

Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

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AMATEUR FM SATELLITES The May 13th RANV Meeting

The May RANV meeting will find us looking skyward. Not with our eyes, but with antennas. Did you know that there are quite a few satellites up there that are repeaters? Some, such as the International Space Station are on 2 meters. Others have a 70 centimeter downlink and a 2 meter uplink.

What is required to do this? Surprisingly, very little. If the pass is close to overhead, a dual band radio in your car can do it. An HT works also. Want to give it a try? Come to the May meeting where Mike N1JEZ will tell us all about how to use the orbiting repeaters. We might also be able to make a contact! Mike has done a few presentations for us, and we always come away with good information.

For those of us who get hungry, festivities get underway at 6 PM at Zak's Pizza on Williston Road. The meeting will start at 7:00 at the O'Brien Civic Center, 113 Patchen Road. See you there on May 13th.

April Fools: There was no April Issue – it is hidden away in this issue!

HAM RADIO AT SCOUT CAMPOREE

The 2008 Scout Camporee will be held May 9-10 $^{\rm th}$ at the Champlain Valley Fairgrounds in Essex.

A full amateur radio station will be erected, consisting of an AB-577 Rocket Launcher holding up several antennas and two stations in a tent powered by generators and batteries. A second tent will have a 2 meter station and other demonstrations.

Set up is Friday noon until 6. Operations are Saturday 9 AM until 4 PM and take down is after that. Volunteers are needed for all aspects of the operation. The operators on Saturday will have lunch provided by Troop 602 from Shelburne.

This is a great opportunity to attract future hams. Between the Camporee and Summer camp, we will have significant exposure of the world of radio to some enthusiastic young folks.

In parallel with ham radio, the Vermont Guard will be present with a military radio exercise.

Contact John K1JCM at k1jcm@verizon.net if you can provide any assistance during the event.

NEARFEST

Nearfest will be held May 2nd and 3rd (Friday and Saturday) at the Deerfield Fairgrounds in New Hampshire. The show opens at 9 AM Friday and runs until Saturday afternoon. Admission \$10 Friday, \$5 on Saturday, and \$10 to bring a vehicle into the flea market area.

Thursday night camping will be provided outside of the Flea Market area. There will be forums offered on several topics Saturday. A Technician class will run on the grounds and VE Exams will be on Saturday.

To get to Deerfield, head down I-89 to its end at I-93. Go south. After paying the \$1 toll, bear right and stay on I-93. Pay attention, otherwise you will end up on I-293 which is the wrong way! Go a few more miles on I-93 and get off at Exit 7, Route 101 East - Seacoast, Portsmouth. Go 6.3 miles on Route 101 and get off at Exit 3. Route 43 - Candia *Deerfield.* Turn at the top of the ramp. Follow Route 43 for 6.6 miles. Notice a very sharp right turn and then a very sharp left turn. The Fairground is 0.7 miles past the second turn on the right. Follow the antennas! Mileage from Burlington: 176. Coordinates are: 43 05 51 x 71 14 51

Official hamfest talk-in is 146.70 (88.5). Rocking 146.67 Repeat will be on the grounds. In addition several low power FM and AM stations will broadcast all sorts of fester information. Detailed information at: www.near-fest.com.

OUR LAST RANV MEETING

by Carl AB1DD, Sec'y

The April 8th meeting was called to order at 7:00 by President Brian N1BQ. There were 22 members and guests in attendance. There were announcements about upcoming events. May 2nd and 3rd is Near-Fest in Deerfield, New Hampshire. May 3rd is the March of Dimes walk. Ham volunteers are needed. May 9-10th is a Scout Camporee in Essex. Contact John, K1JCM if you can help out. May 24th is the Essex Memorial Day Parade. May 25th is the Vermont City Marathon. Contact Mitch W1SJ if you can help out. June 15th is Girls on the Run. Ham volunteers are also needed. See the RANV website for more on these events.

Jim, KE1AZ graciously volunteered again to provide snacks again next month.

The speaker for next month will be Mike, N1JEZ, talking about FM ham radio satellites.

After a round of introductions, Brian N1BQ briefly showed his new QRP PSK transceiver he just got.

The main event was a talk by Ralph Lemnah who builds regenerative receivers as a hobby. He started off his talk with what got him involved in radio. It started when he was a young boy with not a lot to do. He built a shocking device consisting of a 50:1 transformer, and a vibrator from an old car radio. He would give the victim the wire to hold and would tell them they could hear the radio without headphones. He would then connect the battery, and the unsuspecting radio listener would get a healthy shock instead of hearing the radio. Ralph said since no one was electrocuted, he was successful. He then went on to say he got better training in the military that lead to his radio building. Ralph had some of the radios he built, and demonstrated how they were built and how they worked.

The meeting adjourned to the snack table at around 8:30.

MARCH RANV MEETING

by Carl AB1DD, Sec'y

The March 11th meeting was a little different than usual. It was our first March Movie Madness Meeting. Members started gathering around 6:30 at the usual meeting place. We had piles of free pizza and soda ready to consume. By 7:00 there were 28 members and guests that were pretty well stuffed and President Brian N1BQ officially called the meeting to order.

We then proceeded with a few announcements. The Champlain Valley Computer Club extended an invitation to join them on the Wednesday after our meetings at the same meeting place.

We then discussed the need for a screen to go with our new projector. A motion was made by Jim KE1AZ and seconded by Ron N1LDT to spend up to \$250 for a screen. The motion passed unanimously.

Next, a list of upcoming events was announced. They include the MS Walk on April 25th, the March of Dimes Walk on May 3rd, Scout Camporee on May 10-11th, the Essex Memorial Parade on May 24th, the Vermont City Marathon on May 25th, and Girls on the Run on June 15th.

There was also some discussion on how to publicize ham radio at these and other events, or for a fund raiser by hams.

John, K1JCM spoke briefly about the Scout Camporee. Plans are for a couple of HF stations along with some fox hunting and rocket tracking. Anyone interested in helping can contact John at k1jcm@verizon.net.

Next, we started the popcorn popper and the main event for the evening. That was a showing of the DVD on the Peter I Island DXpedition. The movie was a good balance between radio operation and the "adventure" of doing a DXpedition. The showing was a success, and there are plans for another movie night next year.

The meeting finished up at 9:00.

THE PREZ SEZ

by Brian N1BQ, President

Hamfest season is upon us. NEAR-Fest is this Friday in Deerfield. In Quebec, the Sorel-Tracy hamfest is on Sunday of Memorial Day Weekend. Out in New York, the Rochester Hamfest is the following weekend. Take some time and go to some of them. If you do, strange things may happen - fun may be had, bargains acquired, old acquaintances renewed!

Our April meeting featured a fine presentation on regenerative receivers. The current guru of regenerative receivers is Charles Kitchin, N1TEV. If you go to the net, Google the string "charles kitchin regenerative receiver" and you will be rewarded with a wealth of links to circuits, schematics, parts lists and discourses on theory and design.

Field Day is the last weekend in June (27-29) so keep those dates open. RANV traditionally turns in a high nationally ranked performance. The exchange is simple and it's great experience. No other operating event puts as many hams on the air at once. If you are new to HF operations there will be plenty of hands to help you and get you rolling.

Contacting RANV

In Person: Meeting, May 13, 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 899-4527 N1BQ

n1bq@wulfden.org

434-2517 VP/Tres Bob KB1FRW

mcamp@gmavt.net

Secretary: Carl AB1DD 482-3878

ab1dd@arrl.net

Editor: Mitch W1SJ 879-6589

w1sj@arrl.net

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

MARATHON OPERATORS NEEDED!

by Mitch W1SJ

Wanted: A few good hams!

Despite the obvious play on words, there is a serious need for amateur radio communicators for the *Vermont City Marathon* (VCM) in May. The Marathon is the largest single amateur radio operating event in Vermont. In a typical event, some 45 amateur operators will provide communications support for 8000 runners and 2000 volunteers. These amateurs also preside over the movement of scores of runners to medical facilities. To put it another way: 2% of all the hams in Vermont are involved in this!

However, staffing is getting tough. Many of the VCM volunteers who have been doing this for a long time are moving on to other things. Recruitment has not kept up and the result was that we were seriously short handed last year. We were able to move people around and cover the course, but it was difficult at best. We need new operators!

Why do this? For me, it is a real rush and a load of fun. More importantly, we are providing our unique brand of assistance for many people. And finally, we get to show the entire community what we can do and why we are important.

The VCM is actually three races in one. There is a standard 26.1 mile Marathon, in addition to a 2 and a 3-5 person relay race along the same course. The logistics of staging at the relay exchange points are staggering. In addition, wheelchair racers have been added as well. All of these participants need fluids and other supplies. The first job we tackle is in the supply business. On hot race days, water disappears at an alarming rate and it is a full time job to make sure the supply is where it is needed. Many runners also need some type of medical attention. Each water station is equipped with a medical station. For acute injuries, we call on various types of vehicles to move injured runners to the medical facilities or even to the hospital. Amateur operators are in the medical facilities, at the checkpoints and several are circulating around the course on bicycles looking for situations. We must use bicycles because a third of the course is on the Burlington Bikeway and is inaccessible to cars or trucks.

A unique aspect of the VCM is that certain parts of the course, namely the Burlington Beltline, must be cleared of all Marathon activity by a set time. This means we identify the stragglers, warn them of being shut down and eventually the VCM Course Director pulls them off the course. By 10:30, all people and runners are removed from the Beltline and traffic starts flowing. Each year, it is an amazing set of logistics to pull this off.

If you are interested in participating, there are details you need to know. VCM is held on the Sunday before Memorial Day, which is May 25th this year. Many potential operators have other plans on this holiday weekend, making the recruitment job that much more difficult. Most of the jobs start around 7 in the morning, which means that you will have to figure in your travel time to Burlington to get on post. The jobs end between noon and 2 PM, which does allow for other activities after the event, assuming you are not too tired. The weather on race day can vary from downright frosty with a nasty Northwest wind off the lake to hot and humid. The "layered look" is not a fashion statement, but a reality for course operators who are outside. In addition, you will need to be entirely self-contained, meaning you bring whatever food or drink you require, since these items may or may not be available. And of course, you will need your radio, headphones, batteries, connectors and whatever else.

Operators are required to have a ham radio license and an appropriate 2-meter radio with CTCSS capability. Course operators use handhelds, while vehicle operators use mobiles. All operators are strongly encouraged to have a spare battery, or better yet, a spare radio. Equipment failures are rampant!

For all this effort, you will get an official VCM tee-shirt, an invite to the post race party, invaluable training in public service operations, and all the bragging rights you care to grab.

I need to have a list of operators for the Marathon shortly after you read this in early April. Things get crazy in May and we need to have our staffing sewn up by then.

Are you interested in joining this intrepid group of amateur operators? Contact Mitch W1SJ as soon as possible: w1sj@arrl.net or 879-6589.

PARADE

Not only do we need operators for the Marathon, but we also need operators for the Essex Memorial Parade on Saturday, May 24th. Between the holiday weekend and two public service events on back to back days, getting the staffing needed for both events is challenging.

The Parade is an "easy" job and it very appropriate for a new ham to jump in and learn the ropes. We start at 7 in the morning for a quick orientation and then we move out to the field to organize the parade participants into divisions. The radios are used to inform the reviewing stand of last minute changes. The parade steps off at 9 and then the job is to walk with the division and make sure all remains well. Volunteers in the early divisions can get done by 10, while those who hang in until the end finish up at noon.

Please consider helping out at the Parade. Contact Mitch at w1sj@arrl.net or 879-6589.

WHY THEY CALL IT A TEST

by Paul AA1SU

I had time to participate in the Vermont QSO Party this year. It is nice to hand out the rare state of Vermont in clear conditions. Last year I operated from Mitch's house using the club call WB1GQR, and racked up about 700 some QSOs on a lazy afternoon. That was a lot of fun! This year I am at a new QTH and still setting up various parts of my shack. I've operated in CW, RTTY and phone contests so far.

I've begun to realize why these exercises are called "TESTS". It is because you get to test out your station and your skills in preparation for a real emergency, or even for the next contest. Several things went wrong during the course of this "TEST". The first thing that I noticed was that when I spoke into the microphone, the wattmeter hardly moved. This was at 7 PM on Friday; the start of the QSO Party. I was using a Kenwood TS-2000 and an amplifier putting out about 600 watts.

It keyed up on CW just perfectly, but not much output using SSB. The station was using an MC-60 desk microphone. This combination worked just fine for Barb

KB1LIF at the VHF station for Field Day for 2 years. What could be wrong? I began to recall that during the Ten Meter contest last fall, I got a bad audio report.

So what to do now? I had an alternate rig, an Alinco DX-70, and decided to give it a try. I got on the air on 40 Meters and ran the station for a while. At one point, I asked a guy to give me an audio report on two different microphones, the MC-60 and the stock Alinco mike. He said that the MC-60 sounded better. Was it coming back to life? I went back to that mike for a while. At some point, the MC-60 started to give me intermittent troubles again. Eventually, I found a Heil Goldline microphone and wired it up for the Kenwood.

I happily called CQ on 40 Meters

for a long time, and was having fairly good results. However, my mouth was getting dry. This led to me drinking fluids, which led to me having to void the fluids, which led to me having to do some minor chores because I was up and about anyway. It was then that I recalled that the TS-2000 has a voice keyer built in! I hit the Memory 1 button to see what was there. It was Barb calling CQ Field Day - W1NVT. I think it went out over the air. Oops! I reprogrammed in 3 voice messages, and started calling CQ again. Only now, I could do other things at the desk while the message was going out. I sipped water, straightened up, and read. Things were much more relaxed.

I then switched to 80 Meters and had dismal results. This was odd because I was sure that Mitch was probably running a great rate there. After working only one person, I moved on to 160 Meters. I worked 10

"Several things went wrong during the course of this TEST."

people there and went to bed. At 5:30AM, the cats woke me up for food. I managed to work one more person on 160 before going back to bed again. I later got up, did some chores, and worked 20 Meters for 2 hours. Then it was off to Home Depot for a shift.

That evening, I checked for other contests that were on this weekend. The 10-10 Winter Phone QSO Party was on. I switched to 10 Meters and called CQ. To my surprise, with no sunspots or daylight, I worked six stations in the southeast U.S.

Sunday morning, I checked 10 Meters and quickly moved to 20 Meters and worked some Europe and several southern states. At 9:35, Mitch called me and said that I was "buckshotting" all over the band?

"What did this mean", I asked. I was splattering, and I blamed it on being too close to Mitch. At the time, I was on my homemade 30 Meter Delta Loop that I put up last fall. I did not have too much time on the air with it, but noticed that when I did use it, I would have to turn off my computer speakers across the room because I was getting into them. Something could be wrong here, but I did not worry about it too much, until another incident happened.

Later, I was back on 10 Meters running the 10-10 guys as much as I could. I only worked six people. My wife informed me that someone was at the door. Oh my, who could this be? It was my neighbor who rarely comes out of the house. He immediately asked if I was a ham radio operator. Not good, I thought. He explained that I was interfering with his TV, telephone, and computer. He said that it was now so bad that the person on the other end of the phone

could hear me. We chatted for a short time, and he seemed to know about FCC Part 15 on the bottom of his devices. I told him that I would obviously look into the problem, as I was

quite embarrassed. Nothing like this ever happened at the Malletts Bay QTH.

I went into action and installed two new line isolators that I had purchased a long time ago from Radio-Works. I also dug out a Kenwood Low Pass Filter, but did not put it in line just yet. I turned the computer speakers back on and did some testing. I found that no matter what I did, the Delta Loop was loud into the speakers. My other antenna caused only a trace of sound. This antenna is called the Alpha-Delta DX-LB. It is a 100-foot long wire with 4 coils on it to make it seem electrically longer to the transceiver. Both antennas are up at about 50 feet, suspended from trees.

TEST... continued page 5

HEALTH OF THE HOBBY?

by Ed N1UR

I read with great interest the discussion on the hamfest, the club meetings, and Paul's, AA1SU, overview of the New England Division Cabinet Meeting. I greatly appreciate the work done by Paul as Section Manager and by many of our club members for the hamfests and club meetings. I am truly sorry that I do not have more time to attend most of them. However, I, for one, am a VERY active member of our hobby. Yet, I would be considered a corpse based on some of the dialog and writings of our membership

I believe that the Hobby is not dying. It is changing, and we need to change with it as a club and have done so with many activities but grab on to others with a death grip. I don't believe that this is healthy.

Paul's summary paints a pretty decent picture of our hobby: New England had virtually the same number of new hams in 2007 as 2006. There was an almost 4 times increase in upgrades due to no code on Extra primarily. ARRL membership, a sure sign of truly active hams, is up 65 people in New England. A tiny growth number for sure, but growth is growth, no matter how you slice it. The picture it paints to me is an active group of people that are not dropping away fast and getting disinterested, it's an active group maintaining itself. The question is "how is it maintaining itself?"

Personally, I find the internet and a couple of major hamfests (like Nearfest) plenty for getting bargain stuff. How much stuff do we need? And are we willing to wait until once a year in February to get it when it may be available at any time next week through E-bay, or Eham, or an online retailer? I think the answer that has killed most hamfests is no, most are not willing to wait. Yet, I am very, very active ON THE AIR and building my station. Last I looked, that IS the hobby. Attending flea markets is NOT my hobby.

Where my hobby is active, it is thriving. In contests, virtually every major DX Contest is growing or is stable with log submissions and with QSO counts on the air. This is at the literal bottom of the sunspot cycle. It will no doubt be a record breaker on all sides in 2010-12 when the sunspots start peaking.

Antenna and station building is very active. Check out "on line forums" on the subjects and you would have a hard time reading a couple of month's worth of entries on the various subjects.

DXpeditions are setting new records even this year for number of logged stations and unique call signs worked.

I believe that the many parts of the hobby are doing fine. Unfortunately, hamfests aren't one of them.

On the club meeting side, I believe that RANV does a great job. Sure, meetings are a subset of the club, but every club is that way. I think it might help if we got out of the same routine sometimes. To that end, I would like to offer some help since I am now back from Asia as of April 1. There are 3 meetings between now and Field Day, why not really dig into some operating equipment, antennas and tactics beforehand. I would offer my station as the sites of the May and June Meetings if we want to do some on the air training of operators and work on building the 15 meter and 40 meter CW antennas and maybe even building and designing a 2 or 3 element 20 meter yagi with a "kludge of aluminum" just for fun. I offer it as a suggestion to get "out of the box" if there is interest.

If we want to find good things about our hobby they are there. However if we want to kill it off there is ample fodder. I ask all of our membership after reading this article, "what is my hobby specifically?" And let's renew our efforts, all, to make them active and enjoy them.

TEST... from page 4

So what did I learn from this test?

- 1. I learned that my Kenwood MC-60 microphone has intermittent problems and won't be any good for Field Day in its present condition.
- 2. I learned that I should have had a backup microphone ready to go, so I would not have to look for one in the heat of battle.
- 3. I learned some of the features on my TS-2000 a little better.
- 4. I learned to get the "Honey-Do-List" done during the week before a contest, although I get the feeling that this list does not have an end.
- 5. I learned that I am going to have to take down the 30 Meter Delta Loop and replace it with a coax fed Ten Meter Delta Loop that I will probably put back up in its place.

So this is why the contest is really a test. It is because we get to test everything out, especially our operating skills. For example, when to change bands is always a tough call. However, by keeping notes of each contest on what worked and what didn't, you can improve your station set up each time you operate. Mitch is very good about doing this with our Field Day, and we make improvements every year. Me? I just like to get on and operate.

FIELD DAY

While Paul has us thinking about contesting, it is a good time to plan your schedule for Field Day weekend, June 27-29th. Field Day is much more enjoyable when you have an open schedule and can participate as much as you want without some other demands on your time. Free up the schedule and learn to say "NO" to anyone who wants you do anything else that weekend!

You will have to decide what you want to do at Field Day. We have jobs for both operators and setup/take down people. Contact Mitch W1SJ for details and signing up: w1sj@arrl.net or 879-6589.

NEXT MEETING:
"Amateur FM Satellites"
Tuesday, May 13th, 7 PM
O'Brien Civic Center

RANVP.O. Box 9392
South Burlington, Vt 05407

http://www.RANV.org