



Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

JULY 2002

Vol. 12 No. 7

WIRELESS COMPUTER NETWORKING The July 9th RANV Meeting

One of the hottest topics in computer networking right now is *WiFi* or 802.11b networking. It should be of interest to all hams since the primary frequency of operation is in the amateur 2.4 GHz band. Non-hams know this band as the ISM (*industrial, medical, scientific*) band where there is a raft of Part 15 equipment. Our interest in this area comes from two directions. If you are active on the 2.4 GHz band you need to know what and how all this equipment works and what its affect is on your 2.4 GHz operations. Further, because we are a licensed entity in this band we can take the relatively cheap (*mass produced*) high-speed wireless equipment, and modify or enhance it with amplifiers and gain antennas to allow us to interconnect our computers over miles of separation instead of feet.

The presentation is planned to be less of a technical discussion and more a *how-to* with hands on demonstrations. I encourage anyone with a laptop or palmtop computer with an ethernet and/or an 802.11b wireless card to bring it along, we plan to build a big network to show this stuff off.

Pre-meeting eating activities will take place at Zach's, starting at 6. The meeting starts at 7 PM July 9th the the O'Brien Civic Center, 113 Patchen Road.

SUMMER RADIO FUN

Now that Field Day is over, things will get very quiet and there is not much ham radio to do. Not a chance!

There are a whole bunch of radio activities to be involved in this summer. On July 13th is the *IARU HF World Championship*. It runs 24 hours from Saturday 8 AM until Sunday 8 AM. This is a good place to test those operating skills you learned at Field Day. Also, this is the *World Radiosport Team Championship* (WRTC). Teams of the best contesters in the world will be at similarly equipped stations in Finland competing against each other. Help them win by giving them contacts!

Saturday, August 3rd is the **RANV** Summer Picnic. Besides the usual barbecuing and picnic activities, we will have radios set up for operating as well. We are planning to have some more formalized operating to get many attendees a chance to experience some casual HF operating. Details on this next month.

The next weekend is loaded with things to do. Both Saturday and Sunday is the MS-150 Tour and hams are needed to help out. See article in side for details. Also, on Saturday, is the return of the Burlington hamfest.

While you are in the hamfest mood, check out the New England Division Convention in Boxboro, MA on August 24-25th. All the important hams in New England will be there to say hello and give you tips on anything radio related!

Contacting RANV

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OUR LAST RANV MEETING

by Jeff N1YWB

The meeting was called to order by Paul at 7:11. Paul's father Paul J. Gayet W3HYV graced us with his presence. He was in town for his 50th college reunion.

Jeff N1YWB will be taking over secretarial duties for the time being. Our secretary is recovering from surgery and may not be back for some time. Our best wishes, Charlie. We all hope you get well soon.

N1QKH volunteered to bring the snacks for our July meeting.

Brian mentioned that N1YWB has set up a new APRS digipeater in Randolph at Vermont Tech running under the W1VTC callsign. This digipeater fills in a hole in the middle of the state.

Paul reminded everyone that we still need lots of people to help out with Field Day. Bob will help out by bringing food Saturday morning. The Monday Field Day planning meeting at Mitch's was mentioned.

Our meeting topic was on Site Safety, presented by Lee Marchessault. Lee's background included working at GMP for 24 years. He still works for GMP as a consultant, working through his business, *Workplace Safety Solutions*, WSSI. Lee is a licensed electrician and is qualified to work on just about any kind of transmission line. Lee gives these talks for free in his spare time to any organization that would like to hear him, commercial, nonprofit, or otherwise. He has instructed fire departments, TV crews, police departments, and of course utility workers, and many others.

Lee talked about how electricity affects the human body, most notably the heart. Most of us probably already knew this, although Lee put it into very clear language and had some good graphs showing resistance vs. voltage vs. current for lethality. Lee also showed some VERY graphic slides and video of electrical burn injuries, which turned several stomachs.

Lee discussed how electricity flows through the ground. He explained how you can get a shock by standing near a downed power line but not actually touching it. The ground is a very poor conductor, and by standing with your legs apart and inline with the down power line, each foot may be standing on a different voltage potential and thus current will flow through your legs. The trick is to keep your feet right together, so there is very little voltage differential between them. Then either hop or slowly shuffle with your feet tight together until you are a safe distance away from the downed line. The safe distance may be as much as 50 feet for a common transmission line found along many streets. Lee also discussed how radio towers can conduct and how they should be kept a horizontal distance away from power lines equal to the full height of the tower plus a safety margin. Lee also discussed how trees are very good conductors and can complete a circuit between power lines and ground. Lee used a real stick and a high voltage source to effectively demonstrate how electricity can travel through a tree and shock a doll.

Lee discussed how grounding systems can help reduce some risk but don't eliminate it, and can also introduce new risks. Two ground systems may not always be at the same potential.

Lee also discussed and demonstrated the use of various types climbing and fall prevention gear.

Lee gave an exceptional presentation. I would give it an A+, and the other members also seemed to enjoy it greatly. Many had their own stories and experiences to share on the topic. One thing is for sure, NOBODY in that room will ever take the power of electricity for granted ever again.

THE PREZ SEZ

by Brian N1BQ, President

I am not often at a loss for words. I am not sure what to say beyond the usual platitudes for the outgoing president, Paul, AA1SU. There is so much I could say that it is difficult to boil it down. Over the years he has run the club it has been a pleasure to attend meetings and later as Vice-president it was a pleasure to help conduct the club's business under his management. Paul was asked to step up to be Section Manager and I cannot think of a better candidate. Due to the "conflict of interests" aspects of that position, he has stepped down as president, elevating me to that spot. Now I know how Gerald Ford felt! I do feel that I have a mandate from the club. When elected as VP there was full knowledge that I could very well wind up where I am now.

It is, however, one thing to be an Indian, or even a sub-chief, but it is a cloth of a different color to be *The Chief!* I am fortunate to have Paul around to provide his wisdom. I have no grand plans for dynamic change on my agenda, but then again this all happened with Field Day on the horizon and who among all of us has time to think of much else. Field Day is over now. As far as I can tell, a grand time was had by all.

Over the next few months, I hope that I can meet as many of the club members as possible. I would encourage you all to contact me with comments about the club and its future direction. If there is something you don't like, let me know. If there is something we are doing that you like, let me know about that as well. My contact particulars are: Brian Riley N1BQ, PO Box 188, Underhill Center, VT 05490, 899-4527, n1bq@wulfden.org.

This month's meeting features yours truly with a hands-on demo and tutorial on wireless computer networking. In August, we have the annual RANV picnic in North Hero. In the fall, I have a tentative commitment from Mike N1JEZ and Henry KT1J to do a live session on microwave with a plan (*weather permitting*) for the everyone to get out in the field adjacent to the meeting place, set up gear and transmit.

REPEATER NEWS

by Mitch WISJ

In the 8-year history of the repeater we have been pretty lucky as far as lightning goes. That luck ran out last Wednesday. A fierce storm system moved across the Burlington area from West to East. In Essex, around 3 PM, the skies turned very dark, trees were bent nearly horizontal and the roof was pelted with all sorts of tree parts. On the repeater, Dave W1DEC was talking to Neal N1ZRA, amidst static induced lightning crashes. I shut down the radio room and waited out the storm.

I turned things back on around 5 ad couldn't hear the repeater. "Dummy", I called myself, as I remembered to hook up the antenna! Still no repeater. I tried different radios. I tried both VHF and UHF repeaters. I tried all the reset codes. The system was completely dead. Worse yet, all the other systems on the mountain (*2 FM's and 2 pagers*) appeared to be functioning normally, meaning there was power available. It was obvious we were touched by the big guy upstairs and didn't fare all too well.

The next two days included a lot of planning for a repeater rescue mission. In a lightning hit, anything or everything can be toast. It was quickly obvious that a complete repeater had to be brought up. I have a nearly identical backup repeater, but it weighs around 75 pounds – just a bit too hefty for a pack. Several of us were attempting to find someone with a 4-Wheel Drive All Terrain Vehicle to run the equipment up – without much success. In the meantime, I retuned my backup repeater to 145.15 MHz and put in on from Essex. A repeater at 400 feet elevation is hardly a replacement for one at 3400 feet, but it was something, and it provided coverage for the users on this side of the mountain.

During the noise problems we had with the repeater early in the year, Tony WA2LRE offered a replacement system to tide us over until the repeater could be fixed. This repeater

is a lash up of two commercial mobile radios with controller and power supply – a much smaller and lighter package than my system. I picked up the equipment from Tony in Plattsburgh on Friday morning and bench tested it the rest of the day. Neal N1ZRA agreed to a Saturday reconnaissance mission to determine what we had to bring up to fix it. Later Friday, Neal had hooked up with Chris KB1EMC, who loves mountain hiking and agreed to go up in the morning. I finally had contacted Bolton Valley to get the access to the site. It was hard reaching them – the same storm wiped out their phone system, causing \$15K in damage.

At sunrise, I brought the equipment over to Bolton and met Neal and Chris there. Chris was able to backpack the entire replacement repeater (32 pounds) in. They started up the hill at 6:10 and covered the 2½ mile trek in a little over an hour!

Neal started the troubleshooting procedure we laid out. There was 120 volts AC OK, but sparks came from the cabinet as he moved equipment. Not a good sign! Voltage readings were very strange. The power supply appeared to be OK by itself, but when hooked to the repeater, readings of 22 volts were common. Sparks were still coming from grounds. Chris had to leave quickly, so we made the decision to pack the repeater completely out and put on the replacement unit. Chris brought down most of the repeater and Neal, after installing the replacement system, hauled in the 35-pound power supply.

By noon, everyone was down off the mountain, and the repeater was back to being functional. There are some changes: The power is a bit lower (*about ½ S-unit*), there is no UHF side and, therefore, no IRLP access, and the repeater is in full time CTCSS. Other than that, the system is working great and we hope it stays that way for a few weeks until

the main repeater can be repaired.

The repeater has mostly been repaired. The main problem is the power supply is floating 25 volts above ground! This caused the audio output transistors to short and a trace on a circuit board to melt. The audio output stage isn't needed and the bad devices were discarded and the trace repaired. The controller had a shorted protection zener diode and blown circuit board land for the 12 volt input – a typical failure when the controller sees over-voltage. One of the output transistors driving the tone board is dead.

I certainly received a heap of learning in this episode. I don't like fuses very much and there were none in the 12-volt side of the repeater. If there were, it might have been a long walk up to replace a fuse, certainly a better proposition than carrying the equipment down. Then again, the radio might still have blown to protect the fuse. One can never out-guess lightning. We do know that lightning eventually nails virtually every repeater and radio station. It is not an "IF" but a "WHEN". My house has been hit twice. A month ago, WKDR lost a transmitter to lightning on successive days. Lightning most definitely strikes twice in the same place. Both 99.9 BUZZ and WIRY in Plattsburgh have been hit. So has WIZN in Charlotte. The 146.85 and 146.625 repeaters sustained lightning damage over the years. The height of your tower doesn't matter, or even if you have a tower, anyone with equipment running during a storm is a potential victim.

Over the next few weeks, I'll be incorporating a few lightning-hardening techniques to increase our chances of surviving the next hit. I'll also be changing the configuration of the repeater to incorporate some ideas we all have had over the years. It looks like it will be a busy summer!

FIELD DAY 2002 – AN ADVENTURE

by Mitch WISJ

Field Day 2002 has come and gone and no one could ever say it was routine or boring! The headline for this year's event is 11,342 points and a record setting 2428 QSO's at the phone station. Our point total is the second highest ever, only topped by the 12,100 point assault in 1999, when we amassed over 1000 QSO's on 6 and 10 meters. We won't see conditions like that anytime soon. We certainly had another very successful year!

But the story behind the story is more complex. Field Day 2002 was chock full of challenge, hard work, sacrifice and achievement. The challenge started weeks before the event in the recruitment phase. In our area, Field Day has been so successful that a number of groups have spun off. Where we were virtually the only game in town now has ballooned to six Field Day operations in a 20-mile radius. Participants have been trying out other Field Day groups, which has caused us to have to recruit more and to train more to replace them. Very quietly, we filled in the holes and had each job staffed.

The weatherman was no help. A weekend forecast for nice weather turned into an awful rainy mess, culminated by severe thunderstorms on Sunday just as we were leaving. Some wonder about my aversion to weather nets and the Weather Service. That weekend was a perfect example. Frankly, I trust weatherman's ability to forecast weather about as much as Miss Cleo's ability to forecast your future.

Another challenge we had this year was a rule change which invented the GOTA or *Get on the Air Station*. While we were quite happy with this change, it consumed most of the planning, much of the recruitment effort as well as much time during Field Day to keep it running smoothly.

Anyone can throw a wire into a tree and make contacts. However, putting up a station which will be

competitive and keeping it running reliably is another matter. On Friday, we were setting up the antennas and following our setup plan down to the letter. All was going well. When all of the big antennas were up, I proceeded to do my routine of driving up the antennas, connecting up the DX-70 and checking them for function. All worked well, but when I got to the CW tribander, it didn't work on 20 meters. Other bands – fine, but no 20 meters. Other instruments checked the antenna and confirmed the readings. You know what they say about a day without sunshine. Well, a Field Day without 20 meters is even worse. We brought the tower down and took apart the traps and feed to get it to work. It didn't. By nightfall, most of the site was set up but still there was no working CW tribander. We launched into alternate plans. Neal N1ZRA had a tribander which someone gave him, which *might* work if fixed. It was an option, but not confidence inspiring. I also knew that Grant K1KD had a KLM yagi on the ground slated to go up this summer. That was the easy part. Getting the logistics into place was another matter, as all night we missed each other on the phone.

Saturday morning we woke up to pouring rain. We had the worse possible scenario for a Saturday morning setup with lousy weather and the CW station completely in shambles. But Neal was on the way with his antenna and I finally reached Grant. There was no way to carry the yagi on his car without a complete disassembly, which wasn't practical. We were stuck again. In desperation, I put out a call on the repeater for someone with a truck. Lo and behold, a White Knight appeared, in the presence of Chris KB1EMC. Not only did he have a truck with a rack, but also he was willing to turn around in Williston and head up to Georgia to get the antenna. By noon, only 2

hours before the contest, we had a KLM yagi in pieces on the ground. This antenna was assembled, and tested (*it even worked!*) and the tower raised back into position. At T minus 45 minutes, the CW station was a folded tent and various parts and pieces lying about. Like a swarm of ants, the group built the station and was on the air with 5 minutes to spare. I checked in with them, grabbed a burger on the way back to the phone tent, and just got on the air myself. What a start!

And then they lived happily ever after. Not a chance! I was running a 190 QSO per hour rate on 20-meter phone, a tremendous rate. After 45 minutes, the voltage sagged and sputtered. I grabbed the table and started pleading with the generator, "C'mon, easy baby, you can do it." The voltage stabilized and I continued. "Whew." Then again, lights flickering, similar to what I often experience from my power company at home. Again I sweet talked the generator and recovered. And then, a third time, and darkness.

I flipped the switch to the backup batteries and nothing! Oh Nooooooo! I grabbed the HT and started yelling, "Generator out" and with hands flailing, ran to the generator and started the backup. (*Yes, there is a reason why we have so many generators*). I returned to the station to make contacts while the maintenance crew wheeled in another generator. The unit we started with ran fine, but the generator portion stopped generating. We weren't 45 minutes into the contest and we had a dead yagi, generator and inverter. What was next!

Fortunately, that was the end of the major failures and things ran relatively smooth after that. The GOTA and VHF stations got a late start due to all of the other problems in the beginning, but they came on line after a while. The large 10x20 tent was a huge success and enjoyed by all for its comfort. The GOTA sta-

Field Day... continued next page

Field Day... from previous page

tion was a learning experience for us all. It made contacts and people had fun, but it wasn't as successful as expected for many reasons. I challenge all of our GOTA and VHF operators to continue to practice operating all throughout the year and come back next Field Day with a more fine tuned ability. And next year, we will have a super station for you to operate!

One always hears the argument on whether Field Day is a contest or an emergency preparedness exercise. After 30+ years of this, I believe I can offer some insight. All contests are emergency preparedness exercises. The contest, itself, is the measurement system of points. A successful station, one which amasses a lot of points, will be the station which would be the best emergency stations. They will stay on the air no matter what the weather, no matter what the propagation, no matter what the mechanical failure and no matter what amount of operator fatigue and continue to make contacts or pass traffic. One could argue that a ham could take their battery powered HF radio, throw out a wire and make contacts. Yes, but such a station will not be as effective during bad propagation or QRM and if the one radio or battery dies, the station goes away.

The **RANV** Field Day operation was highly successful. Despite problems with missing operators, equipment failure and lousy weather, we still thrived and amassed a tremendous number of points. One cannot say where we ended up in the standings, but it is likely we will still remain in the top 10 of the 2A category, where 500 entries are the norm. Despite the challenges, we went about our job in a quiet, professional manner with little whining (*mostly from me*), no yelling or screaming or any other barnyard animal noises. I am proud of each and every one of the Field Day group for a job wonderfully done!

FIELD DAY HALL OF FAME

The folks who made Field Day a SUCCESS!

- AA1SU Paul** – Workhorse CW operator (12 hours); arranged for and picked up tables and chairs; equipment drop off; traffic bonuses; bulletin bonus; set up; tear down.
 - K1KD Grant** – Phone and CW operator; supplied CW station; set up; tear down.
 - K2MME Howy** – Workhorse CW operator (10 hours); set up.
 - KA1KLJ Matt** – Supplied back up radio; Set up.
 - KA1VLH Pepi** – GOTA setup; arranged for use of generator and radio;
 - KB1EMC Chris** – Help in table pick up; pick up of CW yagi.
 - KB1EQG Mike** – Set up.
 - KB1EZC John / KB1EZD Leela / KB1EZE Leo** – GOTA operators; Set up.
 - KB1FRW Bob** – GOTA operator; food purchase; set up grill; tear down.
 - KB1FUV Mike** – Set up SSTV and Packet Node demo stations; supplied phone generator; set up; tear down.
 - KC1WH Carl** – Phone operator; GOTA assistant; set up.
 - N1QKH Don** – VHF operator; set up; tear down.
 - N1SRC Eric** – Field cutting.
 - N1YWB Jeff** – GOTA assistant; satellite station set up; APRS demo; backup battery power set up; set up; tear down.
 - N1ZBH Moe** – Chef; set up.
 - N1ZRA Neal** – Antenna troubleshooter; set up; tear down.
 - N1ZUK Fred** – Phone operator overnight.
 - W1DEB Debbie** – Ate lunch and dinner; dropped off equipment.
 - W1RL Jeff / N1ALX Alex** – Set up.
 - W1SJ Mitch** – General chairman; workhorse phone operator (10 hrs); satellite operator; publicity bonus; antenna delivery; set up; tear down; tabulate results.
- And thanks to K1HD, N1DTQ and KA1LEX for equipment loan.

| FIELD DAY BOX SCORE | | | | PREVIOUS YEAR'S TOTALS | | | |
|---------------------|------|----------|------|------------------------|-----------|-----------|---------------|
| 80 CW | 133 | 80 SSB | 320 | <u>YR</u> | <u>CW</u> | <u>PH</u> | <u>Points</u> |
| 40 CW | 310 | 40 SSB | 522 | 01 | 1042 | 2262 | 10092 |
| 20 CW | 434 | 20 SSB | 1167 | 00 | 1233 | 2130 | 10294 |
| 15 CW | 185 | 15 SSB | 419 | 99 | 1209 | 1815 | 12194 |
| GOTA CW | 25 | GOTA Ph | 276 | 98 | 1100 | 2674 | 10748 |
| VHF CW | 1 | VHF Ph | 88 | 97 | 1089 | 1773 | 9102 |
| Sat CW | 0 | Sat Ph | 3 | 96 | 963 | 1775 | 8502 |
| Total CW | 1088 | Total Ph | 2795 | 95 | 998 | 2445 | 10012 |
| Total QSO's | | 3883 | | | | | |
| Total Points | | 11342 | | | | | |



The tear down crew: N1ZRA N1QKH KB1FRW AA1SU N1YWB W1SJ

VERMONT CITY MARATHON

by Carl KC1WH

On Memorial Day weekend, approximately 3000 marathon runners participated in the 14th annual Vermont City Marathon. The weather on race day was initially overcast with moderate temperatures – ideal conditions. Along the same route, a 5-leg relay race was run simultaneously with the marathon. Approximately 2400 additional relay runners participated, most of whom were capable of completing a 5+ mile leg. The radio net was quieter than normal because the cool weather put less stress on the runners. There were fewer stalled runners needing Pickup Bus transport, fewer medical calls, and fewer calls from Aid Station requesting additional supplies.

This was the first VCM utilizing sensor chips. Each runner had to weave his shoe laces through a small electronic chip, attaching it to his shoe. A series of sensors across the road interrogated each chip, tracking each runner as he moved through the course. The system worked well, except for those runners who were shoe-tying impaired — their chips fell off their shoes somewhere along the route.

The number of experienced amateur operators who had difficulty using their HT's was a concern. The following radio problems occurred this year: 1) a transmit button was locked on, forcing the entire Net to QSY (*don't bring any transmit switch which can be locked on*); 2) operators didn't (*or couldn't*) program their HT's for repeater offset, and transmitted on the repeater's output frequency instead; 3) operators didn't (*or couldn't*) program their HT's to move to the secondary repeater frequency; and 4) some amateurs had garbled, unintelligible signals until they were reminded to take their HT's off their belts, and magically, they were full-quieting into the repeater. The moral: get out your HT owner's manual and re-learn all those nifty features – like changing frequencies!

The VCM Communications team included 43 hams:

| | | |
|---------------|--------------|--------------|
| Avi K1AKF | Carl KC1WH | Jim N1UWW |
| Roger K1CRS | Betty KC1YW | John N1WQS |
| Burton K1RMF | Ralph KD1R | Evan N1XUD |
| Jay K1UC | Fran KM1Z | Jeff N1YWB |
| Bob K1WML | Marcia N1DSO | Derek N1ZLN |
| Earl K1YLB | Doug N1DTQ | AJ N1ZWL |
| Rachel KA1KHA | Ralph N1DXU | Wayne W1BHL |
| Bob KB1CLG | Steve N1EQP | Debbie W1DEB |
| Tom KB1DSO | Tom N1EXY | Dave W1HRG |
| Chris KB1EMC | Elaine N1IJW | Rick W1RLR |
| Tyler KB1GRI | John N1LXI | Mitch W1SJ |
| Paul KB2TBK | Mark N1MR | Linda W1MP |
| Greg KB2TON | Dan N1PEF | Mike WA1LSD |
| Gladys KB2VTI | Bob N1QMX | Phil WB1CZE |
| Ray KC1BT | | |

HAMS NEEDED FOR MS150 BIKE TOUR

by Paul AAISU

Once again, RANV has been asked to provide communications for the MS150 Bike Tour on August 10-11th.

The 16th annual MS-150 Tour is an exciting one or two-day tour through the scenic back roads of Vermont starting at Sandbar State Park in Milton and ending at Johnson State College. Cyclists can choose to ride anywhere from 40 to 100 miles each day, on a road bike or a mountain bike. Geared for cyclists of all ages and abilities, each route will be challenging enough for serious cyclists, but recreational cyclists will find the routes both enjoyable and achievable. Cyclists as young as 7 and as "old" as 67 have joined the tour! The MS 150 is fully catered, and cyclists receive the finest care throughout the weekend. Checkpoints are placed every 10-15 miles and are stocked with plenty of cool drinks, carbos, fresh fruit and high-energy snacks. Transportation of overnight gear, professional bike mechanics, medical assistance, sag wagons and a communications network support the cyclists.

We need several ham operators for this event, as well as EMT hams. Operators are needed for each checkpoint, several SAG Wagons, and the beginning and the end. Last year, we did it with about 15 Hams. This year at least two have moved away, and I would like to have about 20 Hams on hand for both days. Please drop me an E-mail at aa1su@arrl.org, if you would like to help out. I especially need amateurs with bike racks, or pick up trucks to act as SAG Wagons. Free T-shirts and snacks will be provided, as well as a lot of fun.

ARRL DUES

by Paul AAISU

For those interested in joining the ARRL, you may be interested to know that if you sign up through RANV, the club gets to keep \$15 of the \$39 membership fee. This also applies if you have let your membership lapse for a period of two years or more. It does not apply to blind membership. So, if you have been thinking about joining, or re-joining the League, just make out a check to RANV for \$39, send it in to us, or give it to Deb W1DEB, and we will forward the funds to the ARRL. This is a new plan by the League to increase membership, and to help out radio clubs.

CONTEST CORNER

By Paul AAISU

It's good that we kept ourselves busy with Field Day this past month. That was a lot of fun, and it is always a great learning experience. We did pretty well, but we won't know for sure until November. Looking at some recent contest results, I see that a few **RANV** members were quite active in the 2001 *ARRL November Phone Sweepstakes*. This is good because our club is now getting noticed in the club results. Once again, it is in the wrong category. We are a Local Category Club, but we keep getting listed as a Medium Category Club. Once again, I shall try to fix this. Local members slugging it out were Ted K1HD as Single Operator-Low Power, Mitch WB1GQR as Unlimited, Fred N1ZUK as Unlimited and Ron KK1L as Single Operator-High Power. Mitch decided to take a different route this year, in an effort to win a category. It almost worked. In the whole country, he placed second. In the New England Division, he took first place, and earned a nice plaque! Ted and Fred tried a different approach. They tried to get all 80 sections by making 80 contacts. This is an unusual approach, but a nice change of pace. They both fell a tad short of this goal, but they sure had fun trying. Hopefully, this November, **RANV** will have a few CW entries, and maybe we can win the Affiliated Club Competition. This has been my goal from the start of writing this series.

For upcoming contests to keep us busy, we can look forward to the *IARU HF World Championship* on July 13-14th. This is the only contest where we get to hand out ITU Zone: 8. Details are on page 96 of April *QST*. Note: the *WRTC-2002* runs during this contest. See www.wrtc2002.org for more details.

On the next weekend there are a few different contests to choose from, one of which is the *CQWW VHF Contest*. It is from 2 PM on July 20th to 5 PM July 21. The exchange is call sign and Grid Square. Moving to July 27-28th, there is the ever-popular *RSGB Islands on the Air (IOTA) Contest*. This is an everybody works everybody contest, but the real points are scored for working Islands. As a Single Operator, you can only work 12 of the 24 hours, but you can get a lot of countries in that time. Details for any of these contests are in *QST*, or on the web.

That brings us to August 3rd, which is the **RANV** Summer Picnic. We can work the *10-10 SSB Contest* from our beautiful site at *Knight's Point State Park*. We will also be handing out the rare county of Grand Isle on the County Hunters Net. Hope to see you all there.

IRLP ACCESS

by Mitch W1SJ

With a replacement repeater running, we have lost IRLP access to 145.15 for the time being. Guess again! Through the magic of electronics, IRLP can still be heard on 145.15. The catch is that the 145.15 the IRLP is located in Essex and not on Bolton. It provides coverage through most of Chittenden County.

The original Bolton repeater is being bench tested in Essex and it is still linked to the IRLP node. To keep the two repeaters from bothering each other, the Essex 145.15 requires a tone of 110.9 Hz. The Bolton 145.15 continues to require a tone of **100.0 Hz**. So, if you want to use IRLP, switch to the **110.9 Hz** tone and dial away. Remember, if you hear someone call on IRLP, you have to use the correct tone or they won't hear you!

The Essex 145.15 is available sporadically. I will try to keep it on most of the day and early evening, but the system is still being worked on. Also, remember that folks on the other side of the mountain cannot hear the Essex repeater and you might have Bolton suddenly come on and wipe you out. I'm sure that all users will figure out a way to make this work over the next few weeks while the system is under repair.

FOX HUNT RESULTS

by Mitch W1SJ

It was another fun Fox Hunt last June 14th as N1PEF went undercover as this month's fox. In keeping with tradition Dan got a late start. It's a good thing we schedule the hunts for 6 PM so that we can really get underway by 7!

Right away, things were challenging as the Fox was quite weak and hard to hear. The big yagi up the tower peaked the signal around S-1 out to the East Southeast. Was the fox hiding under the repeater? That was certainly the right direction. The signal was quite hard to hear in the car initially, but as I got further down Route 117, the signal started to peak up. With a good signal in downtown Richmond, I was faced with choosing which direction to go. First, I chose to continue East. Nope! Next I tried going North. Nope again! Fortunately, the last of the 3 possible choices was correct. The signal was loud in a playground, but no Fox in a vehicle was found. But wait, Dan never hides in the vehicle – he is likely in the bush. I quickly sniffed over to the Winooski River where I found Dan hunkered along the riverbank. It took a tidy 30 minutes to flush him out. I initially didn't see the mag mount antenna on the grill, but it was quite obvious once I found him. By the time I climbed out, N1NTT and N1YWB were scouting around the ground and they found the fox shortly after. An hour later, K1UC, KB1FRW, and KB1EZC and crew closed in. Ironically, the fox was literally in Bob's back yard – only 900 feet away from his house. He should have started from home!

The next hunt will be Friday, August 9th as W1SJ climbs into the Fox hole for another exiting hunt.

NEXT MEETING:
“WIRELESS COMPUTER NETWORKING”
Tuesday, July 9th 7:00 PM
O’Brien Civic Center

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