M station for contact through the W1FN repeater. We use the club tower/trailer with a club Tribander and 2M antenna mounted with the club rotor. Setup is from 12 noon on Friday with the station in operation by 3PM. This is a great chance to show the public, kids and parents, Amateur Radio in operation and to answer questions about the hobby. We will have some display boards and handouts and a large world map on which we use colored pushpins to show countries with which we have made contact. In addition to operators for the HF station, we need Hams to talk with passing kids and parents about the hobby. If you can help for any part of the event, please contact me at [william.burden@valley.net](mailto:william.burden@valley.net) or 802 333

4623 or on the repeater.

We can use your help even if you can only be there for a couple of hours on either day. This is one of the club's annual public service events to help make Amateur Radio more visible to the general public. (And we have a lot of fun doing it!!)

73, Bill WB1BRE

## Most Wanted Survey Results

The DX Magazine has announced the results of its annual "Most Wanted Survey" which was taken between late September and ended during mid-October of 2003. The total results are published in the January/February 2004 issue of the DX Magazine. Here are the top

10 Most Wanted:

- 1) Scarborough Reef (BS7)      6) Yemen (7O)
- 2) Andaman & Nicobar Islands (VU4) 7) Juan de Nova & Europa (FR/J & FR/E) 3) North Korea (P5)      8) Navassa Island (KP1)
- 4) Lakshadweep Islands (VU7) 9) Desecheo Island (KP5)
- 5) Peter I Island (3Y) 10) Aves Island (YV0)

An expedition to #10 (Aves Island) is expected to be on the air later this year. And, an expedition to #5 (Peter I Island) is expected in early 2005.

73 -- Mill, K1IB

## **PRB-1 Legislation introduced into the Vermont House**

Dear Vermont ARRL Member:

As ARRL Vermont Section Manager and State Government Liaison respectively, we are pleased to announce that we have introduced PRB-1 Legislation into the Vermont House. It is called H.602. PRB-1 is a 1985 FCC ruling that states local zoning ordinances must reasonably accommodate Ham Radio antenna support structures. This was designed to be a guide for all states. So far several states have passed PRB-1 Legislation. In our Bill, we make it clear that we are not talking about telecommunications towers. Rather we explain why we might need an antenna to be above the house in our yard and some of the things that we do for the community.

We need you to contact your local Legislator and ask them to support and/or co-sponsor House Bill H.602. It was introduced recently by Ira Trombley of Grand Isle. Ira is related (by marriage) to Mike Raisbeck K1TWF our Assistant Division Director for New England. It was then referred to the House Local Government Committee. We need to get it out of Committee and onto the House Floor. Rep Trombley has just testified on our behalf in front of the Committee, so things are moving at a fast pace. Time is of the essence because next it has to make Crossover around the middle of the session, and then it's onto the Senate.

We will be sending out a fact sheet about Bill H.602 that we want you to use as a guide. Since attachments cannot be sent via this method, it will be sent separately. When it arrives, please forward it (without headers) to your local Legislator. Next print it out and mail it to them. Follow this up with a nice phone call. Finally, send them a QSL card with a note asking him/her to support H.602. With all the mail that they receive, a QSL card will stand out because it does not look like anything else.

To find your Legislator and all their contact information, go to [www.vermont.gov](http://www.vermont.gov) and click on "How do I Contact My Legislator?". To track the progress of the Bill, click on <http://www.leg.state.vt.us/database/status/status.cfm> and type in H602. From there, you will also be able to see a copy of Bill H602 as introduced. I want to thank Trevor Lewis KD1YT for drafting the Legislation. Trevor is Vermont's only ARRL Volunteer Counsel and has worked very hard to help put this together.

In addition to all of this, a nice thank you note and words of encouragement to Ira would be a good idea too. Here is his info from the web site: Trombley, Ira , 94 Pearl Street, Grand Isle, VT 05458 372-4030 [itrombley@leg.state.vt.us](mailto:itrombley@leg.state.vt.us)

Thank you very much for your help and support in this very important topic. This Bill, by the way, does not cost the state one-cent to maintain and it clarifies the issue so well that it will prevent costly court battles in the future. Our neighboring state of New Hampshire recently went through a costly battle and lost to the Hams. They now have PRB-1 Legislation and things are going much more smoothly there.

73 – Paul N. Gayet, AA1SU  
Section Manager  
[AA1SU@arrl.org](mailto:AA1SU@arrl.org)

David E. Cain, W1DEC  
Section Government Liaison  
[W1DEC@arrl.net](mailto:W1DEC@arrl.net)

## **REASONS TO SUPPORT H.602**

“AN ACT RELATING TO AMATEUR RADIO ANTENNAS

AND EMERGENCY COMMUNICATIONS”

What is Amateur Radio? Amateur Radio is a non-commercial radio communication service. Amateur Radio operators are commonly called hams, and enjoy communicating with others in nearby and far away places, as well as technical experimentation. Hams also provide communications for others at public events and in times of emergency or disaster.

How are Amateur Radio operators licensed and regulated? Amateur Radio operators in the U.S. must pass exams and are licensed and regulated by the Federal Communications Commission (FCC).

How do Amateur Radio operators assist the Public? Hams span all ages and backgrounds. As of October 2003, there were over 683,000 licensed hams in the U.S. and 2,221 in Vermont. Many hams are active in efforts to prepare for and provide communications in times of emergency when other communications technologies, such as telephones, cell phones, or government radio equipment are often damaged or overburdened. Hams can use a wide range of radio frequencies and communications technologies, giving them tremendous flexibility to respond to conditions in times of trouble.

What do Amateur Radio operators need to communicate effectively? Amateur Radio communication depends upon effective antennas. The exact type and size of antenna can vary by location and the intended type of radio operation. As a general rule, it is often important to have an antenna that is as high as possible in relation to terrain and vegetation. Since Amateur Radio is an important for emergency communications, it is important that hams have options to erect antennas that will be effective and allow for many types of communication.

Are Amateur Radio antennas like Cell Towers? Amateur Radio operators cannot charge anyone for any of their services, whereas cell towers are commercial endeavors. Cell Towers are regulated in Vermont under Act 250; Amateur Radio antennas are not.

Why does Vermont need a law on Amateur Radio antennas? As explained below, the federal government has decided that Amateur Radio is important enough that the federal government, through the FCC, has required local governments to “reasonably accommodate” Amateur Radio operators’ antenna needs. But this is not always clear to local governments-- especially with the wide variation among Vermont towns from towns with no zoning to towns with detailed zoning. In some states, including New York and New Hampshire, such a lack of clarity has led to lengthy legal disputes between towns and Amateur Radio operators. More than 20 states (including Maine, New York, Massachusetts, and New Hampshire) have recognized the need to clarify the situation so that the “rules of the road” are clear for both towns and hams, and consistent from one town to another.

What is the federal regulation known as PRB-1? PRB-1 is a 1985 FCC decision that is now part of the regulations governing Amateur Radio. It is a limited federal preemption of municipal land use regulations for Amateur Radio installations. PRB-1 covers only Amateur Radio installations. It does not cover cell phone towers, commercial towers, CB antennas, or any other type of antenna installation. According to FCC PRB-1 regulations, zoning authorities cannot preclude Amateur Service communications, but must “reasonably accommodate” individual Amateur Radio Operator’s communications. Local regulations must be the “minimum practicable regulation” that will accomplish the municipality’s legitimate purpose. H. 602 gives an explanation and application of PRB-1 to fit Vermont.

## H. 602 as introduced

Introduced by: Representative Trombley of Grand Isle

Referred to Committee on:

Date:

Subject: Municipal government; regulatory provisions; amateur radio antennas

Statement of purpose: This bill proposes to prohibit municipalities from adopting ordinances, bylaws, and regulations that do not comply with federal regulation of amateur radio service and antennas. The bill also proposes to require ordinances, bylaws, and regulations that restrict the height of amateur radio antennas reasonably to accommodate amateur radio communications through minimal practicable regulations. The bill proposes a standard for reasonable accommodation of amateur radio antenna heights. The bill would limit the ability of any municipality to review or place any conditions on a proposed antenna or antenna support structure that meets the criteria defined by the bill.

### AN ACT RELATING TO MUNICIPAL REGULATION OF AMATEUR RADIO ANTENNAS

It is hereby enacted by the General Assembly of the State of Vermont:

#### Sec. 1. POLICY

The General Assembly finds that it is the policy of the state of Vermont that amateur radio use and amateur radio antennas and support structures protect and promote the public interest by providing important communications support to both government and the public during times of emergency when other communications infrastructure is disabled or overburdened and by presenting the public with an opportunity for public service, self-training, communication, and technical investigation.

Sec. 2. 24 V.S.A. § 2296 is added to read:

#### § 2296. REGULATION OF AMATEUR RADIO

(a) As used in this section:

(1) “Amateur radio” means the use of amateur radio and amateur satellite radio frequencies and services by qualified and federally-authorized persons of any age who are interested in radio technique without pecuniary interest.

(2) “Antenna” means an array of wires, tubing, or the like used for the transmission and reception of radio waves.

(3) “Antenna support structure” means a structure or framework that is designed to elevate an antenna above the ground for the purpose of increasing the effective communications range and reliability of an amateur radio station. Amateur radio antenna support structures are removable by design and therefore are a removable structure for assessment purposes.

(b) Notwithstanding subdivision 2291(19) of this title, no municipality, town, city, village, or county may adopt or enforce an ordinance, bylaw, or regulation that does not comply with 47 C.F.R. § 97.15(b), or as that subsection may be subsequently amended.

(c) If a municipality adopts an ordinance, bylaw, or regulation involving the placement, screening, or height of amateur radio antennas based on health, safety, or aesthetic considerations, the ordinance, bylaw, or regulation shall:

(1) Reasonably accommodate amateur radio communications; and

(2) Represent the minimal practicable regulation to accomplish the articulated purpose of the municipality.

(d) Reasonable accommodation for amateur radio antenna heights shall be judged from the perspective of a particular applicant for a permit for an antenna structure, and minimum reasonable accommodation shall be presumed to be as follows:

(1) For lots or parcels smaller than one acre:

(A) Except as provided under subdivision (B) of this section, no municipal ordinance, bylaw, or regulation shall restrict the overall height of an amateur radio antenna and associated support structure to less than 75 feet above ground level nor restrict the number of support structures.

(B) In a duly designated design control or historic district, a municipal ordinance, bylaw, or regulation may restrict antennas and associated support structures to overall heights less than 75 feet, but must not prohibit amateur radio antennas and support structures, nor may it limit the overall height of such antennas and support structures to a height less than the highest permissible construction in any other location within such district.

(2) For lots or parcels one acre or larger, no municipal ordinance, bylaw, or regulation shall restrict an amateur radio antenna height to less than that specified in 47 C.F.R. § 97.15(a), nor restrict the number of support structures.

(e) All antennas and support structures shall be located completely on the lot where they are installed unless permission from the owner of an abutting property is first obtained.

(f) Antennas and antenna support structures that comply with this statute are an ordinary accessory use and shall be granted a building permit upon application for that permit. Antennas and antenna support structures shall not be subject to any conditions, special review, or other processes that may be applied on an exception basis to other types of permit applications. In no event shall application or review fees for antenna support structures exceed the fees for residential projects of comparable cost charged to the applicant for the antenna support structure. Owners of amateur radio antennas and support structures constructed prior to the effective date of this section and constructed in compliance with local regulations as then in effect are not required to obtain a permit merely as a result of subsequent changes in regulations. Any antenna or antenna support structure lawful when erected may be repaired or replaced with comparable components without further permits from or undergoing further review by a municipality.

QFH - This frequency is MINE! - go elsewhere.  
QFH? - Is this frequency hogged?  
QHI - I am jumping in quick to say hi, then going QRT.  
QHI? - Are you leaving after only one transmission?  
QLF - I am sending with my left foot.  
QLF? - Are you sending with your left foot?  
QLK - I am sending with my left foot and keyboard.  
QLK? - Are you sending with your left foot and keyboard?  
Contributed by Thom LaCosta K3HRN

QOK - Your last transmission was Okie Dokie.  
QOK? - Was my last transmission OK?  
QPM - Your signal is purr modulated.  
QPM? - Is my signal purr modulated?  
QRC - Warning, rag chewer on frequency.  
QRC? - Are you a rag chewer?  
QRW - Means Qrp - Really Weak  
QRW? - Qrp, you are Really Weak?  
contributed by w0rw  
QWC? - Who cares? } Courtesy of Fred Bonavita, K5QLF  
QWC - I don't care } Courtesy of Fred Bonavita, K5QLF  
QWC - I have to go to the bathroom } Courtesy of Fred Bonavita, K5QLF  
QWC? - Do you have to go to the bathroom? } Courtesy of Fred Bonavita, K5QLF  
QZZ - I fell asleep at the mike.  
QZZ? - Is that a 60Hz hum, or are you snoring?

## Q-signals

Some Q signals have never made it to the ARRL's official list. Here are some that may agree would be useful in appropriate situations. As with regular Q signals, each can be a statement or a question, depending on whether a question mark follows it.

QBA - My antenna is BIG!  
QBA? - How big is your antenna?  
QBO - Don't sit next to that guy in the meeting.  
QBO? - Buddy, can you spare some soap?  
QBS - It's getting deep in here.  
QBS? - Did I tell you about the one that got away?  
QCP - I am using Cat Power (From Rotary Cat Power Wheel)  
Suggestions made for spark gap transmitter on QRP-L mailing list  
QCP? - Are you using Cat Power?  
QCW - I am going to whistle Morse Code on FM (or SSB)  
QCW? - Why are you whistling Morse?  
QDR - Damn Right the frequency is busy!} In response to QRL  
QDR? - Do you have a Receiver?} In response to QRL  
Contributed by Don Melcher = W6ZO  
QET - Phone home.  
QET? - Has anyone called me from another planet?  
QEW - Copy is difficult due to Ear Wax.  
QEW? - Is copy difficult due to Ear Wax?  
Contributed by John L Sielke W2AGN

## Old W1FN QSL Card

Dave Littlewood, W1GN, sent me this QSL card from Forrest Adams, the original holder of the W1FN call. Dave has been a member on and off since the early sixties, and he thinks the club may actually date into the 1920s.

73,  
Dave Colter

**WHITE RIVER JCT., VERMONT** 05001

11 TAFT AVENUE

**W 1 F N**

WINDSOR COUNTY

Radio..... Confirming our QSO..... 19  
at.....GMT. Ur.....Mc. Phone CW SSB Sigs R S T.....  
Xmtr: VALIANT II Rcvr: 75A3  
Pse/Tnx QSL 73, Forrest Adams

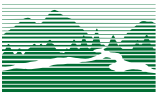
## CLUB OFFICERS

President: Verne Burden N5IEP (802) 295-7533  
vburden57@adelphia.net  
VP: Dave Colter WA1ZCN (603) 526-7120  
dbcolter@rcn.com  
Secretary: Nancy Maynard N1QW (802) 295-6080  
Lensmaam@mindpictures.com  
Treasurer: David Haseman KE1IW (603) 675-2678  
David.B.Haseman@dartmouth.edu  
Trustee: Dave Landry KA1CRP (603) 448-5788  
JDLandry@innevi.com  
Editor: Mike Maynard, K1IH (802) 295-2650  
Lensman@mindpictures.com

## ELECTRONIC ADDRESSES

\*ARRL Website <http://www.arrl.org/>  
\*NH ARRL Home Page: <http://www.nhradio.org/>  
\*Tom Frenaye K1KI-NE Div. Dir. [k1ki@arrl.org](mailto:k1ki@arrl.org)  
\*Al Shuman, N1FIK, NH SM [n1fik@arrl.org](mailto:n1fik@arrl.org)  
\*Dale Drake, AA1QD, NH ACC [aa1qd@arrl.net](mailto:aa1qd@arrl.net)  
\*Paul N. Gayet, AA1SU, VT SM [aa1su@arrl.org](mailto:aa1su@arrl.org)  
Part 97 <http://www.arrl.org/field/regulations/news/part97/>

Don't forget to check the TSRC Home Page!  
Make it your default start page!  
<http://www.w1fn.org>



Twin State Radio Club, Inc.  
PO Box 5078  
Hanover, NH 03755