



Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

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PROJECT CONSTRUCTION NIGHT The October RANV Meeting

On Tuesday, October 10th, we will be having a project night. The primary "project" will be the infamous *Tuna Tin II* 40-meter CW transceiver designed by Doug DeMaw, W1FB in 1976 and since upgraded and improved. Brian N1BQ has 16 kits on order from the NJQRP Club. About 10 of them are accounted for already, leaving another six for those who have not committed. There will be some materials available for some additional projects as well. With some last minute additions, the kits are almost complete. However, **you must bring your own 6.5 oz. tuna can!**

We encourage anyone who has a soldering iron and supplies to bring them. X-acto knives, hemostats, small diagonal pliers, digital or analog multimeters are also encouraged. There will be a hot glue gun and a drill available as well.

The meeting will begin at 7:00 sharp! We hope to dispense with the club business rapidly. Brian will give a very short introduction and we should have a full two hours to work on the kits. With about 40 parts, including two toroids to be wound, each kit should be pretty much done in two hours. For those who don't finish, Brian will open his home and workshop in Underhill on the following Saturday (*October 14*) to finish up and get the transmitters on the air. There's plenty of room and trees to string up and try out some wire antennas.

Several club members are bringing in their prior homebrew efforts as well to show off. We are hoping to get as many of these on the air as possible soon, with a thought of an "activity night" on 40-meter CW in the near future.

Join us for Snax-at-Zacks at 6pm for eats and pre-meeting strategy. Then, it's on to the meeting at 7. The RANV meeting is held at the O'Brien Civic Center, 113 Patchen Road, South Burlington.

GALA HOLIDAY PARTY

Mark December 12th on your social calendar! That's the date of the RANV Holiday Party. These parties have been getting larger each year and last year's bash was well attended. This year's celebration is special in that it will come just before the beginning of next year, which is RANV's 10th Anniversary celebration. It is also special because hosts Mitch and Debbie will also make it their wedding celebration and plan some interesting eats and desserts in addition to the party fare. Besides eating, there will be ham radio activities, videos, games and the telling of tall tales.

HOSSTRADERS

Hosstraders is this weekend, October 6-7th. The fest opens at 9am on Friday and runs until early afternoon on Saturday.

To get there, take I-89 to its end at I-93 in New Hampshire and go North about 2 miles to Exit 15, I-393. This is a short spur around Concord which will end on Route 4/9/202. Go east on this road and continue to follow the turn-offs for Route 202 for about 30 miles into Rochester. In Rochester, pass under the Spaulding Turnpike, go 4 blocks to Hoover Street, make a right and follow the fence to the main gate.

Repeater activity will be on 145.15 to Exit 15 in New Hampshire, then 146.88 and 147.00 MHz (*official hamfest repeater*). At the fest, check in on the local 146.67 repeater where all the troublemakers will be gathered. Look for a fiberglass antenna on a mast with a flashing red light.

Admission is \$5. To bring a vehicle into the selling area, it is an extra \$10. Before 3pm on Friday, an additional \$5 is charged. Official Hosstraders information can be found at: <http://www.qsl.net/k1rqg>.

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OUR LAST RANV MEETING

by Fred NIZUK, Sec'y

After the usual amount of pre-meeting ragchewing and show and tell, the September meeting of RANV was begun. After recruiting a volunteer to bring the snack for the October meeting, Don N1QKH, there were several announcements.

First, Brian N1BQ discussed his plans for the October meeting, which will have a Construction Night theme. Brian will focus next month on the Tuna Tin II QRP transmitter, which besides being an easy project to construct, also has an interesting history. A QRP club in New Jersey has inexpensive kits available, and Brian plans to have a dozen or so of them to build at the meeting. He also would appreciate if you have any tools that may come in handy (*soldering iron, VOM, hand tools, etc.*) that you bring them along so there will be plenty of resources available. Don't forget to bring your 6.5 oz. tuna can (*preferably clean.*)

Paul AA1SU reminded us that RANV now has a 2-Meter mobile transceiver, donated by the family of silent key William Stone, WB1FWR. If there is a club member whom is in need of a radio, and is short of funds, this radio is available for loan, up to a three-month period. Contact Paul for information.

Mitch W1SJ gave us an update on the WB1GQR repeater in Bolton. Currently, there are two issues that have been keeping its performance less than optimal. First, it has been running on a marginal transmitter board, which has been responsible for at least some of the noises that can be heard. Mitch is working on a repair to help reduce this annoyance. Second, for the past few years, the antenna takes a major destructive hit each winter. This is due to ice breaking off the tower, and crashing down on the fiberglass antenna. Mitch has found a suitable replacement for the fiberglass antenna, a commercially built, one-piece metal unit. This antenna would cost roughly \$300. There would be an additional cost for shipping, mounting hardware, etc. As the weather will soon be getting bad, making repairs at the repeater site that much more difficult, the club voted and passed that up to \$500 be available to cover the cost of replacing the antenna.

Our guest speaker for the evening was Karl Zuege KB1DSB. Karl is the ARRL Vermont Section Traffic Manager, and obviously greatly enjoys this facet of amateur radio. He pointed out that if you've ever had been part of a conversation that went something like, "If you hear Joe, tell him...", you've handled traffic. This is an example of informal traffic handling.

Most people think of traffic in its more formal setting, the National Traffic System. The NTS is one of the oldest activities in ham radio, formed over 51 years ago. It's main purpose is to get messages in and out of an emergency area, where other means of communication may have failed or been overloaded. In an emergency, messages pertaining to requests for aid and resources take the highest priority, followed by information of the health and welfare of individuals. Messages are passed on all frequencies, and using all modes, to maximize the resources we have as hams.

Like any system, traffic handling needs to be exercised regularly to make sure that it will work when it's needed. Daily nets, handling traffic running the gamut from birthday greetings to service messages, make sure that the system is working and its participants are ready for more demanding situations. Karl explained the life cycle of messages: how they are initiated, how they pass from local nets to regional and continental nets, how they move back to local nets and finally, how they reach their final destination.

Karl's animated presentation and his enthusiasm for the subject made for a quite enjoyable evening. Contact him if you're interested in finding out more about traffic handling. Or you can listen in on some of the traffic nets to get an idea of how they are run.

THE PREZ SEZ

by Paul AA1SU, President

Here we are nearing the end of the year, and the ham radio fun just keeps coming. In the past few months, we have enjoyed meetings on a wide variety of topics. These have included talks on the Vermont Enhanced 911 System, W1KR's half scale model telegraph keys, Red Cross Disaster Communications, a full VHF presentation, Fox Hunting Techniques, PSK31, the Tune-up Clinic, the Summer Picnic, and Traffic Handling. This month we will venture into kit building. The topic will be new to most of us but "old hat" to other members. This is where "Elmering" really comes into play. Hams that are very familiar with a soldering iron and a schematic will be able to help others get their feet wet in this really fun part of the hobby. It is an easy kit to get started with, and we hope to have more than one completed before the end of the meeting.

The interesting topics will continue as the months push on. All of the meetings are educational, to say the least. One of the things that make them so, is that some of them do not involve Ham Radio at all. Remember the meeting about the Lake Champlain Ferry (3/99), or Railroad Radio (10/96). We have a lot of new members, so you may not have been able to attend, but believe me they were riveting.

I invite all of you to attend our meetings and social functions. In addition, you are invited to suggest topics, write articles, and/or give presentations. For instance, if you work in a technical field, or belong to a specialized ham radio club, we would appreciate hearing about it. Hope to see you at the next meeting.

Traffic Nets You Can Try

NET	FREQ	EST/EDT
VT/NH Net	3540 kHz	1900
Granite State	3943 kHz	1800 1345 1530
Eastern Area	7243 kHz	1430 M-F

DF-ING THE FAIR!

By Mitch WISJ

This is sort of a sequel to the wild and woolly “DFing your Neighbors” which appeared the month before last. I went to the Champlain Valley Fair a couple of times and brought my radio with me and well, you know, the rest is history.

Actually, I didn’t DF anything. And my main purpose was to see and/or harass the animals and people who I found there. The radio was a minor part. However, since this is a radio newsletter, that’s what I’ll report on. I came equipped with my Yaesu VX-5 and one other important piece of equipment – the handheld frequency counter! On a legal note, all of these frequencies are legal to listen to (*my HT is cellular blocked*). However, it is illegal to divulge the contents of the transmissions, so I can’t report on all the mooing, clucking and oinking I heard on the radio.

At any given time, there are a dozen or so frequencies in use at the Fair. Police, Fair employees, private security, broadcast links and a plethora of wireless microphones make up most of the activity. The easiest ones to find are the broadcast links. These run for long periods, at significant power – 25-50 watts. Right away, the counter locked right on to 161.76 MHz over a wide area. This is the link for WOKO personalities to talk back to the studio. It appeared that sister station WKOL also had an antenna, but I didn’t hear activity from over there. During remote broadcasts, the personality at the Fair gives a 30-60 second speech over the radio link. Everything else originates from the studio. When the radio link is the air, some geous banter between the and staff at previous such links W V M T , WKDR had links. In fact, one year, WKDR’s link transmitter was broken and it dumped spurs all over the place – including a full quieting signal on the input of the 146.85 repeater!

“I thought about finding the frequencies used in the Hypnotist and Magician shows, but I didn’t want to run the risk of being hypnotized or made to disappear.”

Another interesting group of frequencies to listen to is police and security. The Fair hires policemen from Essex and other departments to patrol the grounds. They do not use the Essex Police repeater on 460.1 MHz but instead used a simplex channel – 467.625 MHz. Activity on this channel seems to pick up on Friday and Saturday evening and usually centers on activities near the beer tent! Fair personnel use 467.75 MHz among other channels for logistical communications. Lemieux Security, a vendor watchman service, uses a frequency in the 462 MHz range (*I didn’t store and forgot the frequency!*).

Some of the most interesting radio signals come from low power wireless microphones and control transmitters. During most of the day, there was a robot running around the fair entertaining the crowd. This robot does not have any intelligence per se. Instead, a person who stands off to the side controlled its every move. In this case, the operator was seen talking into a coke can. He obviously nursed this Coke for many hours. Inside the can was a digital transmitter on 75.95 MHz. Fortunately, my HT doesn’t transmit there, otherwise the robot might have done some really strange stuff! Wireless microphones were everywhere. Of course, every big concert uses several wireless mikes, but I generally avoid those nights. However, there were lots more to play with. The announcer at the Pig Races was on 462.705 MHz. The operator of the Fat Albert game (*the one where the mouse runs on wheel*) was on 185.4 MHz. And, for the DX entry, McDonald’s, across the street, was heard on 902.4 MHz. I thought about finding the frequencies used in the Hypnotist and Magician shows, but I didn’t want to run the risk of being hypnotized or made to disappear. There were lots of other radio frequencies in use, but I preferred to spend most of the day as a tourist vs. a radio geek.

The normal (non-ham) person might ask why one would spend any time doing any of this. To me, exploring the radio spectrum and watching how it is used is a lot of fun.

THE QRP BUG

by Fran KMIZ

The QRP bug bit me a while back. I built my first homebrew QRP rig in 1981. It was modeled after W7EL’s “Optimized 40 Meter QRP transceiver” as published in QST and in some editions of the ARRL handbook.

I made many contacts with it, even then in the early 80’s when QRP was not so popular. The bug has held on since then. There is a certain good feeling you get when you can use simple technology to communicate over distances. It seems like a lot of people spend a lot of money and time doing the same thing with computers and cell phones, etc. I admit that QRP ham radio may not be as reliable, but it sure is fun when you can communicate over hundreds of miles using something you built with your own hands out of \$50 or so worth of parts. With the good band conditions of late, it is a good time to have lots of fun on the air with QRP.

Brian N1BQ’s radio construction night on October 10th would be a good one to attend, even if you aren’t building a 40 meter “Tuna tin” transmitter. Just join in and grab a soldering iron. You can put my tuna tin transmitter together!

CONTEST CORNER

by Paul AAISU

The results of two DX Contests have just been published. In the CQ WW DX CW Contest, KK1L put in a few hours on high power, and I managed a small effort on low power. This one was held on the weekend after Thanksgiving, so we were not able to put in a full time effort due to family commitments. In February, the propagation gods were shinning down on the ARRL International DX CW Contest. On low power, I came in just behind W3SOH of Rutland. On high power, 5 Vermont hams competed, including KK1L and AB1T. Results are in CQ and QST respectively.

I am happy to report that I have received two nice certificates lately. For the 1999 ARRL 10-Meter Contest, I received First Place, Single Operator, CW Only, Low Power, Vermont Section. I had some competition, too.

For the 1999 CQ WW WPX SSB Contest, I just received First Place, Rookie, Low Power, in the Single Operator, All Band, United States First District. This was my final year of eligibility for Rookie Class. I'm not sure if I had competition, because I don't see the Rookies mentioned in CQ Magazine.

I also had entered the WPX CW as a Rookie with a high score, but it was accidentally grouped with regular scores, during the log checking. Guess I should have checked the web page, before the public release. This is a good reminder: always check that you are being scored in the proper category, if this information is available to you.

For the next few weekends, here are some tests for you to try out. On October 14th (*after the Fox Hunt*), you can try out the Pennsylvania QSO Party. The Saturday hours are Noon to 1am. It then continues on Sunday, 9am to 6pm. The scoring is complicated, but if you can do 80 Meters CW from your house, you have a direct high scoring shot to PA at night. October 21st brings us 3 more stateside QSO parties, as well as the Worked All Germany Contest. WAG runs from 11am Saturday to 11am Sunday. Guess who we work here? Exchange is RST & QSO number. Score 3 points per QSO, and multpliers are the 26 German Districts. All of these events are all good for testing your Search & Pounce skills.

Moving to the last weekend in October, we find "The Contest": The CQ WW DX SSB. This is a monster 48-hour contest where everyone works everyone. There is also a changeover to Daylight Savings time to boot. With the propagation being so good this year, it is possible to get your DXCC during this test alone. Those of you in the YCCC are naturally encouraged to get into this one. Details are in QST.

The ARRL CW Sweepstakes is on November 4th. It starts at 4pm Saturday and ends at 10pm Sunday. This is a big stateside contest, and practice ahead of time with NA, CT, or TR is highly recommended, as the exchange is so long. Stations can only be counted once during the contest. But many hams will want Vermont on more than one band.

We've lost some affiliated club score totals by members forgetting to list the club. Don't forget to list RANV as your affiliated club for the SS, 160m and 10m and YCCC for the CQ WW.

Finally, on the weekend of November 11th, we find nothing. That's right, it's time to rest up for SSB SS and Thanksgiving.

DANCING = CONTESTING

By Mitch WISJ

"So SJ, what the heck were you really doing lifting W1DEB in the air like that?" This was among the many comments about some interesting pictures which appeared on the Web Site. We were engaging in Swing Dancing and I was doing a maneuver called a lift. We also do some other strange moves, including one in which I yank Debbie through my legs and another where she swings out horizontal.

So, what does this do with amateur radio? Well, the answer is simple. Dancing is very much like contesting. That's why I enjoy it. Disco dancing is the classic single op category, while partner dancing, which I enjoy, is much like the Multi-2 transmitter category (*two ops*). Debbie goes for QSO's while I pick up the multipliers. Finally, we have line dancing or the ubiquitous Chicken dance to end up being the multiop category of dancing.

Swing dancing involves some complicated maneuvers done in one spot on the dance floor; much like the Sweepstakes with its complicated exchange, usually done on one frequency. The Waltz or Fox-trot, in which you move around the room, is just like the Sprints which prohibit staying in one spot but require QSY'ing around the band. In fact, dancing has something very similar to the dreaded DX Window. Proper etiquette requires stationary dancers to stay in the middle, leaving the outer edge of the room (the dancing DX Window) open for the folks doing Fox-trot. And if you don't clear the window on the dance floor, it's likely you'll get run in to!

The effect of dancers crashing into each other is very similar to adjacent QRM crashing onto your frequency. I get the same feeling when some couple squeezes in next to us, pinching the room just like someone parks a kHz away and calls CQ. When this happens the radio operator pulls in the bandpass filters, while dancers tighten up the moves and use every leftover piece of dance floor available.

Contesters, of course have to pick up many contacts and multipliers and submit a log. The advantage of dancing is that no logs need be kept. Points are scored simply by having a good time and impressing others in the room. In mixed dancing, sometimes a higher score is attained by dancing with as many partners as possible, but this is optional. Some male operators are known to score after the dance, but we don't have data on this.

VT PUBLIC TV VOLUNTEERS

Vermont Public Television (Channel 33) is once again seeking amateur radio volunteers to help with their December, 2000 Membership Campaign. In order to ensure that volunteers who come forward can be easily registered and assigned to tasks and time frames, Sam N1PDL has volunteered to record names, addresses, phone numbers, and email addresses for volunteers willing to help out.

In past years radio amateurs have answered pledge telephones and served as bid runners during on-air special programs. The station also offers a tour of their technical facilities, and food is donated and served to volunteers. Folks usually report the fun they've had contributing and helping out during these membership campaigns.

As soon as Vermont Public Television planning for the event is completed, I'll post particulars to folks who have signed on as volunteers.

Volunteers are asked to submit names, postal addresses, telephone numbers, and email addresses to Sam at 655-1664, E-Mail: n1pdl@arrl.net.

Contacting RANV

In Person: Meeting, Oct 10, 7pm,
O'Brien Civic Center
113 Patchen Rd, SBurlington
By Mail: PO Box 9392, South
Burlington, VT 05407
By Radio: 145.15 repeater
By E-mail: w1sj@arrl.net
WW Web: <http://www.ranv.together.com>

Principals:
President Paul AA1SU 860-1134
VP/Tres: Richard WN1HJW 372-4595
Secretary: Fred N1ZUK 878-4209
Editor: Mitch W1SJ 879-6589

Please send submissions for newsletter to the editor, W1SJ.

TIDBITS

WEB SITE

A lot of people watch the RANV Web Site (*address on back*). The number of hits clocked each day is still on the rise. All sorts of information about RANV and ham radio in Vermont are can be found. It's worth getting an Internet account just to read it! What else should be added? If you have ideas, send them along to w1sj@arrl.net.

REFLECTOR

Keep track of the latest information and scuttlebut in RANV. Subscribe to the RANV Reflector. Send an E-mail to ranv-request@wpi.edu and put SUBSCRIBE in the message. Then anything sent to ranv@wpi.edu will go to everyone subscribed to the Reflector.

CALLSIGN CHANGES

Jay W1EMT changed his callsign again. He is now K1UC.

HOT 515 NEWS

A new repeater antenna has been ordered for 145.15. Installation should be in October or November, weather permitting. A repaired transmitter board is all set to go and these changes should clean up much of the noise.

OTHER REPEATERS

New repeater on Pico Peak is N1DZA on 444.40+ with 82.5 Hz tone. Mt. Mansfield 146.94 is back on with 100.0 Hz tone. The Northern New York Net is heard 7:00 am and pm simultaneously on 145.11, 147.255, 53.35, 53.59 447.775 and 448.775 Mhz!

SELL HAM RADIO!

The growth of amateur radio this year is quite poor. Yes, there have been lots of upgrades, but we still need to bring fresh blood into the hobby and into the club. Get active on the air and show off your stuff! And then get them enrolled in a class!

FOX HUNT OCTOBER 13

Join us for the final Fox Hunt of 2000 as Paul AA1SU will attempt to foil a cast of hunters. The hunt will take place Friday, October 13th, starting at 6pm. This is Paul's first stint as a Fox, so we don't know what tricks he has up his sleeve.

The rules are simple. Check into the event on the 145.15 repeater at 6pm (required). Then, listen on the input of the repeater (144.55 MHz) and look for the Fox. The Fox will hide in a public accessible spot in Chittenden County and will transmit at least 10 seconds out of every minute. The winner of the hunt gets to be the Fox at the April, 2001 Fox Hunt and receives all bragging rights associated with this honor.

SEND STUFF!

It is the continuing tradition of News & Views to report on local ham radio activities here in Vermont and not to repeat national news found in other sources. But, to do this, we need input from YOU! Articles, short or long, really help. But also, any news of your ham radio activities are of interest. Please send them to me at w1sj@arrl.net.

Welcome to RANV

We've been a little lax with these listings, so it's catch-up time:

Dave W1DEC of Fayston, is a graduate of this spring's ham class and was a major player at Field Day.

Steve KB1EXF of Jericho, also a graduate of the spring ham class made a satellite contact at the April RANV meeting.

John KB1EYC, daughter **Leela KB1EZD** and son **Leo KB1EZE** of Essex all got their Novice and Technician Plus licenses together. Leo made his foxhunting debut at the summer picnic.

**NEXT MEETING:
“Construction Night”
Tuesday, October 10th 7pm
O’Brien Civic Center**

**FOX HUNT
Friday, October 13th 6pm
on 145.15**

RANV

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