

Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

NOVEMBER 2002

Vol. 12 No. 11

ARRL, ARES & GEOCACHING The November 12th RANV Meeting

Join us this November as we pack 3 unrelated topics into one meeting! OK, so two are somewhat related. We will actually do the topics out of order by first introducing *Geocaching*, which is the sport of hunting for various treasures called **Caches** only by knowing the **Geographical** location (*also known as Latitude and Longitude*). Four cachers, WE1U, W1SJ, N1PEA and N1BQ have some 75 "finds" between them and will be your guides. To get a taste of Geocaching, we will arrange to have a cache hidden nearby. Bring a GPS receiver, if you have one, a good flashlight and dress warm. One suggestion is that we hide the snacks for the break in the cache. That will motivate everyone! The cache search will be limited to 30 minutes or less.

Next on the agenda, Carl KC1WH, Vermont Section Emergency Coordinator will give a short talk on the Amateur Radio Emergency Service (*ARES*). Many of us know Carl as the guy who organizes the communications for the Vermont City Marathon. For *ARES*, he organizes hams all over the state to respond to communications needs during an emergency. Carl will tell us all how that is done and will likely sign us all up into *ARES*.

Last, but not least, Section Manager Paul AA1SU will give us a quick "state of the Section" address and let us know how the team of volunteers he has put together is getting the job done in Vermont.

Somewhere in all of this, we will find time to meet, share stories and eat goodies. The warm-up for the meeting is Snax-at-Zaks, a **RANV** tradition, starting at around 6PM at Zach's. The meeting starts a 7 PM sharp at the O'Brien Civic Center, 113 Patchen Road, South Burlington.

ELECTIONS

Pursuant to the By-Laws of the **Radio Amateurs of Northern Vermont**, enclosed in this month's newsletter is your ballot for election of officers. Families receiving one newsletter will receive the correct number of ballots.

Nominations for officers come from the membership, or (*much of the time*) people are asked to run. We have found one candidate for each office. However, any club member in good standing, who agrees, can be written in.

Brian N1BQ has agreed to continue as president. Bob KB1FRW has agreed to run for VP/Treasurer and Howie K2MME for Secretary.

Please show your support for our officers by voting. Either bring your ballot to the meeting, vote by E-mail, or immediately mail your ballot.

And remember our motto, *vote early and vote often!*

RANV HOLIDAY PARTY

Mark Tuesday, **December 10th** on your calendar! That is the date of the Gala **RANV** Holiday Party. The Party will once again be hosted by Mitch and Debbie at their Essex QTH. **RANV** will be providing the eats. The menu will be similar to previous years, but some changes will be likely. Our usual caterer, A&P, is gone (*RANV has now closed 6 restaurants and 1 supermarket!*). So, we are open for suggestions from the floor! Activity will get underway at 5:30PM and will include eating, telling tall tales, eating, playing with radios, eating, watching videos and eating. Over the next few weeks please let Mitch know who is coming and what you would like to bring. See you at the Holiday Party!

IN THIS ISSUE...

Class: 11 New Hams

Field Day Results

Repeater News

Fox Hunt Results

Contest Corner

Get Well Wishes

Tower and Antenna

Hello from NY

Official Ballot!

OUR LAST RANV MEETING

by Bob KB1FRW, Sec'y

The meeting started at 7:09. A motion to pay the RANV.ORG domain name dues for 3 years was made by Dave W1DEC, and passed unanimously.

President Brian announced that he was returning to run for President. Bob KB1FRW had agreed to run for VP/Treasurer, and we need a Secretary. The ballots will be in the next (*this*) newsletter.

Brian pointed out that participation in the Steering Wheel meeting had declined over time and he encouraged members to come and share their stories and ideas. This meeting is usually on Wednesday the week after the club meeting at Friendly's in Colchester.

The evening's program was Mike N1JEZ and Henry KT1J, giving us a neat presentation on microwave transmitting and receiving. These are generally the frequencies above 1 GHz including 23cm (1.2 GHz), 13cm (2.3 GHz), 9cm (3.3 GHz), 6cm (5.6 GHz), 3cm (10 GHz) and 1.4cm (24 GHz). The most activity takes place at 1.2 GHz, with 10 GHz also popular due to the inexpensive gear available.

Cost is a big issue in the microwave world as components such as amplifiers, pre amplifiers, waveguide and fittings are very expensive, and a 10 GHz 5-watt amplifier costs \$500! Antennas are focused on to make the most out of the available wattage with gains ranging from 14db (1.2 MHz yagi) to 27 db gain 10 GHz 18" dish).

Equipment design is critical as even the connection leads on commonly used electronic parts affect the transmission of these ultra high frequencies. Surface mount devices are highly favored as they have very short leads. Printed circuit boards have a lot of ground plane built in and connections are made with little pieces of small diameter hard-line. The transmission losses at some of the higher frequencies are so high that the transmission lines are often rectangular metallic tubes called waveguides and the connections are bolted flanges. The assembly of such devices is a mix of plumbing and electronics. Hard line is used on some of the lower frequencies. A complete transceiver consists of an IF radio (*typically a 2 meter rig*), a transverter, a transmit amplifier, a receiver preamp and a T/R relay. Some setups need a sequencer to turn everything on in the correct order to avoid the fatal smoke problem electronic parts sometimes get.

Propagation methods are line of site, bounce, rain and snow scatter and ducting. These methods have produced some amazing distance records such as 1287 miles over land on 1296 MHz and 2574 miles over water. Some activities that take place in the microwave world are contesting, setting distance records and warming coffee.

Mike and Henry showed that you can make a microwave contact all the way across the meeting room and that Brian absorbs microwaves. They brought along a spectrum analyzer to show the actual transmissions and the effects of obstructions.

THE PREZ SEZ

by Brian N1BQ, President

In the past month we have seen the leaves turn, watched frost wither the plants of Spring and Summer, and most of us have seen some snow. Smugglers Notch Road has been closed once by snow already. If it hasn't been done yet, antennas, rotors, guys, associated cables, and ground connections should be checked. Winter usually gives us one trial run before setting in seriously. Tower work is no fun in winter and neither is searching through two feet of snow for a bad cable.

Field day Results are in and RANV was well represented. W1NVT the official RANV entry, was fourth out of 518 entries in class 2A, traditionally the largest entry category, with a score over 11,000. Further, W1MOO, staffed by many RANV members, placed first of 106 in class 5A, with a score over 17,000 points, which was the 6th overall score. The Northern Vermont QRP Society, also with many RANV members placed 12th of 49 in class 3A Battery. Across the board, there were fine performances from three groups of predominantly RANV operators from Northwestern Vermont. It was interesting to note that despite the relatively low ham population in Vermont there were eight Field Day operations around the state which was more than in many more populated states.

The November meeting will feature the annual elections, a presentation of Geocaching, and presentations from Paul, AA1SU in his role as Vermont ARRL Section Manager and Carl KC1WH, the Section Emergency Coordinator on the Amateur Radio Emergency Service (ARES).

Contacting RANV

In Person: Meeting, Nov 12, 7pm,
O'Brien Civic Center
113 Patchen Rd, So. Burlington

By Mail: PO Box 9392,
So. Burlington, VT 05403

By Radio: 145.15 repeater

WW Web: <http://www.ranv.org>

President: Brian N1BQ 899-4527
n1bq@wulfden.org

VP/Tres Debbie W1DEB 863-3698
dstern@zoo.uvm.edu

Secretary: Jeff N1YWB 878-0496
n1ywb@amsat.org

Editor: Mitch W1SJ 879-6589
w1sj@arrl.net

Please send submissions for the newsletter to the editor, W1SJ.

WEEKEND CLASS: 11 NEW HAMSTERS

by Mitch WISJ

For the first time in a long time, the Burlington Weekend Class was quite large. As more and more students were signing up, I was contemplating renovations to the Town Office to fit everyone! Sadly, a number of enrolled students never showed up. We'll get 'em next time!

This class had students from 3 states (VT, NH, NY) and 3 Vermont counties! Three new hams (Kim, Nate and Tim) will be adding to the increasing number of folks who combine the sports of hang-gliding with ham radio. I just operate from the mountaintops – but, they jump off! Other DX students included Heidi, who came up from New Hampshire with friend K1BZZ to get a ham license and to view the foliage. Bob, from over in New York, used to operate the boom on a KC-135 refueling tanker. I'm not sure if ham radio will be as exciting.

Closer to home, literally, Jeff had a short commute – he lives right in back of the Town Office! There were two students from Milton: Jim, a former Chemistry teacher and Enis, a computer science student at UVM. Dick, from South Burlington would be a perfect member – he is located close to meetings!

Two teenagers were in the class – Tony from Cambridge and Evan from Morrisville. Evan, who cannot read due to a handicap, thoroughly inspired everyone with his hard work and commitment. He has been heard on the air on 145.15.

Four students picked up credit for General Element 3. Dave KB1FVA got the General upgrade and is warming up the bands with his Ten-Tec Scout.

The next Weekend Class will be March 22-23 in Essex.

Here are the graduates of the Fall Weekend Class. Be sure to say hello to them on the air!

KB1IWJ	Kim Anderson	So Burlington	Tech
KB1IWK	Jeff Bonn	Essex Jct	Tech & EI 3
KB1IWL	Tim Hoopes	Corinth	Tech
KB1IWM	Nate Hayward	Burlington	Tech & EI 3
KB1IWN	Tony Kmetetz	Cambridge	Tech & EI 3
KB1IWO	Enis Pilavdzic	Milton	Tech
KB1IWP	Heidi Scott	Concord NH	Tech
KB1IWQ	Jim Waters	Milton	Tech
KB1IWR	Evan Yacovone	Morrisville	Tech
KB1IWS	Dick Ziemba	So Burlington	Tech & EI 3
KC2KIY	Bob Corbett	Schuyler Fls NY	Tech+
KB1FVA	Dave Wojcik	Colchester	General

FIELD DAY 2002: UP 4 SPOTS & A TOP TEN FINISH

by Mitch WISJ

The results are out on the Web and RANV and W1NVT had another strong showing. We jumped up from 8th last year to a solid 4th place showing! If we would have finished up the 400 QSO's on the GOTA station and grabbed the bonus we would have had 3rd. Or, another 100 CW contacts would have nailed 2nd. Things to think about for next time. Remember, that is 4th out of 424 stations in 2A! We turned in a tremendous job!

East coast scores were up somewhat – but so were West Coast scores. Locally, the Udder Club, Twin State and CVARC all showed big improvements, while RANV and NVQS showed small improvements. Large changes in score usually means a group made a lot bigger (or smaller effort).

Here is a listing of the Field Day groups in Vermont and nearby. Since it is impossible to compare scores across categories, the place, total number in category and overall percentile is shown to show how each did in their respective category.

CLUB	CALL	CAT	QSO	PTS	#	TOT	PCT
RANV	W1NVT	2A	3883	11342	4	424	.99
Udder Club	W1MOO	5A	5758	17720	1	94	.99
Twin State (NH)	W1FN	4A	4780	15270	4	127	.98
SOVARC	WT1B	3A	2080	5482	51	378	.87
NVQS	N1QS	3Abat	454	3840	12	46	.76
CVARC	W1BD	2A	924	4040	112	424	.74
GMWS	N1VT	2A	1149	3414	136	424	.68
Tesaro (NH)	W1IM	2Abat	437	1654	48	78	.40

REPEATER NEWS

by Mitch WISJ

The new 145.15 repeater has been burning in at its Essex location and has performed flawlessly so far. It is awaiting a ride up to the top of the hill. Unfortunately, the winter weather has kicked in up there, with several inches of snow on the ground and more is expected this week. These conditions will necessitate a change in vehicle from something with wheels (ATV) to something with a track (snowmobile). I am working with the mountain to arrange for transport. We all hope it will be any week now. In the meantime, the antenna connector we fixed last April is acting up again. We may have to send an advance team up to install a new connector.

The IRLP has changed things around on the network. All nodes are now 4 digits. Our new node number is 7230. To call a node, simply enter the node number. To drop a node, enter "73". The repeater does not require an access code for IRLP between 8 AM and 11 PM. Remember to use the 110.9 Hz tone to access the IRLP. In a few weeks, this function will be on the mountain repeater. Check the RANV website for updates on the repeater.

FOX HUNT RESULTS

by John KB1EYC,
Leela KB1EYD and
Leo KB1EZE

This fall's fox hunt ended in triumph for Dan N1PEF. The foxes for this hunt were John KB1EYC, Leela KB1EYD and Leo KB1EZE. It was their first time as foxes and they were anxious to present a challenge. In the days preceding the hunt, they investigated signal propagation from a few different locations and finally settled on a hiding place in the wilds of Winooski. They hid in Hawthorne Park and used a directional antenna turned sideways, placed low to the ground next to an embankment and pointed at a neighboring hill. Previous measurements indicated that the resulting pattern would be highly unsymmetrical. This proved to be the case, but it was no barrier to Dan.

Dan's solution was to begin in southern Chittenden County and drive north along the interstate taking frequent measurements of the signal strength along the way while making careful records. Only an hour after the hunt began he came running breathlessly across the park, HT in hand. An hour later, Bob KB1FRW drove into the parking lot—good thing, too, as the fox was running short of donuts. One more hour to go and Mitch W1SJ, with Debbie W1DEB, looking chagrined, pulled into the parking lot to complete the hunt.

The hunters and the fox then retired to Friendly's for "great food and ice cream, too."

CONTEST CORNER

by Paul AA1SU

This month, I will explain what contests **RANV** can participate in for the ARRL Club Competition. In some of the contest rules for League sponsored contests, we can participate as a club against other clubs similar to our size. This encourages member participation, and hopefully gets more of us on the air. It also gets **RANV** some national recognition. Many of us are YCCC members as well. We encourage you to submit scores in the DX Contest for YCCC, and submit scores for the other ARRL contests (*listed below*) for **RANV**.

Only clubs actively affiliated with the ARRL may participate in the club competition: **RANV** is. For a club to be listed, the following conditions must be met: 1. At least three different entries from members of the club must be submitted. 2. All members wishing to be included must indicate the club name in their log file: RADIO AMATEURS OF NORTHERN VERMONT (*spelled out*). 3. The club secretary must send a list of all club members eligible to compete for the club and which level (*unlimited, medium, local*) they wish to enter for each competition within 30 days after the contest. 4. A member's score must be shown in the contest results to be counted for a club. Only that score shown in the results will count for the club competition.

We are a local club. Here are the rules for a local club: 1. Club submits 10 or fewer entries. 2. One station can submit two entries: one on CW and one on phone (SS and DX). 3. All members must reside and operate within 35 miles of the club's center (*We use Bolton as the club's center*). 4. All members must be "a member in good standing" as defined by the club.

Six ARRL-sponsored contests include an ARRL affiliated club competition: January VHF Sweepstakes, DX Contest September VHF QSO Party, Sweepstakes, 160-Meter Contest, 10-Meter Contest.

If you participate in any one of these contests, and submit a log, I want to know about it. I will include you on the list of club members to the League.

GET WELL WISHES

by Paul AA1SU

This is some information to update you on the health of some hams in the area that you may or may not know.

Ernie Richards N1TNL has acquired Alzheimer's Disease and has been not doing well over the past several months. Ernie is now at The Arbors in Shelburne, and visitors are welcome. His son, Eugene encouraged me to go down for a visit, but warned me that I might not be recognized. I came to know Ernie as President of the Club, and by bumping into him a few times at Garry's Barber Shop in Essex Junction. I never knew him when he was younger and healthier, but in case someone on this list did, I wanted to pass this along. Ernie was active on the HF bands.

Richard's wife Karen was just recently diagnosed with a serious condition. In mid-October, she had a procedure done at the hospital and was home the next day. She is recovering well, Richard tells me. Test results will determine any future treatment. Richard is welcoming phone calls from any well wishers. Richard and Karen were reliable fixtures in **RANV** until recently, when they decided to scale back their ham radio activities. Richard still gets on his HT from home, from time to time, with Karen by his side.

Some of you may have also heard that **John Fowler N1PDV** is seriously ill. He has somehow contracted Legionnaires disease. He has been on full life support and intensive care, but he is now making progress and is expected to recover. John, you may know, was one of the fixtures behind W1B.

Betty Tucker W1OKH has been diagnosed with cancer. Sadly, this is not treatable. A few years ago, Betty, an octogenarian, took up ham radio, the hobby which her late husband Lloyd was active with for years. She has been active on the repeaters.

Please keep these folks in your thoughts and prayers. If you need contact information, Paul or Mitch might be able to help.

OFFICIAL RANV 2002 ELECTION BALLOT

THREE WAYS TO CAST BALLOT:

- Deposit in voting box at start of November 12th meeting
- Mailto **RANV** PO Box 9392, South Burlington, VT 05407 no later than Saturday, November 9th
- E-mail to <ranv@sover.net> no later than noon Tuesday. You must include serial number in E-mail

Write-ins must be: a. Real living person (no cartoon characters)
 b. Member of **RANV**
 c. agreeable to accepting the office

President

- Brian Riley N1BQ
- Write In _____

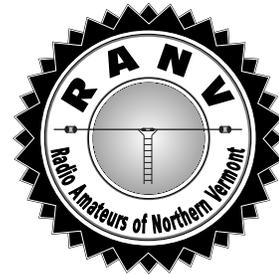
Vice President - Treasurer

- Bob Allen KB1FRW
- Write In _____

Secretary

- Howie Ferber K2MME
- Write In _____

SAMPLE



Vote early and vote often!

ranv _____

TOWER AND ANTENNA NEWS

by Mitch WISJ

As reported last month, **RANV** now owns another AB-577 "Rocket Launcher" mast. A couple of weeks ago, Bob KB1FRW and I ran the mast through its paces. The guy wires were opened up, measured and, in some cases, repaired. The sections were assembled on the ground and adjusted for minimum play. After some finagling, we found a place to erect the tower in my front yard (*not an easy task with the abundant trees*). The mast was raised with the TA-33 yagi used for the CW station at Field Day. This yagi did not function correctly and the traps were rebuilt. The antenna was compared head to head with my A4 at 50 feet and they were neck and neck on all three bands. With this work complete, **RANV** has a solid arsenal of antennas for Field Day and any other events.

HELLO FROM NEW YORK

by Mitch WISJ

Internet radio linking was heavily used this past weekend as WISJ and KB1FRW coordinated on capturing some webcam shots in New York.

I wanted to capture my picture in front of some webcams situated around Times Square. To do this, a computer operator is needed. Also, some communications are needed to set up the shot. I first tried an IRLP repeater in West Orange, New Jersey, but it was just barely keyable from the concrete canyons. There was a closer repeater, but I didn't have the code to access it. I finally had Bob get set up on Echolink. There is a Echolink repeater a few block south of where I was (*a gorilla allegedly climbed up that site years ago*). I gave a call, and there he was! We spoke for an hour while I wandered around Times Square posing for cameras. Now, that's slick!

Echolink is at www.synergenix.com/el.

AA1SU OK AFTER CRASH

On the day we were going to press, Paul AA1SU was involved in a bad auto accident on the Beltline and Plattsburgh Avenue. A northbound left-turning vehicle plowed into the driver's side door of Paul's car, causing major damage. Jaws and cutters were needed to open the car. Paul sustained a large cut to his temple (*12 stitches*) and was otherwise pretty banged up. He was at home resting that evening and promised to be back in action after a few days.

**NEXT RANV MEETING:
“ARRL, ARES & GEOCACHING”
Tuesday, November 12th, 7PM
O'Brien Civic Center**

**RANV OFFICER ELECTIONS
BALLOT IN THIS ISSUE
Vote Early and Vote Often!**

RANV

P.O. Box 9392

South Burlington, Vt 05407

<http://www.RANV.org>