



Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

FEBRUARY 2008

Vol. 19 No. 2

RADIO CONTROLLED VEHICLES The February 12th RANV Meeting

This month, we will have a two-part presentation on Radio Controlled (RC) Vehicles. In Part I, Bob K1LAX, an avid RC airplane hobbyist, will fill us in on all the aspects of flying small aircraft. In Part II, Arnie W2HDI, who has been racing RC sail boats for a while, will show us how it is done. Both parts will feature discussions on transmitter and receiver equipment and frequencies used. There will also be some show and tell items to look at as well as some pictures. This should be quite interesting as it includes many aspects of amateur radio integrated with hobbies which are a lot of fun.

We will also have a brief discussion about Milton Hamfest Organization and job assignments.

Things get under just before 6 PM with dinner at Zach's on Williston Road. The meeting will start at 7 PM at the O'Brien Civic Center, 113 Patchen Road, South Burlington. Hope to see you there!

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MILTON HAMFEST 2008

The Milton Hamfest and ARRL Vermont State Convention will be **Saturday, February 23rd**, at Milton High School. Doors open to the General Public at 8 AM and the hamfest closes at 1 PM. Milton High School is on Route 7 in Milton, 5 miles north of I-89 Exit 17. The show will cost you one crisp five dollar bill, an especially great deal in these days of skyrocketing prices. Bring the kids along and they get in free.

This year's focus is "Building HF Activities". We have a whole program of forums and demonstrations geared towards setting up that HF

station, getting on the air and working lots of people. To be successful on HF, one needs a good antenna, and to know what type of antenna you need, you need to know how propagation works. So, we've brought in an expert in both topics. Ed Hare W1RFI of the ARRL Laboratory will kick off our forums at 8:30 with *HF Propagation - How it Gets From Here to There*. How a signal starts at your antenna, bounces off the ionosphere and gets to someone else's antenna can be a rather complicated subject. Ed will have his trusty lap top along to show how

propagation works and how to read and understand propagation predictions. Following at 9:30, Ed will present *Antenna Mythbusters*. Everyone has opinions and stories on how to construct the best antennas. Sadly, many of these anecdotes are stories and myths. Much like the TV *Mythbusters*, Ed will look at many of these myths and aided once again with his lap top and antenna modeling software, he will show you exactly what the antenna will do or not do for you. It will be a real eye opener and help you put up a great station on a budget.

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OUR LAST RANV MEETING

by Bob KB1FRW

The meeting started at 7:00 with 15 attendees. Introductions were made.

Mitch W1SJ asked the club if there was interest to place an ad in the 2008 Vermont Amateur Radio Directory. A motion was made and seconded to spend \$65 on this. The vote passed unanimously.

Carl AB1DD gave a report from the ARRL New England Cabinet meeting that he and Paul AA1SU attended the previous Saturday in Springfield, Massachusetts.

The club voted to allocate up to \$400 for Hamfest expenses.

W1SJ talked about the upcoming Milton Hamfest. He put out a call for volunteers, talked about what people wanted for forums, and discussed running a special event station using a big yagi on mobile tower truck that WCAX donates.

Bob KB1FRW announced that he found and purchased a 16' x 32' military surplus canvas tent for the Field Day GOTA operation. This should take care of the problem of the computer monitors being hard to see and the lack of space; hopefully this won't be any harder to set up than the current tent.

The subject of a video projector came up as the club can't seem to borrow one anymore. It was discussed that a used projector could most likely be had for under \$500. Brian, N1BQ, asked for a motion to allocate \$500 for the purchase of a projector. A motion was made and seconded and discussed. It was decided to spend this money and appoint KB1FRW to pursue the purchase. *The projector was purchased and received a couple of weeks later.*

The main topic was Radio Frequency Interference (RFI) presented by Mitch W1SJ. He discussed 10 different types of interference includ-

THE PREZ SEZ

by Brian N1BQ, President

The hamfest is coming! OK, I said that last month but some people never get the word on the first try. Bodies are needed, see Mitch! As I have said before on many occasions, if you really want to do more hamfesting and less selling, talk to two three other hams and have a joint table, that way you only need spend an hour total at the table probably in half hour sections.

As many of you know we have moved the monthly Steering Wheel (*Directors*) meeting on the third Tuesday of the month to Manhattan Pizza in Essex Junction. It is on Railroad Avenue across and just down from the train station. I haven't heard much about the Pizza, name notwithstanding, but they seem to make great burgers and I can vouch that their Philly Cheesesteak is awesome (*I used to live in Philly so I am an expert!*). This past January, saw the welcome sight of two area hams who came, in addition to the usual cast of suspects (*W1SJ, N1BQ, AB1DD, and KB1FRW*). We for once, had a discussion of future meeting agendas with OUTSIDE input - great! There has always been an open invite to any local ham to come to the Steering Wheel meetings. Let's have more of it!

ing direct interference, intermod, local oscillator and unintentional. He related a story of a person with an illegal cell phone jammer which also jammed a radio station's studio transmitter link (STL), and shut the station down for a minute or two each day. This drove the engineers crazy until they figured out what it was. There were many other examples of interference and how to fix each case.

The meeting ended at 9:00 and snacks were served.

The annual January Vermont Ham Breakfast meeting at Lincoln Inn was well attended and a lot of good ideas were floated. There was a lot of enthusiasm.

We have had some extraordinary weather of late. I should not have to remind anyone about checking for winter wind damage to antenna systems, but with the recent rapid fluctuations of temperature compounded with chill winds, have you looked out to see where wind driven ice/snow melt may have gotten into anything, then refrozen and burst small junction boxes, RF fittings, etc? Have you had any inexplicable SWR readings lately?

See you all at the Hamfest!

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

W1SJ OPERATING EVENT

by Mitch W1SJ

Once again, I opened up the shack to guest operators for the Vermont QSO Party. This year, I even managed to convince a bunch of people to come over and operate.

Getting on HF and making a lot of contacts is challenging. I remember when I first did this a long time ago. As a Novice, I ran a mighty 60 watts to a dipole – all on CW. The separate receiver was awful. Consequently, I spent a lot of time CQing and very little time contacting anyone. A lot of us did that back then. And that is how you learned to make improvements. And there was a lot of incentive to upgrade and get on phone! Early on, I didn't think much about contests. What was the point of saying 59 to everyone? Then, a friend invited me to help him work in the Sweepstakes – from my shack! This had the same effect of shooting up high grade heroin. I was hopelessly hooked. After he gave up, I continued operating. And have continued operating in that contest, without missing a beat, for 37 years. Why do I like it? There is always that challenge to see how many contacts or multipliers I can work this year. It is like any sporting event. You are only as good as your last year's score. And by doing this much operating, you get good – very good!

The idea for the QSO Party open house was to give operators the opportunity to operate from a competitive station with mentoring available the whole time. We do this at Field Day, but that activity is fraught with other issues, such as incredible QRM, noise from our other stations and often, a crowd milling about. In the QSO Party, there is little to no QRM and besides me, no one else is around. And I'll tell you that everyone is quite self-conscious and nervous. After operators demonstrate that they have the basics of listening, speaking and logging down, I leave the room to pursue other matters, and then I can hear

them take off and get into a rhythm. Operating undisturbed is very important for new operators.

The operating schedule consisted of 2 hour blocks at 10, 2 and 4 both days. I would operate for 5 minutes or so to demonstrate what is said, how it is copied and how it gets logged. Then I put the operator in the chair. If I had a heart monitor set up, it would clearly indicate pulse rates soaring past 100! But hey, anything new and challenging will do this; it is part of life. This is why we try new things. At first, I have to help the operator along, with prompts to transmit, or log a certain piece of information. Invariably the operator asks me to tell them what the call sign was, and I always answer, "Ask him, not me!" And so, the new operator will struggle on for 10-15 minutes like this. But then, I am involved less and less, as they figure out what they need to do to copy and log stations. The biggest problem I saw all weekend wasn't the ability to copy call signs, but the ability to listen and type, or talk and type at the same time! It isn't something that many people do, unless they happen to have a job where they talk on the phone all day.

Without warning, I then disappear to check E-mail in the other room. All the time I am listening to the operator to listen for consistency and a rhythm. When I hear a break, I'll check them out, but otherwise, I get busy with other things.

It was interesting to note that even after successfully making a bunch of contacts, some of the operators were in denial over it. The comments heard were, "Oh, I'm no good at this" or, "I'm too slow and messing things up." I responded with, "If you are no good, just how did those last 40 contacts end up in the log?" They respond that the station was responsible for it. Heck, I'll be the first one to tell you, that I take a 30 minute break during a contest to rest, when

I come back, the "station" has not made a single contact! No matter how good the station is, it is a tool only. The operator uses that tool to make the contacts! Oftentimes, the folks who win the contests are the ones who continue to operate at a low rate while the competition gives up and goes to bed.

We can't lose sight of the fact that conditions were awful. Over my years as a ham, I've witnessed 4 sunspot highs and 4 sunspot lows. This year has been the absolute worst conditions I have seen in 39 years. There simply weren't that many stations that could be heard or worked. This produced some interesting results. I would get on and work people very fast, but then have to call CQ a lot. The new operators would be slow in working people, but they didn't have to call CQ as much, because stations were waiting. The result was that my rate was about 45-50 an hour and the rate of the new operators was about 45-50 an hour. Under slow conditions, a slower operator produces the same result as a crack operator.

Despite all of this, the results weren't too shabby: 1000 QSO's and some 108 multipliers, including all states, 40 countries and half the Vermont counties. Two years ago, I had over 2300 QSO's, so that will give you an idea just how far the propagation has fallen. Things will get better!

The operating crew consisted of Phil KB1OOX, who had the highest rate of the group at 61. Phil has a bit of a southern drawl which created the pileup of W4's in the log! Next was Gene W1EBR (ex-KB1OYU), who just wanted to come and look at the equipment and ask questions. I put him to work anyway, running stateside contacts. Bob KB1FRW has a few years of operating experience, but not much at a good station. He was going strong until 3 PM when everything stopped. The amp was

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very hot and I noticed that the SWR was suddenly 10:1. Yes Virginia, Murphy is alive and well, even in Vermont! I hauled out the big tuner, and we ran into the dipole for the rest of the afternoon. Bob still worked lots of people. As it got dark I went up the icy tower (*don't try this unless you get your head examined first*) and chopped the ice from the yagi feed. Everything was back to normal.

Jim KE1AZ took the Sunday morning run and he got assistance from son Alan KB1PNF for the last 30 minutes. Ron NF2O took the noon shift. He has a very deep voice, which would be perfect for a radio personality. He had no trouble getting folks to come back to him, and he copied the calls down quite well. The ones he had trouble with, I did too! Finally, Rob KB1FWU came by for the afternoon slot. He was funny, as he exclaimed, "Oh no, I have to operate?" Well, yes, it is an operating event, after all! And he did fine and worked lots of people in between all of the exclamations how he couldn't do this. Rob operated with me back in the 2004 QSO Party, but sadly, he hasn't been on the air since.

The summary of this activity is that I can train anyone in a short period of time to sit in front of the radio and make contacts and log them efficiently. But this happens only if they want to. The big obstacle is overcoming that shyness or terror to actually do it. You don't make any contacts if you don't get to a working station and call CQ or call someone. What I see is that everyone is in such terror of doing it wrong or failing that they do nothing. This is a tragedy. Do it wrong! And then do your homework to correct it and do better next time. Fail! And then you will eventually succeed! When you mess up on amateur radio, the good news is that people will probably not get hurt or die. Simply use your mistakes as a learning experience to get better. The best operators in the world will tell you fondly how they screwed up when they first started out. That is part of the fun of the hobby.

If you don't have a station or not much of a station, there are ample opportunities to operate. At the Milton Hamfest we will have W1V on the air. Make sure you go there and sign up for a 15 minute slot to operate. We have the GOTA station at Field Day which begs for operators. There are many operating events throughout the year which go by because there aren't enough people to take part. Make your intentions known that you want to operate, and I'm sure folks will call you when they need operators. You worked hard for that license. Now go out and enjoy it instead of worrying about every little thing.

BREAKFAST MEETING

by Mitch W1SJ

The Breakfast Meeting was held Saturday, January, 19th, from 9:00 AM until Noon at the Lincoln Inn in Essex Junction. There were 37 people in attendance, representing 6 Vermont counties and 5 area radio clubs in Northern Vermont. Roughly half attended last year's breakfast. The first part of meeting was spent having breakfast and socializing. The room was set up banquet style, with 8 tables, allowing for easier discussion among groups.

Mitch W1SJ asked each attendee to introduce him or herself by call sign, name and the last time they are on the air. As a lead-in to the discussion topic, Trevor KD1YT read a piece, written by John VE2EQL, entitled, "Rest In Peace - Any Town Radio Club"

The discussion topic was, "How to Build On-Air Activity". The questions initially raised were: Why is activity dropping? Why are new licensees decreasing? How do we build interest and participants? Comments follow.

Contests and Emergencies are what brings folks out. Organize a monthly event along those lines.

Among all contacts, very few are from Vermont. Even Vermont QSO Party has low numbers. Logs from 40 hams received from 2006 QSO Party, but most were for only a few contacts.

Lack of high power and equipment should not be a limiting factor. People need to know how to use their equipment.

It might help new hams if more information was put in front of them so that they know what to do.

People seem unaware of local clubs, of where to find equipment or how to set up a station.

Maybe a hamfest forum on how to mentor new hams?

Produce a one sheet handout for distribution at VE session. It would list clubs and contacts and anything else clubs would like to list. Brian volunteered to produce this.

Various nets could encourage listeners to go out and get licenses. Nets seemed to bring folks out. Good idea to vary the format a bit and not be too strict. Nets great, but then what? After several months, folks get tired of the same old thing and get disinterested in amateur radio. Nets need to move people along to new activities and build on their interest. But, we need to celebrate those who find a niche and stay there, too

Organize a Kid's Net. But, Kid's Nets start off fine, but quickly fade when kids grow up or move on to other things. Should we segregate kids just talking to other kids?

It's intimidating to speak on the air. There is a void - no faces and no audience feedback. Also, being scrutinized is very intimidating. It would be helpful to be directed to an ice-breaker type of net. The friendliness is most important. Old-timers need to stay on too, and we must involve them. First contact should be rewarded with a note or certificate.

Try more repeater and simplex contacts. Drop in your callsign several times and allow time for scanners to lock in.

Loan radios. Clubs can offer free memberships for new hams.

New hams scared off by the idea that "license equals expert". Change the idea to "license to learn".

In summary, some of things we should be doing: Ask hams not on the air, why not? All suggestions above will find a use somewhere. No one solution will cover all bases.

Milton... from page 1

Now that you have your antennas set up, how do you set up the station and operate? For this part, we call on another expert, Mitch W1SJ who will place down his Hamfest General Chairman's hat for 60 minutes while he delivers the forum *How Do You Make All Those QSO's - Be a Better Operator* at 10:30. This talk is similar to one given at Dayton Hamvention each year and will cover all the techniques on how to get on and make contacts, including station layout, how to listen, what to say and how to get it into the log accurately.

The final forum in the HF tract is the *Contest Forum*. Contesting is the most demanding and intensive of HF operating. Being active in contests will train you for just about any situation on amateur radio. And contesting is a lot of fun! Al KE1FO has put together a program which includes a mock practice contest, audio from the 2007 CQWW, discussion of the ARRL's *Logbook of the World* and *Morse Runner* demonstrations.

In our other forum room, we have four programs which cover other amateur radio topics. We will start off with the *ARRL Forum*. Our Director, Vice Director and Section Manager will be on hand to take a look at the state of amateur radio and the American Radio Relay League.

Ever thought about going on a DXpedition to a rare country? We have the forum for you – *Africa or Bust!* at 10:00. John Grow VE2EQL does some traveling and he is planning DXpeditions to Guinea in West Africa and the Dominican Republic in the Caribbean. He has been to these places before, so he has all sorts of pictures and maps and information to get you started. And he has lists of lots of stuff you will need to bring along for that successful operation.

On a more serious topic, John returns at 11:00 with *What To Do Before the Silent Key Award Arrives*.

When you QSY to that heavenly shack in the sky, does your family have any idea what to do with your cherished equipment? Will they get licensed and use it, or will they burn it? This forum takes a humorous look at a serious topic and presents some steps for you to be prepared.

Last, but not least, Brian N1BQ will present *Field Operating*. Brian will give you the lowdown on the various radios, antennas and batteries you need for a successful operation in the Field, be it Field Day, a picnic or a leisurely camping trip along the Winooski.

To put all these HF Forums to good use, we will have our hamfest station W1V set up in the lobby. Plans are underway to build a significant station with a yagi and some power to overcome the flat conditions. This isn't just a demonstration station. Instead it is a "put what you've learned into practice" station. The station will have 15 minute slots for operators of all classes to sign up and operate. Experts will be on hand to help you make the contacts. That should be 16-20 slots, which shouldn't be too hard to fill with a Hamfest of 400+ attendees. Prizes will be awarded for the most contacts, the furthest contact and other categories as we see fit. Make sure you take part in this activity because it will be a lot of fun.

With all these activities, don't forget that we have a Flea Market too! Milton is considered one of the better small Hamfest Flea Markets, so make sure to check out the offerings.

The Hamfest doesn't work if you choose to not come and make excuses. It amazes me that some folks still mention things like, "I forgot" or "I didn't feel like it". Heck, this IS the amateur radio event of the year in Vermont. Your amateur radio religion commands that all good Vermont Hams make an annual pilgrimage to Milton in February despite the quantity of snow forecast. You are also commanded to tell everyone you know about the Hamfest. You have your instructions! See you at the show.

HAM CLASSES

by Mitch W1SJ

The Spring Weekend Ham Class will take place on Saturday, March 8th, at the Essex Town Office. This is a ONE DAY class. Arrive at 8:30 Saturday, take your Technician exam at 6:00 and get your license on Tuesday. It's that easy. But you do need to enroll and show up!

Everyone seems to be looking for a General Class upgrade. We've got just the ticket – a ONE DAY General upgrade class. This is scheduled for Sunday, March 9th after the Technician class. There is also a class in Manchester, New Hampshire, on March 29-30th if that will work better for you. To find out about the Weekend Class, contact Mitch at 879-6589 or at w1sj@arrl.net.

Can't make it to the class dates? Can't leave the house? Interested in Technician, General or Extra? No problem! Try out the On-Line Amateur Radio Course. This course is a lot different than what you think a computer based course is. Each lesson is displayed as an easy to read slide while the instructor (*yours truly*) narrates your journey through the depths of ham radio. There are pictures, graphs, diagrams and even a few anecdotes. If you don't understand something, simply type in a question and the instructor will quickly send your answer back. Or, with prior arrangement, you can even call. Students have taken these courses, and they do indeed work. To find out the details or to take a sample lesson, go to www.hamclass.net.

For the 6th straight year, ham radio attendance in Vermont has dropped. If we all do not talk about ham radio or even talk on ham radio, then how will anyone learn how great our hobby is? Get out there and talk it up. We have the books; we have the classes. Now all we need is the recruits!

NORTHERN VERMONT
WINTER HAMFEST

ARRL VERMONT STATE CONVENTION

MILTON, VERMONT
SATURDAY, FEBRUARY 23, 2008

FLEA MARKET

FORUMS

ACTIVITIES

Tables & Tables of Goodies

New Equipment Dealers

VT Amateur Radio Directory

Tables FREE while they last

8:30 HF Propagation
9:00 ARRL Forum
9:30 Antenna Mythbusters
10:00 Africa or Bust
10:30 Make All Those Contacts
11:00 Before You Join the SK Club
11:30 Contest Forum
12:00 Field Operating

RANV Information Table
Special Event Station W1V
Coffee, Donuts and Sandwiches
Hundreds of Hams to Meet!

ADMISSION \$5 UNDER 18 FREE

TALK-IN:

WB1GQR 145.15- Rptr
W1NVT 146.67 Beacon

DIRECTIONS:

MILTON HIGH SCHOOL, ROUTE 7
I-89 Exit 17, Route 7 NORTH 4 Miles
I-89 Exit 18, Route 7 SOUTH 5 Miles

FOR MORE INFO:

Mitch: (802) 879-6589
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RANV

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NEXT MEETING:
“Radio Controlled Vehicles”
Tuesday, February 12th, 7 PM
O’Brien Civic Center