



Radio Amateur News & Views

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LINUX IN THE HAMSHACK The March 11th RANV Meeting

The second presentation in the series "Computers in the Hamshack" will be a talk by Jeff N1YWB at the March meeting entitled, "Linux in the Hamshack" Linux is the name of an operating system. Most of us are familiar with operating systems with names like Windows or DOS. Linux does sort of the same things, but differently. Hey, if you want to know the exact details, you will have to come to the meeting! All of us are Linux users, without even knowing it! If you use the IRLP, you are using Linux. All of the IRLP nodes, including ours, runs on Linux. By contrast, Echolink runs under Windows.

Jeff will walk us through several applications of Linux, including packet, APRS, logging, PSK-31, SSTV and radio control. He will also have some working demos of the program.

So join us on March 11th at 7 PM at the O'Brien Civic Center! Pre-meeting festivities and chowing down will be at Zach's at 6 PM. Arrive early to get a good seat!

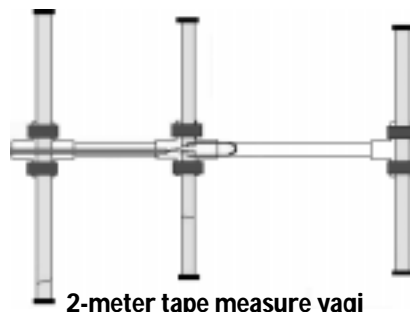
2-METER BEAM CONSTRUCTION PROJECT

by Bob KB1FRW

Next month's meeting on April 8th will feature constructing your own 2-Meter, 3-Element Beam, made from recycled tape measures. This light, portable, collapsible and inexpensive beam antenna is very useful on fox hunts, on mountain tops, at local public service events, outdoors, indoors, in attics and just about everywhere. This antenna was designed by Joe Leggio WB2HOL. It sports a rather impressive 50db front to back ratio, a critical parameter for direction finding. The feed line is RG-58 with a BNC connector. The construction is simple and all materials will be provided for less than \$15. We will also test the antennas

on an MFJ-259 antenna analyzer to verify performance.

It is necessary to sign up for this project by Tuesday, March 11, 2003 (*next meeting*), as time is needed to order enough materials for everyone. If you have questions, contact me at mcamp@gmavt.net.



2-meter tape measure yagi

COMING UP!

The last 5 weeks have been busy, if you are an active hamster. We had a Vermont QSO Party, a pair of DX and 160 Meter Contests, and, of course, the Milton Hamfest. Things will quiet down briefly and then the activities will start up again!

March 22nd is the Weekend Ham Radio Class. There is still time for some latecomers to jump in and get their ham licenses.

Make sure you leave Tuesday, April 8th clear! That will be our annual Construction Night. Our mission is to build a bunch of portable (*and working!*) 2-meter yagis. See the article on this page for details.

Our first Fox Hunt of the year will be Friday, April 18th. Dan N1PEF will be the master of ceremonies and you all will have a chance to test out those newly constructed yagis.

And that brings us to May 2-3rd - Hosstraders! And Spring. We all hope!

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Welcome to RANV

OUR LAST RANV MEETING

by *Howie K2MME, Sec'y*

In total, 34 energized hams braved the very frigid weather on a promise of Sara's brownies and a treatise on IRLP and Echolink by Mike KB1FUV. Brian stressed the nearness of the 21st Milton Hamfest and the need for live bodies. We were reminded of the significance of Milton in the history of the toothbrush. The April 8th meeting will be a construction project affair with the building of a 2-meter beam from measuring tape. Nine people showed their interest. The cost will be around \$10 each. Contact N1BQ before then if interested.

The program for the evening discussed the hot current trend of combining ham radio and computers in actual QSO modes. Mike had first described IRLP at a meeting in April, 2002. After brief review, he launched into the actual daily operation. First, you need a 100 Hz subaudible tone on your signal to access the repeater. You first must identify yourself or the presence of any DTMF tones will cause the terminator (*control operator*) to swoop down and make you go away. Due to various link delays, you must leave adequate time between transmissions or speech will be lost. Since many systems can be combined, proper etiquette should be observed. Interestingly, rules do not actually cover this type of communications yet. They will be evolving with the technology.

The club got a real chuckle when the N6SEX node was brought up. No QSO was made but the sultry voice on the identifier sure got our attention. Johannes KB1JDT brought up a node in Nuremberg, Germany and had a QSO with DJ2KWO at 3 AM his time. The Trinidad node found nobody home. The next connection was made to the Western reflector in Las Vegas. It brought Doug KL7M in Anchorage where it was 41° (*we at -12°*). Then, Carter KH6FV joined in (81°) and the battle between the 49th and 50th states commenced. Alaska boasted 50 pound

THE PREZ SEZ

by *Brian N1BQ, President*

I have always thought of the Milton Hamfest as the gateway to Spring. Situated on the last Saturday in February, it has always coincided with the Vermont school vacation break. There have been no hamfests since October. Milton is the perfect place for hams from across the North Country to get together at the end of an often long winter.

Attendance this year was at the low end of recent attendance figures. It was not bad but it surely wasn't good. Shooting from the hip, the miserable weather forecast for Saturday afternoon seems like an easy scapegoat, but a more than casual glance around would have revealed that ninety percent of the familiar 'DX-attendees' were there. Missing from the cast of characters were a goodly number of local hams. The support of local hams is paramount to the continuation of hamfests in this region. At least two hamfests have fallen by the wayside in the past years and they are both struggling to be reborn.

Now, I know that we, individually, have weddings, funerals, barmitzvahs, sick relatives, et al., that take precedence over our hobby. But as a group we need to support these affairs with our presence and a few of our dollars for admission and purchases. I was initially puzzled and amused, but on second thought

salmon countered by Hawaii's 100-pound marlin. Vermont trumped them both with 2000 pounds of Champ. It brought the house down. The final contact was in the mountains of West Virginia.

The Echolink system was described as method of communicating which does not necessarily need a radio, just computer to computer via the internet using a mike into the sound card. Of course, radios are also connected to the nodes in many places. We tried several connections, but we found nobody home.

The brownies disappeared shortly after.

almost felt outrage over reports that a few individuals made a minor scene because they felt that Milton Hamfest's entrance charge of three dollars was too much! That occurred in this age where the five dollar hamfest fee is almost extinct!

If we do not support the Milton hamfest in February and the Essex hamfest in August, they will go away for good. The money that pays the gate and draws vendors and tailgate sellers goes a long way to finance the venues for the associated meetings and VE sessions, QRP forums, satellite and microwave demonstrations, etc.

The ham community in Vermont is small enough that clubs cannot afford to lose the income that the hamfests generate. The proceeds from the hamfests fund organizations throughout the rest of the year. The hamfests themselves cannot survive more than three or four consecutive years of low attendance. They are an essential part of maintaining the ham community. Your few dollars for admission and spending money to these hamfests pays you back tenfold in the continuing presence of the clubs that sponsor the events.

Contacting RANV

In Person: Meeting, March 11, 7pm,
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By Mail: PO Box 9392,
So. Burlington, VT 05403

By Radio: 145.15 repeater

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

MILTON 2003

by Mitch WISJ

Judging from the comments and smiles, Milton 2003 was an unqualified success. Buyers hauled out their goodies and they were happy. Mike W1RC told me he scored a serious buy on a vintage piece. Sellers carried out wads of money and had broad smiles. Debbie, widow of ex-N1HKP was able to sell off most of his station. On the other side of the building, smiling faces were seen clutching the valuable CSCE – the certificate of passing at the VE session. Other smiling faces were seen at forums, where attendees learned about QRP, RFI Antennas, Contesting, Microwave and all sorts of exotic stuff. And all of this went on in just 4 hours.

Attendance was in the low to mid 400's. This matched Milton 2000's low ebb. Milton seems to be running on a 3-year cycle with a peak, a dip and a slow rise back up again. Different this year was a noticeable absence of sellers. I noticed this trend last year and it has continued. The sellers this year reported good sales, unlike 2000 where the many vendors had mediocre sales. The club's share of gate receipts was on line with previous years.

We had rather nice weather for the event. This despite the howling of misinformed weather personnel whose only ability appears to be scaring the populace. I reviewed the same weather forecasts and made the call that we were all clear for the morning. Weather patterns didn't start until 2:45 with some light flurries, long after everyone was gone and most were home. While many will blame the attendance on the weatherman, the ticket data says otherwise. The same ticket stubs used for finding the winner of the door prizes are later poured into a database and analyzed. We had a record number of people from New England outside of Vermont (*mostly New Hampshire*). Attendees from the St. Lawrence area of New York and Canada were consistent with last year. Attendees from the Chittenden County area of Vermont and Clinton County New York, the two closest

areas to the hamfest, were markedly down, by 17 and 35 percent respectively. In other words, people traveling less than 30 minutes chose not to come. More on this later.

Set up and break down was uneventful and went smoothly thanks to a large table moving and setup crew. No PA system was available to us, so I made the decision to go without one. This didn't appear to have any negative affect. The posting of winning numbers actually was a lot less work. On Saturday morning, with so many forums and activities occurring simultaneously, workers were stretched out all over, but the job got done. In particular, it was very difficult coming up with a volunteer exam team as most of the active examiners were doing something else. Several hams took advantage of QSL card checking activities as both Fred (VUCC) and Linda (WAS) were tied up for some time checking cards. I checked a massive bunch of DXCC cards after the hamfest.

In the exam room, 19 applicants took 25 exams and passed most of them. Jeff KB1IWK, just licensed in October, earned his Extra. Don N1QKH picked up his General. In the forum rooms, attendance was good, but not as crowded as last year, consistent with the change in attendance. Ted K1HD and Moe N1ZBH both scored door prize wins.

Thank you to the following folks:

Setup and Table rustlers: AA1SU K1HD KB1FRW KB1FVA KK1L N1BQ N1QKH N1ZRA N1ZUK W1SJ WA1LIE WA1RMS WE1H

Tickets and RANV Table: AA1SU K1CRS KB1FRW W1DEB W1SLR W4YFJ W1SJ

Card Checkers: N1ZUK W1MP W1SJ

Volunteer Examiners: K1HD K2KBT KM1Z N1PEA N1WT NV1Y N1ZUK W1SJ

If I left you out, I owe you one!

My final comments in this article concern the future of the Milton Hamfest. They may as well concern the future of ham radio. The Milton show has been lucky in that it has weathered the trends affecting hamfests better than most. All hamfests have been significantly

down lately – even *Hamvention* and *Hosstraders*. Not only are attendees down, but sellers are down as well. If you picked up a *Vermont Amateur Radio Directory*, look at page 1. Notice that in 2002, the number of hams in Vermont dropped by 12. This is the first time this has ever happened. Vermont is one of the 5 fastest growing ham radio states. What does this tell you? I know firsthand because I deleted many Vermont hams who chose not to renew. Many other hams were deleted because they moved out of state – likely to find a job. It is against this backdrop that we held the hamfest. We know the Vermont story, but why was attendance from the Plattsburgh area off a whopping 35%? Does apathy play a part?

In reviewing the data, I know that attendance of RANV members at the fest was close to 75% and RANV has had very good participation in activities. So, I am preaching to the choir, but it is my hope that others will find out the story through word of mouth and on the web. We all need to understand that amateur radio events absolutely need to be supported or they will go away. It is NOT OK to hear things like, “oh yeah, I heard the hamfest was this weekend, but I was too tired to go,” or, “I have to go to the dump on Saturday”, or “I had nothing I wanted to buy.” It is NOT OK to hear about people coming to the fest and griping about the \$3 admission. That's getting a tad old. Get with the reality – the price will go up one day, likely even next year. Forces we have little control over will dictate that to us.

I enjoy organizing the hamfest each year. However, when the show becomes stale and mediocre, I will go do something else. The attitude needs to ramp up. If there is something which needs to be changed or improved upon, please let me know. My final word is this. The word “fest” in hamfest is short for festival. Many more of us need to adopt that festival attitude and support the show or it will most certainly cease.

CONTEST CORNER

by Paul AAISU

One of the contest results just published was the *ARRL 10 GHz Contest* that took place during the weekends of August 17-18th and September 21-22nd; a record 137 entries were received. I can report that two Vermonters did exceptionally well. Mike N1JEZ of Burlington came in 23rd place with 25,569 points and Chip W1AIM of Cabot placed 24th with 24,452 points. While not club members, Mike and Chip are very familiar to many members of the club. Congratulations on a fine effort!

The 2002 *ARRL September VHF QSO Party* results also came out. Once again, Mitch W1SJ operating Single Operator Low Power as WB1GQR placed 3rd in the nation, 2nd in the Northeast Region, and 1st in the New England Division! He was also the QSO leader on the 50, 144, 222 and 432 MHz bands – wow! Only three other Vermonters submitted a log for this fun contest, including Chip. As I mentioned last month, VHF contesting is fun for any class of license, and more of you should be doing it.

This month, there are a few contests to warm up the airwaves. This weekend, on the Ides of March, is the *10-10 Mobile Contest*, sponsored by *10-10 International*. It is an organization of amateur radio operators dedicated to maintaining high levels of amateur radio communications on the 10-meter amateur band. You do not have to be mobile and you do not have to be a member to play in this one. It starts at 7 PM on Friday and runs for 24 hours. Details can be found somewhere on their web site: www.ten-ten.org. Working on 5BWAS? This is a good one for closing in on the 10 Meter endorsement.

Jumping to the end of the month is the *CQ WW SSB WPX Contest*. WPX stands for “Worked All Prefixes”. This is the one that has the Rookie category for those of you licensed less than three years, as well as many other interesting classes to choose from. It is 10 thru 160 Meters, and Single Ops can only work 36 of the 48 hours. This is an everyone works everyone contest. The thing that makes you a multiplier in this contest is your call sign prefix. According to the club roster, **RANV** members comprise the following prefixes: KB1, N1, W1, KA1, KB2, AB1, W4, K2, WE1, W3, K1, WN1, N2, KM1, AA1, VE2, KE1, WA1, WB2, WA2, KD1, KK1, K3, & N9. Any of these could be multipliers in this contest, and multipliers mean more points. And you get some pretty interesting prefixes showing up for this one. There is also a WPX Award: but more on that another day perhaps. If you want to get on, you will have no problem finding other hams eager to work you. One footnote, if you are contesting with your everyday Internet computer, make sure you turn off the “Automatic Adjust for Daylight Savings Time” feature, as this will mess you up really badly. The clocks usually spring forward during this event. Contesting software is recommended for this contest.

In early April is the *MARAC County Hunters Contest*. It starts at 8 PM on Friday April 4, and runs for 48 hours. Yes, you too can help hand out those rare Vermont counties, even if you are not submitting a score or county hunting yourself. County hunting is another area of ham radio that we may explore at a later date. Suggested frequencies are: 3880, 7240, 14275, 21340 and 28340 KHz. Fixed stations should try to CQ above listed frequencies, and mobiles below. Their web site is www.countyhunter.com.

As usual, this is only a small sample of the many ham radio events that are on the air each month. I left several out, such as *BARTG RTTY*, *Russian DX*, and several state QSO Parties. You can check the Contest Corral in QST for more details and choices. A very good web site to visit is: www.hornucopia.com/contestcal. Here you can find every contest imaginable listed.

When you participate in a contest, please take a minute to E-mail Mitch your contest score and he can post it on the **RANV** web site.

Next month: it's Holyland on the Air.

EMERGENCY PREPAREDNESS

by Mitch W1SJ

With all the talk about war and terrorist activities, amateur operators just might be called upon to deliver on their prime mission: emergency communications – perhaps sooner than we think. All that talk we give to the media about how we are going to save the day in an emergency may be looking at us straight in the face. Are you ready? I will be dropping a short piece like this every so often to keep us all aware!

If there is a widespread infrastructure breach, knocking out power, phone and computers for over a week, will you have power for your HT or base station? In fact, is your HT battery charged right now?

We can never know what situation will exactly occur, but there are some simple things we all can do now. First, make sure you have a day's worth of power for your station. This means having an HT battery in good condition, which is cycled regularly. Through normal use, I cycle my HT battery every 7-10 days. Have a backup battery, or better, a backup HT or two. Have a few small sealed lead acid batteries around. These are surplussed out of UPS's and usually have plenty of life left. But you must keep them charged! Make sure the floating battery voltage under no-load sits at 12.4-12.6 volts. In a long-term outage, even all of these batteries will go dead. That is why you need to have a way to charge them without commercial power. There are a number of ways to charge batteries: from a running car, a generator, a simple solar panel or even a hand-crank generator, as a very last resort. Consult folks like N1BQ and N1ZRA for details on how to generate power off the grid. But, you must plan this and do this now – not when the emergency is upon us.

Assess your power needs, discuss it and put a plan in place!

REPEATER NEWS

By Mitch WISJ

It was my intention to report that the hardline connector, which has been bugging us all winter, was repaired. This has not occurred. This winter has been awful and has thwarted attempts to get this key piece of work done. The few thaws we have had have not been long enough to get a crew working on the tower. The tower has been iced over all winter anyway, making this work dangerous, at best. Fortunately, the number of days that the connector has reduced performance of the repeater have been few. We will continue to keep our fingers crossed.

Last month, I commented that the level of operating on the repeater needs to improve. Regrettably, I have noticed that this level has actually dropped after the article was published. I still hear long QSO's during peak travel hours, little to no space left between transmissions and frequent doubling. At times, it is embarrassing. Understand that I want to encourage use of the repeater. However, the primary mission is to have the system available for emergency and priority traffic at all times. Long transmissions and tiny breaks are contrary to this goal.

I have adjusted the timing of the controller to assist with this goal. The controller sends a courtesy signature 2.5 seconds after you stop transmitting. The courtesy signature is either a quick 2 beeps (*CTCSS*) or a quick high-low beep (*COR*). It is always sent, but it is low. If you cannot hear the beeps, make sure you pause 3 seconds before talking. Otherwise, the timer will not reset and you will most certainly time out. On a repeater, you don't get extra points for the length of transmission. Your goal is to convey your thoughts in the fewest words. This is excellent training for emergencies and is actually a subject of one of the modules of the *ARRL Emergency Communicators Course*. If someone went down face first in front of you, could you describe the situation and ask for what is needed in 15 seconds or less? This doesn't come from a textbook – it comes from daily practice. On the repeater, we need to get into the habit of keeping the duty cycle of less than 60 seconds transmitting and over 2 seconds standing by. Please make sure that everyone you converse with on the repeater understands this. It is important.

There are two other issues which are minor, but should be mentioned. First, break into conversations with care. While we all like to kid with each other and drop funny comments in, not everyone appreciates this. Make sure it is OK to comment into someone's QSO before doing it. Second, there are a few operators at base stations who are consistently very weak into the repeater. Stations who are noisy into the repeater should not be holding QSO's. Certainly, the repeater is there to help them find people or information and this should be done quickly and efficiently. However, if a longer QSO is desired then they need to improve their signal so that it is clear. We do all we can to make the repeater perform well, but given its location, conditions will vary greatly and a signal which is weak under normal conditions will be virtually unreadable on certain days. When this occurs, move the operator to another frequency or sign off with them. Most users do not appreciate listening to noise.

Judging from the use of the IRLP, many more users are having fun with it. Remember to leave the appropriate pauses! We have an intermittent problem with the node antenna, which causes the IRLP to not be available at times. Bear with us until we get it fixed.

FIELD DAY?

by Brian NIBQ

With the balmy weather upon us again (*-10 degrees as we go to press*), its time to start thinking warm thoughts about warm weather. What should come to mind but Field Day.

There has been a change in the club's body count and some resources have been lost or moved. For Field Day we need tents, tables, chairs, ropes, tools, generators, gas cans, trash cans, etc.; you know the drill. While you are wandering through your own assets over the next couple of months take note of any Field Day type items you may have that you could make available to the club for Field Day (*June 28-29*). We aren't talking about cast-in-stone commitments here. Just let us know that you do have such and such item(s) and that you would consider making available. Then, come the end of April or the beginning of May the club can start making lists and figure out what we need in a less hurried fashion and start contacting individuals for a more concrete commitment.

So, if you have anything useful that you would be willing to allow the club to use for Field Day, please let me know at 899-4527 or n1bq@wulfden.org.

VERMONT DIRECTORY

I have a couple of Vermont Amateur Radio Directories left and will be bringing them to the next **RANV** meeting. If you haven't already done so, plan to pick up your copy there. Once they are gone, you will have to wait for next year's printing. The Directory is \$5; \$6 if you want it mailed.

Welcome to RANV

Matt WEIH of Grand Isle is interested in contesting and public service – two things we do a lot of in **RANV**.

Johannes KB1JDT of Jericho will likely have the entire club fluent in German by the end of the year.

Justin VA2WTF of Greenfield Park, Quebec, joins dad VE2EQL as an amateur operator and **RANV** member.

NEXT MEETING:
“Linux in the Hamshack”
Tuesday, March 11th, 7 PM
O’Brien Civic Center

RANV

P.O. Box 9392

South Burlington, Vt 05407

<http://www.RANV.org>