



Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

MAY 2005

Vol. 15 No. 5

ACTIVITY NIGHT The May 10th RANV Meeting

The May meeting night will be a smorgasbord of hands-on activities.

Many of us have equipment marked with nothing but the manufacturer's serial number. To remedy that we will have vibrating scribe tools so that you may mark your equipment with your call, name and driver's license number.

There will be computers available with the latest ham radio and related software. Bring your flash key memory if you have one, or a couple of CD's. If you have software to share bring it along too.

We will have sufficient materials to build 3 direction finding beams of the type we made two years ago and at least a few of the active attenuator kits. If this is your pleasure, please contact N1BQ or KB1FRW ahead of time to reserve materials. If you have had some poor performance or breakage of your existing beam this would be a good time to get help repairing it.

We will also have some limited materials for constructing computer interface cables for modes like PSK-31. Please have a schematic of the connections for your transceiver and a connector for your transceiver. We will have a limited supply of cables available for Icom and Yaesu hand held radios for APRS interfacing.

Brian will have several working units and some kits of the various ham oriented microprocessor projects he described in his November presentation.

Materials will be made available at cost. Basic tools will be present, but if you are planning to do some work, it would help to bring some tools from home to ensure there are enough to go around.

ACTIVITIES & FIELD DAY

May and June are loaded with amateur radio activities. Throughout May, we have lots of public service events (*detailed on page 4*). There are hamfests galore, starting with Hosstraders this weekend, and (*if you have lotsa gas money*) Dayton Hamvention, followed by Rochester and Sorel, Quebec. June brings us the VHF QSO Party and finally, the crown jewel of the summer, Field Day, June 25-26th.

It's only 2 months out, but start planning now! Clear your calendar

of all those useless engagements like weddings and family outings. You'll just get fat from all the eating! Then decide what role you want to play at Field Day. Things get so crazy and complex around Field Day time that no one can promise you a coherent answer to any question. However, if you use the next 8 weeks to focus on an activity and learn about it ahead of time, you will enjoy yourself much more. Drop me an E-mail or grab me at a meeting to discuss how you want to have fun!

HOSSTRADERS

Spring is here! We know this because it is time for the *Hosstraders Swapfest*, this Friday and Saturday, May 6-7th. The location is the *Hopkinton State Fairgrounds* in New Hampshire. Take I-89 into New Hampshire and head for the *Exit 7 - Davisville* exit. After getting off, go left under the highway for 0.2 miles and then go right (*Warner Ave.*). The fest will be about a mile down on the left side. The trip is about 2 hours from Burlington.

The fest opens at 9 AM on Friday, May 6th and winds down 1 PM on Saturday. Exams will be given on Saturday at 9 AM. Admission is \$10 Friday before 3 pm, or \$5 afterwards. Sellers pay \$10 additional. There are plenty of hams and goodies on both days of the show.

For communications, use 145.15 MHz into New Hampshire, then 145.33 and 146.895 MHz. At the hamfest, check in on the local 146.67 MHz repeater.

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OUR LAST RANV MEETING

by Carl AB1DD, Sec'y

The April meeting was called to order at 7:05 by President Brian N1BQ. There were 14 members and 1 guest in attendance. Announcements were made about upcoming events including: RANV Fox Hunt Friday April 15th, MS Walk Saturday, April 16th, Hosstraders Hamfest May 6 and 7th and the next RANV meeting on May 10th which will be a construction project.

There was some discussion on the club incorporation project. Dave W1DEC brought up some changes in the wording of the by-laws. There was some discussion on the steps to follow to become incorporated. There were also some concern as to whether incorporating would really provide the liability protection currently believed. Those concerns will be asked of Jeff W1RL. A motion was made by Ed N1UR, seconded by Dave W1DEC to explore and put together the necessary application and paperwork for incorporation, and to allocate \$500 for this purpose. The motion passed unanimously.

The next order of business was to select the refreshment committee for May. The membership unanimously voted Paul AA1SU as the committee of one. Congratulations, Paul.

Ed N1UR gave the presentation this month. His topic was HF Antenna Terrain Modeling. After a brief introduction on antenna radiation patterns, he demonstrated how the terrain around an antenna affected the take-off angle to various parts of the world. It was interesting to note that the antenna height made quite a difference, and higher is not always better. These points were demonstrated with HFTA software. Ed showed the effects of terrain, different antennas on different bands, and part of the world of his stations' antenna array compared to other high end contesting stations. Now we know why these guys do so well!

THE PREZ SEZ

by Brian N1BQ, President

Ham radio is an interesting hobby since it is so multi-faceted. On one hand, like collecting things (*stamps, coins*), model building, cabinetry or gardening, it can be a complete hobby in and of itself. On the other hand, within ham radio we have sub-hobbies like DXing, contesting, rag chewing and so on, all of which can be ever consuming of attention and copious amounts of time.

Volunteerism is a popular pastime among many people. People help at homeless shelters, food shelves and retirement homes. Ham radio wears that face also. For many hams, the primary amateur radio activity is helping to provide communications at public service events and to be ready for any emergency.

But there is yet another facet to the ham radio personality, and it just doesn't seem to get as much attention. Ham radio enthusiasts, not unlike computer hobbyists, have their hobby as a tool to use to augment their enjoyment of other hobbies. The technical expertise that hams acquire in their pursuit of that hobby allows them to experiment in many areas of electronics. It allows them to bring their communications expertise to other areas like, say, radio telemetry in model rocketry. Beyond this more obvious aspect is the simple social aspect of communications; many varied hobbyists meet on the air to discuss their hobbies. I have heard nets discussing stamp

This was an excellent presentation, and everyone learned from it.

Last month's trivia question was answered by Jon, KB1LIE. The answer was *The Federal Radio Commission*. Old timers and AM tube transmitter people will probably get this month's question. *What is meant when you are going to get an 807?* Answer next month.

collecting, scouting, coin collecting, and gardening. I have heard chess and checkers games played on the air as well as role playing games like *Dungeons and Dragons*.

It seems to me that we have overlooked this last aspect of the hobby in our search for new hams to breathe new life into the hobby. Many of us have other hobbies and I wonder how many of us have really thought how ham radio might fit into them. On the one hand our goal as viewed from here is to find new people to bring to ham radio, but it might just as readily benefit ham radio to introduce our fellow hams to our other hobbies. Seeding the other field with more hams brings more exposure to ham radio. It's worth considering.

See you this month at "Activity Night" on the 10th of May. I have built many of the projects I talked about in my microprocessor presentation in November and will have them there to show off and for play. I promise a good show all around, not just my stuff.

Contacting RANV

In Person: Meeting, May 10, 7pm,
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By Mail: PO Box 9392,
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By Radio: 145.15 repeater

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

DISAPPEARING RADIOS

by Mitch WISJ

- ADI AR-147 two-meter radio stolen from vehicle in Richmond, April 2005.

- Kenwood TH79 dual band HT stolen from vehicle in Burlington, November 2004.

If you see or hear about these units, contact me and I'll put you in touch with the owners.

As much as we choose not to believe it, radios are indeed stolen from parked vehicles in our area. The latter radio was stolen with the car parked right in the driveway! If you think that this type of occurrence won't happen to you in Vermont, guess again! Unfortunately, we do play host to a very small number of parasites who have nothing better to do than to rifle through people's stuff. The purpose of this article is for you to learn the steps to take to decrease the chances of these folks making you a victim.

Some say to not put a radio in the car or to take it out whenever you leave. If you do that, you will not have the radio when you need to use it, such as in an emergency. Besides, a ham

transceiver is very inexpensive compared to the cost of the vehicle and it's components (*well, most of our vehicles...*). Keep the radio in the car!

Besides the obvious things you can do, like lock the doors (*how many do that?*), there are some simple safeguards you can take. I call it "plain vanilla". When leaving your vehicle parked somewhere, you want it to look like a "plain vanilla" rental car. That is, one which thieves won't be necessarily interested in. Thieves are probably not looking for ham equipment, as they likely do not know what the term even means. But they are looking for car stereos, CD's, cell phones and any other electronic gadgets they can get quick cash for. Remove all evidence which might indicate you are carrying electronic equipment on board. Fortunately, most thieves do not know what

callsign license plates mean. Strip all antennas off the vehicle. An antenna is like a neon sign saying, "radios here!". If you are parking in a questionable neighborhood, it is a good idea to remove the antenna before parking. Crooks will watch vehicles park and take note of what is going on.

Next, do a peek-a-boo test. Park on a street with typical lighting and peer inside. What do you see? Do you see a nice shiny radio under the dash? If you can see it, so can they. Don't think that by throwing a jacket over the radio that will hide the problem. Unless you are very good at arranging clothing, that is usually a tip-off that something valuable is underneath. This is where you need to get original. When I lived in a high crime district, I used to have a black cover which completely conflagated the radio. Experiment with mounting positions. Often you can find a location where you can

"An antenna is like a neon sign saying, 'radios here!'"

see the radio to operate it, but it cannot be seen very well from the side windows. In a high crime or suspicious area, I completely remove the radio and hide it. Don't use the trunk or glove box, as those are the first places the bad guys look.

Despite these precautions, there are other things you should do. Sometimes thieves just like the look of your car and want to take it for a test spin, even if there is nothing to indicate that anything is inside. If you don't have one, consider installing an alarm system. This would be a low cost system which would make noise when a door is opened. The idea is that when confronted with a loud, ear splitting noise, the thief exits quickly, leaving your stuff intact. However, this only works if you are within earshot of the alarm

and can mitigate the situation quickly. If you become a nuisance and the alarm goes off all the time, your neighbors will eventually trash your car! In New York, alarms are going off every minute. Whenever I hear the unique sound of the one of the more popular alarms down there, I exclaim, "ah yes, the Brooklyn National Anthem!" If your alarm goes off but the thief doesn't care and keeps pilfering, there is not much you can do except stay out of the way. You really don't know how big or ugly he (*or she!*) is and you certainly don't know and don't want to know what kind of heat they are packing, so stay safe.

If you don't have insurance for your ham equipment, consider getting some through the ARRL. Car insurance might or might not cover the radios and will usually have steep deductibles. It costs about \$10 a year to insure a two meter radio. If you get ripped off, don't get sad, as

it is a great excuse to get a brand new radio!

Another common sense item: Don't

announce on the radio where you will be parking your car or when you are going on vacation. Lots of non-hams listen to scanners and might find such information useful.

Your driveway does not exclude you from getting ripped off! It happens all the time. First, if you have a garage, use it! It is completely silly to store a couple of hundred dollars of junk in there and keep the \$20,000 car in the street, where it is not only subject to vandalism but also to the ravages of acid rain and salt. Put the junk in the storage shed, or better yet, haul it away! If you don't have a garage, consider parking the car as close to the house as possible, keep it well lit and make sure it is locked and alarmed. The tougher you make it for crooks to go undetected, the more likely they will move along.

FIRST FOX HUNT OF 2005

by Bob KB1FRW

It was a beautiful spring evening as I set up in the deep little valley that I had chosen and tested a few days before with Moe N1ZBH. The weapons of choice for the night's hunt were a 8-element log period beam, horizontally polarized, and the north-south rock walls of two fair sized hills about 1500 feet high. The plan was to create a difficult target for the hunters that start in the Burlington area to pinpoint. Actually, the plan was to be difficult to pinpoint me in general.

I started the hunt at 6 PM with the roll call, consisting of Paul AA1SU, Jon KB1LIE, Carl, AB1DD & Brian WB2JIX, John K1JCM & Robert W1RFM (*youngest hunter*) and the mystery hunter who never actually signed in but I think might have been Mitch W1SJ and his companion Debbie W1DEB. Well then, the whining started, "you're not S1; I can't hear you, yada yada yada". OK, so I went and checked the equipment and some idiot had the beam pointed the wrong way (*hey, some design idiot had put the feed point on the front!*) so I swung the rotor around the other way and the whiny noises went away. This wouldn't be the only mistake of the evening either. Carl and Brian were using my 2 element tape measure beam and my offset attenuator and I forgot to tell Carl to tune his HT 2 MHz away from the fox's signal (*sure, I "forgot"*).

So there was some rollicking reading from a "How to Ski" book. Did you know breathing is important to skiing? Go figure. This was followed by a story out of *Wooden Boat* magazine (*or maybe the QST stuff was next, who can remember*), somewhere in this great monologue the first clue was released "the loons are beautiful" (*I was near a pond*).

The first hunters arrived at 7:20: Carl AB1DD & Brian WB2JIX. They apparently started a few miles to the east and weren't led astray by the big signal I was pumping into the Winooski River valley.

At 7:36 the second clue, "the first bird of spring" (*I was near Robbins Mountain*) was given away and then again another clue at 8:00: "don't cut yourself shaving" (*next to Gillett Pond*). It took until 8:28 until the next hunters, John K1JCM & Robert W1RFM, arrived. The last clue at 8:15 was, "AB1DD is closest" as he had repeatedly said Huntington when asked for his position and seeing he was standing next to me since 8:20, it was true.

The next 2 hunters were separated by about 30 seconds as the mystery hunter whizzed in at 8:38:15 and Paul AA1SU showed up at 8:38:49. Jon KB1LIE informed us of his retirement from the hunt so it ended at about 8:40 and most of us went to 99 Restaurant in Williston for a late dinner, camaraderie and waitress abuse.

On the way to the restaurant the mystery hunter pointed out the "road closed- residents only" sign that diverted him away from the road I was on. I didn't see it when going there but it turned out to be the final mistake of the evening and considering the timing, W1SJ might have been first, but it would have been close!

Good hunting, it was tough!

PUBLIC SERVICE EVENTS

Charlotte Covered Bridges Half Marathon.

This will take place **Saturday, May 7th** in the morning in Charlotte. Amateur operators will serve as checkpoints, bicycle mobiles and shadows. Activities get underway at 7:30 AM at the Charlotte Central School on Hinesburg Road with a quick meeting to go over route details and locations. Operators will need a reliable mobile setup or high power HT. There is an acute need for volunteers because many of the regulars will be attending Hosstraders that same day. Volunteers get a T-shirt and can stay for barbecue lunch. Contact Steve KB1IVE: 388-3585, E-mail: june24@adelphia.net.

Essex Memorial Day Parade.

This will take place on **Saturday, May 28th** in the morning in Essex. 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 on Route 2A at the Fairgrounds with a quick meeting to go over parade details. The parade is over by noon. Operators will need to have a reliable HT with spare battery. We are particularly looking for some of the newer hams to take part as this is an easy event and a great way to learn about public service communications. Contact Mitch W1SJ: 879-6589, E-mail: w1sj@arrl.net.

Vermont City Marathon.

This will take place on **Sunday, May 29th** in the morning and early afternoon over a complex route throughout the city of Burlington. The Vermont City Marathon (VCM) has the largest amateur radio team supporting a public service event in Vermont. Over the years the VCM Staff has come to rely on amateur radio communications to identify and solve problems all over the course. Two repeaters are used to support the event. Hams provide communication support for aid stations, shadows for race officials, medical personnel 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. There will be an organizational meeting Wednesday, May 25th at the Essex Town Office. Volunteers get a T-shirt and an amateur radio cap. Contact Carl KC1WH: 878-8232, E-mail: kc1wh@hotmail.com.

OLD BUZZARD RADIO

1. – Those Time Signal Stations

by Mitch WISJ

The world of communications is an exciting one. I suspect that it has become so easy to communicate these days that the excitement and fun has all but drained out. From time to time, I'll be offering up some memoirs of my early days of learning about communications and how exciting it was to me in the hope that new people will find similar fun and excitement. Or, you can just view this as filling space in the newsletter with old buzzard stories.

When I was in my early teens, I turned on an old Zenith Trans-Oceanic radio receiver which was sitting around the house. It had been always used as an AM radio receiver, but no one ventured beyond that. One day, I pressed one of those "other" buttons, labeled "41 M" (41 meters) and tuned around.

I stopped when I heard a series of beeps. That sounded interesting! It certainly didn't sound like any song in the Top 40. Then a voice was heard. It wasn't any voice, but to me, it sounded like God. It said some pretty strange things!

"CHU Canada. Eastern Standard Time: 21 hours, 35 minutes."

There was also a foreign voice after that, but I didn't pay much attention, as I quickly checked my watch and found indeed, that it was 9:35 PM.

I later learned that this was station CHU, on 7335 Kilocycles (*we didn't use Hertz back then*), located at the Dominion Observatory in Ottawa, Ontario, Canada. To a kid in New York, the picture of CHU was a radio shack, much in the form of an igloo, not far from the North Pole. I further pictured that there were two

people manning this igloo shack 24 hours a day and they didn't like each other very much. The second "voice", I determined, was in French (*not very easy for someone learning Spanish in school*). Of course, the stereotype which kicked in was of a short guy wearing a beret, who looked like he would be more at home on the Left Bank of the Seine than in a radio room near the North Pole.

CHU, of course, alternates English and French, with the English announcements coming first on the even hours and vice versa on the odd hours. But I could certainly discern the annoyance in Pierre's (*that's what I called him*) voice, because the English guy (*I called him Graham*) got to say "Exactly" first at the top of the hour, while Pierre was relegated to saying "Precise" in French after that. I suspect that in 40 years of man-

"...the picture of CHU was a radio shack, much in the form of an igloo, not far from the North Pole."

ning this igloo radio shack, Pierre and Graham never spoke to one another.

Such were the ramblings of a teenage kid playing with a radio. It doesn't really help to inform me that the voices were actually recorded.

Months later, I found the flagship station of the *United States National Bureau of Standards*, WWV. To find this station, I pushed the 31 M (31 meters) button and finally found WWV at the far end of the dial at 10 Megacycles. Unlike the down-home Canadian feel of CHU, WWV was very much a business-only ap-

proach. Back then, the format was very different than what you hear today. The ID and time announcement were given only every 5 minutes. You had to wait a loooong time to get that time signal. The 5 minute segment was a cacophony of beeps, boops and weird computer tones. Just about the time you were ready to give up listening, you heard this perfect CW emanate from the radio followed by another voice which sounded like God. The CW message went something like this (*practice right along with your code oscillator*):

"WWV WWV 0235 N7"

This was followed by the voice announcement: "National Bureau of Standards WWV, Fort Collins, Colorado. Next tone begins at 2 hours, 35 minutes Greenwich Mean Time".

The N7, I later learned was the propagation forecast. Today, WWV announces every minute, and uses

Coordinated Universal Time in place of *Greenwich Mean Time*. They also announce the location as Boulder, instead of Fort Collins. I'm not sure if they moved, or if the town line was re-drawn.

A real treat was when, very late at night, just before the CW, a female voice was heard giving the same announcement. This was WWVH in Maui, Hawaii, which was considered very rare DX for me! To this day, I'm amazed how they keep the frequency so accurate that you never hear a heterodyne between the two AM signals!

Now that I had the clocks accurately set, it was time to see what propaganda from which country I could pull in. But that story will wait for another time!

NEXT MEETING:
“Activity Night”
Tuesday, May 10th, 7 PM
O’Brien Civic Center

RANV

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South Burlington, Vt 05407

<http://www.RANV.org>