



Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

MAY 2004

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HIGH DEFINITION TELEVISION The May 11th RANV Meeting

For our May meeting, we will learn about *High Definition Television* (HDTV). HDTV is a method to transmit television pictures in much higher definition than the way we have been used to for over 60 years. A U.S. television picture is analog amplitude modulated and consists of only of 525 lines of information with only a quarter million pixels total. Contrast this to the millions of dots on typical computer screen and it's easy to see why a computer monitor will display things much sharper. Digital cameras are even shaper. The standards of HDTV double the number of lines and increase the pixel count up to 2 million. The system is transmitted digitally, meaning that the picture and sound is free from noise. Unfortunately, HDTV requires special equipment for the viewer and a completely new transmitter and frequency for the broadcaster.

Technical personnel from WCAX Channel 3 will present a talk on the details of HDTV. WCAX is ramping up to start broadcasting in HDTV. Presently in our area, there are no HDTV broadcasts and only a limited selection on cable. We will learn all the details on HDTV and digital broadcasting. Don't miss it!

Festivities get underway with Snax at Zacks at 6 PM, followed by the meeting at 7 PM at the O'Brien Civic Center, 113 Patchen Road, South Burlington.

MAY PUBLIC SERVICE EVENTS

Ham operators are still needed. Details on page 4. Volunteer today!

CHARLOTTE HALF MARATHON

Sat. May 8th 8:30-noon

Contact: Paul AA1SU 860-1134
aa1su@arrl.net

ESSEX MEMORIAL PARADE

Sat. May 29th 7:30-noon

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

VERMONT CITY MARATHON

Sun. May 30th 7:00-3:00

Contact: Carl KC1WH 878-8232
kc1wh@arrl.net



Leo KB1EZE working intently on his attenuator at the April RANV meeting

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OUR LAST RANV MEETING

by Dave WIDEC, Sec'y

A brief business meeting preceded what has evolved into the annual RANV Kit Building night.

Jeff, KB1IWK assumed responsibility for one of the more important chores at the upcoming May meeting. He will be sure that the hamsters of RANV are well fed.

A cameo appearance by Brian WB2JIX was enjoyed by many of us who have not previously met him. He's a world jet setter, with trips between homes in Hawaii and Starksboro. His visits are rare events at best. Thanks Brian for joining us, and don't be a stranger at future meetings.

Hosstraders was mentioned briefly for all who are interested in the semi-annual pilgrimage to Hopkinton, New Hampshire starting Friday, April 30th.

Thanks to Ronnie N2GNW, and daughter Stephanie for making the long trip up from North Hudson, New York to meet and join with us. Please come back soon!

The attendance was around 30 people, and included 6 teens and a few non-members. Who said that there are no youngsters in amateur radio?

By general observation, all in attendance were seen to be having a great time building the attenuators. Most were functioning by the time we left and a few were finished the next day. No doubt, fox hunters have stepped up a notch in their hunting skills because of this building project.

Our thanks to Brian N1BQ, Bob KB1FRW and Fran KM1Z for their hard work in putting together the kits for the Active Attenuator building project for our meeting and for other clubs as well.

JULY MEETING

by Brian N1BQ

The July RANV meeting will be July 13th but the time and location will be different. The meeting will be held in Underhill Center at the N1BQ/W1SLR QTH on Harvey Road. There will be a barbecue at 5:30 and the regular meeting will begin roughly at 7.

The meeting will be on the topics of *Geocaching* and *Fox Hunting*. We have presented these topics before, but the larger amount of room will allow for more varied hiding and hunting. We will start with a short overview and then take to the field. The meeting will also be a "Geoevent" and it is hoped that we will have several Geocachers join in on the fun. Several Geocachers have been looking for training in Fox Hunting and several club members have been looking to sharpen their Geocaching skills. Don't forget to bring your GPS and Fox Hunting equipment.

Contacting RANV

In Person: Meeting, May 11, 7pm,
O'Brien Civic Center
113 Patchen Rd, So. Burlington

By Mail: PO Box 9392,
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w1sj@arrl.net

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

THE PREZ SEZ

by Brian N1BQ, President

Spring has sprung - in true Vermont fashion. Last Wednesday, I woke up to an inch of snow on the ground up here at Wulfden Manor, and on Friday when I arrived at Hosstraders it was 87 degrees. And, as if that weren't reminder enough, my wife, W1SLR just came back in with Spenser the wonder mutt with a face full of porcupine quills.

Hosstraders! In my estimation, apparently shared by many, attendance was up from past years. The weather was wonderful, not as hot as the first year when on Friday we baked in the sun. This year was marred only by the black flies who came out with a vengeance at 5 PM for two to three hours. Personally I did rather well finding a number of goodies for myself and for the recent graduates of the scout ham class. We made out mostly with VHF equipment. I am still looking for some HF gear for some of them. If anyone has a spare or older HF rig that they could loan out for two to three months, please contact me.

Field Day is fast upon us. Technicians - the GOTA tent awaits you with a chance to operate HF and maybe to get the bug to upgrade. We will need a full complement of antenna erectors and operators as well. Mitch will be presenting a full list of needs at the meeting.

This month, thanks to Carl AB1DD, WCAX will be at the meeting to give a presentation on High Definition Television. In June, Jack K1VAS, the president of the Vermont Astronomical Society will give a presentation on radio astronomy. And in July there will be a barbecue and field exercises in Geocaching and Fox hunting.

OPERATOR TRAINING FOR EMERGENCIES

Part II – What Are We Training For?

by Mitch WISJ

Technical Coordinator

I'm often amazed that emergency planners have the playbook written for any emergency or disaster. The one thing that is eminently predictable about a disaster is its unpredictability. Before 2001, nobody was planning for jets to hit tall buildings. The next big disaster will likely be something we haven't even conceived. As amateur radio operators, our job is simple. We supply communications wherever and whenever needed. We don't know where or when or even how. We just supply the communications. We are the experts in that.

Amateur radio planning for disasters has been virtually non-existent in Vermont. There have been no widespread disasters in Vermont since the 1927 flood. As radio was in its infancy then, and portable stations were scarce and limited at best, there wasn't much of an amateur radio re-

sponse. Since then, there have been numerous local incidents and annual bouts of miserable winter weather, but that's it. This, of course, is very fortunate, but it has lulled us into a false sense of security. Amateur radio emergency organizations in the West deal with very big and very real disasters like earthquakes, tornados, forest fires and mud slides and most are very capable of providing a quick response. We should be capable too. Not only are floods possible, but so are large fires, damaging earthquakes and even terrorist action.

It is conceivable that in a large scale disaster there would be, for possibly long periods of time, no power, no phone or computer networks and limited ability to travel. Operating conditions could be spartan at best in makeshift shelters or tents with limited food and long operating hours. Operators would certainly have to take care of their own needs and those of their fami-

lies at some point. Tempers would likely be short. Above all, the trained emergency operator would have to be a self-starter and be able to get the job done in spite of the hardships. This is the real thing and it's a far cry from the Walkathons and Fun Runs we are used to serving.

Over the years, the typical Vermont amateur radio emergency communications scenario is something in which the Red Cross is involved in a relief effort and calls upon amateur radio to provide communications. Logistically, this is often easy to set up for, once personnel are alerted and are on the scene. There is nothing wrong with any of this, but amateur operators and leaders are not being trained for large scale emergencies. That is where we should be spending the bulk of our training time since these situations are certainly the most challenging.

“The one thing that is eminently predictable about a disaster is its unpredictability.”

The call up for a disaster is most difficult. First, officials must reach amateur radio leadership. The first problem is establishing who will be contacting whom. In a small emergency, law enforcement and rescue organizations manage the scene. Sadly, amateur radio emergency organizations have very little relationship with police departments and rescue organizations. It is something which needs to be diligently worked on by amateur radio leaders. Next, who are the amateur radio leaders? Is it the ARRL Section Manager, or the Section Emergency Coordinator, or the District Coordinators, or the Radio Amateur Civil Emergency Service (RACES) or is it local radio club presidents. This has been a source of confusion for years and it is crucial that amateur radio speak with one voice during a situation. Finally, in a widespread emergency, we have to assume that power, phone and computer networks will

be disrupted. How do the served agencies reach amateur radio, or do we just go ahead and assemble at some predetermined spot. There are lots of sticky questions here which no one person can give a direct answer. This will take much planning and development of relationships. Amateur radio emergency response requires a lot of politics.

So far, not a single radio transmission has been made! Before the equipment is even installed, the team, management and structure need to be in place. While these things can be put together on the fly in a situation, it is certainly not the most efficient way to go. Building a team is crucial. We all fully appreciate that there are many divergent skills here. The management people are good at managing and politics, but not necessarily good operators. The operators are great at what they

do, but not necessarily good at negotiating relationships with the various agencies. A third group is the technical people who design and build the stations and figure out how to get the impossible done. This caldron of mixed skills has to be finely tuned so that the entire job gets done efficiently.

Homework: There are a plethora of public service events in May and continuing through the summer, including Marathons, road races, walkathons, bike rides and parades. Make sure you volunteer to serve in at least one of them. Organizers are always looking for volunteers. Contact your District Emergency Coordinator to find out details.

Field Day is June 26-27th. Be sure to get involved with a Field Day group somewhere. There is no better to learn the details of setting up a communications system than Field Day. Be sure to share your thoughts on these events via E-mail or on the RANV reflector.

VERMONT CITY MARATHON

by Carl Phillips KC1WH

On May 30th, the 16th annual Vermont City Marathon will be held in Burlington. This 26.2-mile race takes a winding route around the city, ending at Waterfront Park. A team relay race runs simultaneously with the Marathon.

The VCM is a very popular race, voted among the top twenty marathons in the US. Physical limitations of the course necessitate a 5600 runner limit. Previously, runner registration opened and filled within a week or two. This year, a lottery system gave everyone an equal chance to participate.

The Vermont City Marathon has the largest amateur radio team supporting a public service event in Vermont. Two repeaters are used to run controlled nets. Hams provide communication support for aid stations, shadows for race officials, and communications for a variety of other locations. This is a great way to build your proficiency in emergency communications.

Amateur radio operators are needed to join the communications team. The radio gear required is a 2-meter HT and an extra battery. Volunteers get a T-shirt and an amateur radio cap. Please call me at 878-8232, or E-mail to kc1wh@hotmail.com. Have a great time, make some new friends, and use your radio skills!



Sly Fox Paul AA1SU thought he'd fool us with his car cover

ESSEX PARADE

Amateur operators are needed to provide communications for the Essex Memorial Day Parade, on Saturday, May 29th. Amateur operators will serve as Parade Marshals to assure that participants line up in an orderly fashion and march safely down the parade route. Activities get underway at 7:30 AM at St. James Church with a quick meeting to go over parade details. The parade is over by noon. Amateurs will need to have a working HT with spare battery. We are particularly looking for some of the newer hams to take part as this is a easy event and a great way to learn about public service communications. Contact Mitch W1SJ: 879-6589, E-mail:w1sj@arrl.net.

SS RESULTS

The results for Sweepstakes phone are in. As detailed in December *News & Views*, SS in Vermont was a battlefield between WB1GQR KK1L K1KD and K1XX from New Hampshire operating at NT1Y's super station. When the dust had settled GQR was a mere 30 QSO's in front of K1XX - not a lot of breathing room, given that 40-60 QSO's are usually removed by the log checkers. The score order stood up after the log check. Four of the five highest scores in New England were from right here in Vermont and GQR managed to stay in the top ten in the Unlimited category nationally. This despite dreadful conditions which killed us in the north latitudes.

MS WALK 2004

by Brian N1BQ

This year's MS Walkathon saw ten hams led by Bob KB1FRW, provide communications coverage in Burlington. Statewide the Multiple Sclerosis Society simultaneously sponsored ten such events.

Some 200 participants filled a 5-mile course which ran down North Avenue to the Burlington Waterfront and back up the Bike Path. It presented some small challenges in that the Bike Path and Church Street permitted no vehicles except bikes. We operated voice simplex on 146.58 MHz while simultaneously running APRS on 144.39 MHz running on a battery and solar panel. The lead and sweep bicycles and the SAG wagons had GPS tracking. The APRS system permitted Net Control to know where everyone was at all times without having to burden the bicyclists with voice requests. It worked well. Three young new hams did very well in their first efforts.

Vicky, the MS organizer, was very pleased with the efforts and we helped her arrange with Bill W1WAW for a ham presence next year in the St. Albans effort as well.

Thanks to: KB1FRW KB1KVX KB1KVY KB1KVVW KM1Z N1BQ N1LXI N2YHK W1SLR W1WAW.

MARCH OF DIMES WALK

by Bob KB1FRW

A big thank you to all the RANV members who provided communications for the March of Dimes Walk on April 25th. Most had only 12 hours of advanced notice. The participants and their official tactical callsigns were: Paul AA1SU (*birdman*), Bob KB1FRW (*bike mobile again*), John N1LXI (*the donut guy w/the energizer HT*), Kyle KB1JOO (*candyland rest stop*), Johannes KB1JDT (*madmax YoYo*), Jeff KB1IWK (*walkers shouldn't eat cheese doodles*), Leo KB1EZE (*where is dad?*), Moe N1ZBH (*where is North Beach?*) and Ralph KD1R (*net control*).

FOX HUNT RESULTS

by Paul AAISU

I started off picking out my fox hole a few nights before the actual event. It was the night that we built the active attenuators at the last club meeting to be precise. I chose a small dead end street on the back of Water Tower Hill in Colchester (*near Friendly's*). I tried to disguise my car, but I forgot that the leaves were still off the trees when I first visited the site. Once a hunter was in the area, I stood out.

I theorized that with high power (*50 watts*) that my signal would bounce around and be hard to zero in on. I actually did not get to test this theory since I accidentally set the radio to 10 watts. Needless to say, Mitch arrived in 20 minutes. The first thing he said was "Gee you're not running much power are you?" I replied that I was running full power, but after he left, I noticed that it was really on 10 watts. Mitch told me that it would not have made a difference. Oh well.

Meanwhile the other Foxes were circling the county – literally. With the new attenuators on board, I knew that asking people to check in later in the hunt would be hard. This is because you cannot transmit into the attenuator without causing damage to it. So I made an announcement that I wanted everyone to check in with their current location at around 7:55 PM. Kyle KB1JOO started in Colchester and reported that he was in Mallets Bay. Good – at least I was fooling him. John N2YHK started in South Burlington, was later heard in the North End of Burlington, and up towards Milton near the end. Johannes KB1JDT did not give me his location, but he scared me to death because he was full scale on the input, and he said "I think that I'm right on top of you!" It turns out that he was on Nashville Road, which is way out in Bolton. John N1LXI was on West Street, but would not tell me what town he was in.

For reading material, I decided to appease W1DEB's taste for gossip and read items from the *National Enquirer* web page. It was really juicy stuff too, and she thanked me profusely for choosing it over the usual boring radio stuff that Fox's usually read. When I ran out of gossip, I turned to topics such as 160 Meters and *Brass Pounders League*.

I handed out several hints during the night. This was harder than I thought it would be. I did not want to give myself away, but I wanted them to be useful.

Here are the final results:

| | |
|--------------------|---------|
| W1SJ/W1DEB | 20 min |
| KB1FRW | 52 min |
| KB1EZC/D/E | 57 min |
| N1LXI (start 7:09) | 97 min |
| KB1JOO/YL | 98 min |
| KB1JDT | 170 min |
| N2YHK | 180 min |
| N1QKH | DNF |

Be sure to join us for the next Fox Hunt in June, where Mitch will be the crafty and sly fox!

INTRUDERS ON 10 METERS

Intruders continue to be a problem on the 10 Meter band. Over the years, unlicensed operation from Citizen Band operators, fishing vessels and taxis have taken place. Recently, there has been a rash of truckers using 10 meters. Some of the perpetrators have been identified and have been contacted by the FCC. However, the problem is becoming more widespread and the FCC is asking the Amateur Auxiliary for help in identifying the intruders. From FCC Enforcement Chief Riley Hollingsworth: "*We request the assistance of the ARRL Auxiliary in identifying, in a continuing effort, any unlicensed operation in the Ten Meter Amateur Band, whether from business entities including trucking companies, truckers or other individuals operating domestically. We do not request direction finding, but would appreciate, where possible, the names and cities of the operators, trucking company names and license plate numbers and state if from a vehicle.*"

From past experience, most of the useful information about unlicensed ten meter operation has been obtained by people who were mobile. They were close to where the activity occurred and were more able to obtain the needed identification. Most of the activity has been heard while monitoring 28.085 MHz. However, there are a number of other favorite frequencies depending on the location. The FCC has indicated a good location to monitor for this type of activity is near truck stops or rest areas. As always, please use caution and good judgment and avoid any confrontation with suspected unlicensed operators.

When attempting to obtain license information, don't chase vehicles or make repeated attempts to follow. Making more than one attempt puts you in the position of being accused of stalking. Writing down information is the absolute limit of the interaction.

If you witness an intrusion on our bands and are in a position to identify the source, here is the information which will be useful: license plate of tractor and/or trailer, date/time, frequency, mode, language, references to location, CB handle or any other distinguishing characteristics. Remember, do not attempt to chase or harass the operator. Do not contact the FCC. Send a report with all of the information to k0bog@arrl.org or directly to the ARRL.

It is likely that no interference actually emanates from Vermont. However, anything we all can do to identify intruders will work towards getting them legally and safely removed from our bands.

NEXT MEETING:
“High Definition Television”
Tuesday, May 11th, 7 PM
O’Brien Civic Center

RANV

P.O. Box 9392

South Burlington, Vt 05407

<http://www.RANV.org>