

# Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

MARCH2008 Vol. 19 No. 3

# MARCH MOVIE MADNESS The March 11<sup>th</sup> RANV Meeting

Join us for our first March Movie Madness night. This also could be titled "Pizza, Peter Island, and Popcorn." We will set up and have the doors to the meeting place open and the pizza hot and waiting by 6:30. We will start the meeting at 7 while you continue to munch. After we take care of some business, we will view a video of the 3Y0X Peter I Island DXpedition. View in awe as we are taken on an exciting trip from the U.S. to the remote island down there near the South Pole. Peter I is one of the most remote places on Earth. See how the team packed their equipment into a semi trailer, then onboard a ship for the journey. Think we set up a lot for Field Day? This will amaze you! Ever tried to set up a tent in 40 to 50 knots of wind? This team had to. How about supper without plates, knives or forks? When the team leader says that the days QSO's were down from the day before (8000), and everyone needs to work harder, will the team rise to the occasion? You might wonder after hearing the CW pile up!

Bring a friend and introduce him/her to the excitement of ham radio. Oh, and just like the movies, there will be popcorn, pizza and soda. The club is picking up the tab. Let Carl, Bob or Brian know if you have any special requests on beverages and/or pizza.

The video is made possible through the Northern California DX Foundation. They help finance DXpeditions like this one and are always looking for donations for the cause.

Since we'll have eats at the meeting, we will forgo Snax at Zax for the night. The festivities start after 6:30 PM at the O'Brien Civic Center, 113 Patchen Road, South Burlington.

### **VE SESSION**

A VE Session will be held following the Weekend Ham Class on Saturday, March 8<sup>th</sup> at 6:00. Candidates must preregister by contacting Mitch.

The General upgrade class will be on Sunday, March 9th. Last call to upgrade. Contact W1SJ for details.

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#### **COMING UP!**

We usually report on upcoming ham events, but we are in the late winter doldrums and there isn't much to report. So, let's take this opportunity to review what is coming up in the Spring so that you can set your calendar accordingly.

We'll start off with Field Day, which is June 27-29th. The Field Day period starts around noon on Friday and ends around 6 on Sunday. This time includes all operating, set up, take down and trucking. Choose the activities you plan to be in and set up your schedule now. It really isn't fun to have to juggle 4-5 other things during Field Day.

Spring is when all the public service events hit. Here is a rundown of the dates:

| MS Walk               | Sat | 4/26 |
|-----------------------|-----|------|
| March of Dimes Walk   | Sat | 5/03 |
| Essex Memorial Parade | Sat | 5/24 |
| Vermont City Marathon | Sun | 5/25 |
| ADA Tour de Cure      | Sun | 6/01 |

We are looking for operators NOW! You don't need experience – we'll train you. It has become difficult to find enough people to participate, especially in the Marathon where over 40 hams are needed.

Contact Mitch W1SJ and your request will be forwarded to the person organizing the event.

Last but not least, Nearfest will be May 2-3<sup>rd</sup>, but most of the regular attendees know this. And if you want the ultimate ham radio rush, Dayton Hamvention is May 16-18<sup>th</sup>.

## OUR LAST RANV MEETING

by Carl AB1DD, Sec'y

The February 12<sup>th</sup> meeting kicked off at 7 PM when President Brian N1BQ called the meeting to order. The first order of business was discussion of the upcoming hamfest in Milton. Mitch W1SJ put out the yearly plea for setup, tear down and people to man various posts around the show. There were enough volunteers to fill the needed positions.

Next were announcements about some public service events in the near future. These included the MS Walk on April 26<sup>th</sup> and the March of Dimes Walk on May 3<sup>rd</sup>. There will be a need for operators.

The March meeting will be a fun evening with a movie with popcorn and pizza.

The subject for this meeting was Radio Controlled airplanes and sailboats. Arnie W2HDI and Bob K1LAX, with the help of Red K1RED put on a great presentation. Bob started off with his part on airplanes. He showed how the controller worked, and explained some of the different types of controllers and the frequencies they operated on. He also had a video about an RC helicopter and the stunts it could do. It was very impressive flying upside down and straight up. Unfortunately, the video ended when the chopper crashed.

Arnie then talked about RC sailboats. He races them at the Stowe Yacht Club in the summer. He showed a news story about the RC club and a race in Stowe. The sailboats only use 2 control channels, whereas as the airplanes use more. It was interesting to find out the small boats follow the same rules as full size sailboats. There are also various class associations just like the big boats.

The meeting adjourned at 8:30. Since there were no refreshments, everyone went home hungry. Brian N1BQ will supply the food for March Movie night.

#### THE PREZ SEZ

by Brian N1BQ, President

Another hamfest gone by! Wall Street condemns any company that doesn't show double digit growth every single year. We, viewing through more realistic lenses, take solace in the fact that we at least hold our attendance at about our previous levels at a time when many hamfests are waning.

I won't try to give a list of names. In that way I won't get myself in trouble for leaving out someone, but the cast of usual suspects was present at Milton High School Friday evening and Saturday afternoon to set up and take down as well help out during the hamfest. You know who you are, stand up and take a bow. Without you it couldn't happen.

I want to thank all of the hams in the region who are not RANV members but who came and supported the hamfest not just with their money, but more importantly with their presence. You all may rest assured that when your hamfests come around so long as I am president I will continue to use my bully pulpit to encourage RANV members to attend them.

I want to thank the vendors who came from afar to sell their stuff. I saw most of the usual suspects there. I spoke to several of them after and once again they seemed satisfied that the trip was worth their efforts.

We'll see you all at the Pizza, Peter Island, and Popcorn meeting on March 11th. Don't forget to let us know what kind of pizza you like.



**KE1FO** operating W1V at Milton

# CANAM WEATHER NET

The CanAm Weather Net meets every night at 9 PM on the Mount Sutton Repeater, VE2RTC on 146.64. It is hosted by the CanAm WXNet Club, formerly known as the Townshippers Amateur Radio Club. It continued the original "Hassell's Weather Net" which was on the Jay Peak repeater many years ago. Steve KB1JKS, Don VE2DIW and Lenny W1LVT alternate as net controllers depending on the night and schedules. The net has a regular following from hams in Vermont, New York and Quebec, with some Echolink checkins. The coverage is excellent, and recent upgrades have made the repeater a pleasure to use. The CANAM group is an informal group of hams, which supports the operation and maintenance of the repeater. You do not have to be a member to check into the net. More information can be found on the web at http://canamwxnet.mikelachaine.ca.

### **Contacting RANV**

In Person: Meeting, March 11, 7pm,

O'Brien Civic Center

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

#### MILTON HAMFEST 2008 REVIEW

by Mitch W1SJ

It was a challenging year to run the Milton Hamfest, but once again, we pulled it off with flying colors. The measurement is the many smiling faces I saw all over the hamfest Saturday. We had a few less vendors this year, with the result that the vendors in attendance did a very brisk business. I heard comments like, "I took the stuff out of the box and it never hit the table."

With the way the planning went, I thought I was going to change the name from Milton Hamfest to Murphy Hamfest. I applied for the space way back last fall. I never received written confirmation, nor do I know what the space will cost this year. I was told that the gym floor was being resurfaced, which is really silly, since we don't use the gym. Without paperwork, I was bit more than uneasy going into this.

About a month ago, Paul AA1SU alerted me that Gene from KJI Electronics opted to go on a cruise in February and would not be coming. That had a noticeable affect on the flea market. Craig from Radio Bookstore would once again not be able to come due to family commitments. The ARRL stopped doing book consignments. The result was that books for sale were scarce.

Tuesday before the show, I spoke to Ed W1RFI, our guest speaker from the ARRL. He mentioned that he was under the weather, but this would be no problem for the weekend. It was. On Thursday, the ARRL informed me that Ed's condition was not better and he would not be able to attend. There are not that many folks at HQ who travel and can give presentations. However, Hamfest coordinator Gail searched and searched and found Chuck K0BOG, who was willing to come up and talk about the OO Program. However, he is not the antenna expert that Ed is. We tried all sorts of ideas to import the talk, but it wasn't going to be. Fortunately, Carl had

the St. Peter I video for the upcoming club meeting and we used that.

And then there was the weather. While we were OK for the weekend, a big storm was moving south of us on Friday and dumped 6-12 inches from New York to Boston. Needless to say, that storm made travel to the hamfest from points south very arduous. John from Quicksilver Radio reported that the normal 4 hour trip stretched out to 7 hours. And on Saturday of the hamfest, we had two hours of flurries. It didn't amount to anything, but it was an unadvertised special. Actually, the fact that the weather service didn't report this activity was good news for us.

So, it is fortuitous that we had a viable show with all these problems.

In the forum rooms, the attendance was a bit off, but the St. Peter video and my talk on antennas and operating drew respectable numbers. The folks who attended the forums really enjoyed them. I really enjoy giving talks – more so than running the hamfest! The new forum rooms are quite a bit more comfortable than the crammed classrooms we used to use.

The W1V Special Event station hummed along all morning. Some 136 contacts were logged by at least 8 operators, although I've heard that many others made cameo QSO's. The yagi and amp gave us a good signal to the West, but it could not be rotated towards Europe. The station appeared to draw a crowd of spectators all day long.

The RANV table was busy all morning long with Directory sales, renewals and answering questions. Chuck set up an ARRL booth and picked up a few new memberships.

The VE session saw 6 upgrades, including 2 new licenses out of 10 applicants. In addition 2 applicants obtained their GROL FCC Commercial license. It was a lot smaller session than last year and all the VE's were grateful!

Everyone asks, "How was the attendance?" I knew it was off. Despite getting old and senile, I can "smell" the attendance numbers at any hamfest. It's simple – look down at the floor and you see empty space. In our heyday, you could hardly walk across the room.

The attendance was 340. I'll be perfectly blunt – that stinks. The last 3 years our attendance has averaged 410. An 18% drop in attendance is not acceptable. And with the drop in attendance and a couple of big vendors missing we had some 14 empty tables in the flea market. Not a good sign. The article on the next page will look at some of my views on the future of this hamfest.

There are tons of thank you's, and I'll try to get everyone in here. KB1FRW arranged for a whole bunch of tables and their transportation up to Milton. AB1DD arranged for the hydraulic lift truck to mount the W1V antenna and he was helped by KB1FRW in the antenna setup. KK1L, AA1SU and KE1FO did much of the W1V station setup and did a fine job mentoring operators. W1DEB, K1CRS and KB1ODP guarded the front door, while AA1SU and N1YD guarded the back door and made sure money was safely collected and put away. W4YFJ, KE1AZ, KB1LIE and KB1LIF did a fine job of taking care of business at the RANV table. The Friday setup crew consisted of AB1DD, KB1FRW, KB1MDC, K1HD and WA1RMS. Thank you to door prize contributors: VE2EQL, K2KJI and ARRL. A big thank you goes out to our Forum Speakers K0BOG, K1TWF, AA1SU, VE2EQL, KE1FO, KK1L and N1BQ. And our Volunteer Exam team consisted of AB1DD, KD1R, KM1Z, KB1FRW, K1HD, N1ARN and N1PEA.

See you all next year.

#### THE FUTURE OF THE HAMFEST

by Mitch W1SJ

Despite all the good news about the hamfest, there is a dark side. The drop in attendance represents an 18% hit. There might be many reasons for this but the plain fact is this: we cannot withstand an attendance drop this big. The show is already small. There are those who would say that the two hours of morning snow flurries chased people away. I won't have that. The fact is that the attendance from New York and Canada was the same as last year and some of those folks travel quite far. The biggest hits to the attendance came from Central Vermont and our own backyard. Geez, there were active hams from down the street who didn't show.

The question becomes, "at what attendance level does it become not worthwhile to do this anymore?" **RANV** used to do a Spring Hamfest in South Burlington. We drew around 300 people and made money, too. However, we decided that it wasn't bringing in the numbers we wanted to see so we ended it. At that time, Milton was drawing over 600 people. Well guess what? We have dropped to the small numbers of that Spring hamfest. Another 2 precipitous drops and we are back at the attendance level of the very first Milton hamfest in 1983. I will be long gone by that point.

With the planning for this hamfest nothing short of gut wrenching, I am seriously asking whether I want to keep doing this when the ultimate result will be that the hamfest will quietly dwindle away. And the answer is that I care not to go down with the ship.

Some will say I'm doing my annual whining. How can I or the staff get excited about this when I hear people say some of the following: "I forgot"; "I felt like sleeping in"; "I had to go to the dump"; "I didn't near anything"? Clearly the hamfest and ham radio have not been all that important to a lot of people. We

see the same problems affecting club meetings, activities and ham classes.

Obviously, I 'm preaching to the choir. Of local **RANV** members, not counting family members, 63% showed up. That's pretty good, although I could ask why that number isn't more like 85%. But since we publish on the web, I am counting on others reading this and considering what our future might be.

To this day, I still hear, "Isn't it a shame they don't hold Charlotte anymore." And my response always is, "You didn't go to Charlotte for its last 5 years, so YOU are the cause!" I did go to every one of those hamfests, even when the attendance was less than a backyard barbecue. I also went to the Central Vermont hamfest in Randolph and saw it dwindle to nothing. Yes folks, hamfests really do fade away.

Why is hamfest attendance failing? It is because ham radio is dying. We are losing hams every day as folks fail to renew their license. The number of new hams is tiny and cannot replace the hams leaving. And in Vermont, there has been a serious exodus of people because of lack of jobs which pay any livable wage. It is really frightening to see how many folks have given up on the hobby, moved away or died over the last 10 years.

And now some really scary statistics. Do you know how many youth (18 and under) attended Milton 2008? TEN. That's it. I asked the ticket sellers and they said that the absence of youth was quite obvious. Folks who brought along family in the past did not do so this year. Has the hamfest become so scary a place that people won't bring the kids anymore? Or have we gotten so boring to youngsters that they will find any reason not to come.

I have decided to give away two hamfest jobs which I hate: *publicity* and *door prizes*, and will do this another year or so. Maybe this was just

# HAMFEST IMPRESSIONS

by Brian N1BQ

Milton Hamfest was quite different for me this year. For the first time I had only a single presentation to do, and not until noon. I was able to get in early and set up to sell my microprocessor related products from a rear corner in the main room. Visually it gave me a grand view, as I only need to lift my eyes a little to see over my customers and take in the whole room. (nice thing about be*ing over six feet tall!)* When the doors opened at 8, I looked up and could see straight down the entrance hallway. They came with smiles and determination. I don't know the actual numbers, but from where I stood, it looked as good as it has been for the last few years.

I saw old faces whom I see regularly at hamfests such as St. Albans, Nearfest and Boxboro. I saw old faces I don't see very often and I saw a lot of new faces. I had at least three new hams with non-ham friends in tow showing their friends all the different kinds of things hams are into.

As some of you may know I have a line of microprocessor related products, mostly in kit form that I have designed and sell. It was heartening to see that my clientele at Milton crossed all lines. Old timers and new timers; those who knew; those who wanted learn and everything in between. This is very satisfying for me. It is nice to see that old and new hams are still interested in building and experimenting.

an anomaly this year and things will bounce back. My gut feeling tells me no. We have done well for a few years, but the forces of nature are simply too strong. We'll see what happens. But as Brian and I and others keep howling that we better support our hamfest, the reality is here. Apathy, even at the smallest level, will kill us. And then folks will be saying, "Isn't it a shame..."

# TUNING FOR MINIMUM SMOKE

by Fran KM1Z

For the past few weeks, there has been an interesting experiment in progress on air. Mike AA1TJ has built and put on the air a transmitter using only tunnel diodes as the active components. It is currently running as a CW beacon on 80 meters during weekends on 3568 kHz at the extremely low power of 120 micro watts, (that's micro, not milli). He has been having regular chats with AA1MY in Bethel, Maine using this transmitter. When running as a beacon, the message contains Mike's call sign and a secret code word. If you copy the word, you get mentioned on his web page at http://mjrainey.googlepages.com/tunneldiodetransmitter.

This experiment interests me for several reasons. One is that something can be learned about propagation by using a signal that you can hear only under the best conditions. For me, this means about an hour or two before sunset or early morning. Another is simply seeing how little power can be used to communicate, the other and perhaps most interesting is the idea of the use of a diode as an amplifier oscillator.

How do you make a diode into an oscillator?

A tunnel diode has the peculiar characteristic of "negative resistance". At certain voltages placed across this type of diode, the current flow will decrease with a small increase in voltage, the opposite of a resistor. This characteristic can be used to amplify a signal. Since an oscillator is just an amplifier with feedback, an oscillator can be built using this device.

The "electron tunneling effect" was discovered by Mr. Esaki, a Japanese physicist. Mike commemorated the 50<sup>th</sup> anniversary of Esaki's paper with a QSO on January 15<sup>th</sup>. Tunnel diodes are becoming scarce, but Mike tells me that Aeroflex/Metelics still lists tunnel diodes in their product lineup. See the website at http://www.metelics.com/pi1.htm#Tunnel.

Some would say that QRP can not always be relied upon for reliable communication, and I agree. I would not try to use low power to check into a traffic net or for emergency communication. In such a situation, it is most important to get your message through clearly. But hams are also allowed and encouraged to experiment.

The real reason for QRP or QRPp, as in this case, may be that it's just plain fun to see what can be done with a very simple set. The transmitter uses only 2 tunnel diodes as active components. Mike also has a receiver constructed using only tunnel diodes and has managed to communicate with other stations using this.

So, give a listen on 3568 kHz for the code word on weekends when the beacon is running from Mike's station in Roxbury, Vermont. Then send him an email at mjrainey@gmail.com. He will put your call sign in the *hall of fame* on his web page. You can see my call sign there . I copied the beacon from Burlington.

You can follow this project and others by subscribing to the QRP list, http://mailman.gth.net/mailman/listinfo/grp-l.

# ARRL CABINET MEETING

by Paul AA1SU

On January 5<sup>th</sup>, I attended the New England Division Cabinet Meeting in Springfield, Massachusetts. It was called by Tom Frenaye K1KI, and Mike Raisbeck K1TWF, the ARRL New England Division Director and Vice Director. I drove down with Carl AB1DD and Jane KD6PCE. There were about 30 people in attendance from all over New England.

Some of the topics covered were the growth of the hobby and attracting new hams. Nationwide, new growth is uneven. New England is pretty much flat (864 new hams in 2007 vs. 882 in 2006) but there were 820 upgrades in 2007 vs. 218 in 2006.

ARRL Membership is growing and is up 4895 from last year; up 65 in New England. There is a lot of work being done at HQ and they have been tasked by the Board to increase the number of new hams to 30,000 per year.

There was a lot of discussion about how to encourage new hams. Getting new licensees on the air quickly is key to retention. Use Elmers, follow up with new hams, and maybe offer free first year club memberships were suggestions.

We also talked about results from the 2007 World Radio Conference. A 138 KHz allocation was agreed upon, and awaiting country action. However, the guess is that the FCC won't give access due to power company usage. No changes are planed for 7.2-7.3 MHz. The 2011 WRC may consider 15 KHz in the 415-526 kHz area.

PAVE PAWS is a radar system on Cape Cod and near Sacramento, California which operates on the same frequencies as the 70 cm ham band. This has affected a lot of 440 repeaters in those areas that have gone off the air because the military is a primary user of those frequencies.

The Red Cross National Memorandum of Understanding with the ARRL has expired. The issue of background checks is still the major stumbling point.

Mary Hobart K1MMH talked about historical work at the League. YASME has contributed \$25K a year for the last 2 years. The ARRL 100<sup>th</sup> anniversary is coming in 2014. It will be the springboard for some major fundraising and program development. The objective is to build an endowment to help guarantee the long term viability of the League.

Upcoming New England Hamfests as well as meeting topics and ideas were also discussed. All in all, it was a very nice meeting.

NEXT MEETING:
"March Movie Madness"
Pizza, Popcorn and a Movie!
Tuesday, March 11th, 6:30PM
O'Brien Civic Center

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http://www.RANV.org