



Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

September, 2000

Vol. 10 No. 9

VERMONT TRAFFIC HANDLING The September 12th RANV Meeting

Come join us for an overview of Amateur Radio's oldest activity: Traffic Handling. The handling of Traffic has become a lost art in Vermont, but the new ARRL Vermont Traffic Manager Karl Zuege KB1DSB of Bomoseen, hopes to reverse that trend. Knowing how to efficiently pass traffic can be a big help in an emergency, and it can be a lot of fun to learn.

Karl, our featured guest speaker this month, has accepted our invitation to come talk on this subject. We can expect an overview of the NTS (*National Traffic System*), including its purpose, goals, and history. How does it function during disasters? How does it function the rest of the time? How does the traffic (message) get from the sender to the recipient? Just what exactly are Radiograms? These questions and more will be answered at the upcoming meeting.

So, come join us for an evening of ham radio, snacks, and ragchewing at 7pm in the O'Brien Civic Center, 113 Patchen Road, South Burlington. Of course, don't forget Snax-at-Zak's on Williston Road, starting around 6pm.

WEEKEND CLASS TO FEATURE GENERAL UPGRADE

The next Weekend Ham Radio Class in our area will be on Saturday and Sunday, **October 14-15th** in Essex Junction. The course has been revamped this year to take in all of the changes to the amateur service put into effect on April 15th.

The Weekend Course will offer **three** types of classes: Technician Class, General Class (*no previous license*) and General upgrade Class (*existing Technician*). How all of this will be offered in a single weekend is a bit complicated to describe here, but rest assured, the results will be as good as they always have been for these courses. No Morse code training will take place in class, but the course materials will include Morse code training software and instructions in its use.

There is no better time to upgrade to General and explore the HF frequencies! If you are interested or if someone you know is interested in taking one of the courses, please contact Mitch at 879-6589 or w1sj@arrl.net. He will give you all the course and enrollment details.

October Meeting: **CONSTRUCTION NIGHT**

by *Brian N1BQ*

The October meeting is going to be Construction Night. I have laid out six simple designs that I found in various ARRL books and various web sites. These include a mix of simple 40-meter CW transmitters, code oscillators and a simple programmable fox hunt controller. I had some other ideas as well but I have plenty to evaluate right now. I am trying to get them built in the next two weeks so I can evaluate them and get some parts packages put together.

My idea is to first show off what we have. Then I will demonstrate various construction techniques, including hi-resistance stand-offs, "Manhattan style" stand-offs and generic project board techniques.

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OUR LAST RANV MEETING

by Fred N1ZUK, Sec'y

For last month's meeting, a sizable number of hams, family, and friends arrived by land and water to attend RANV's annual celebration of summer – the RANV picnic. After what have been too many questionable summer days, perfect weather was in store for those who ventured to Knight's Point State Park. Along with the sunny skies, good food and company was plentiful.

Although no official club business was attended to, there were many other distractions to keep one busy: a low power fox hunt; a HF and VHF station to operate; fishing, swimming, and other fresh air activities; and the all important eyeball QSOs and ragchewing. David W1KR even had an impromptu demonstration of a miniature steam engine he had built, driven by an antique backpacker's camp stove and garage sale cappuccino steamer. Bet that's something not seen at most picnics! The YCCC (*Yankee Clipper Contest Club*) chapter here in Vermont also took the time to have a meeting, making plans for the upcoming contests.

Thanks to all who joined us this year. Although we all have a common interest in amateur radio, it's always nice to know we share so much more than that.

Contacting RANV

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Burlington, VT 05407
By Radio: 145.15 repeater
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Please send submissions for newsletter to the editor, W1SJ.

DONATED RADIO

by Paul AA1SU

Recently, a 2-Meter FM Radio was donated to the club by the son of a late ham radio operator. William Willard Stone, WB1FWR of South Burlington, passed away at the age of 81 on February 2, 1999, at the Vermont Respite House in Williston. His son, Dave from Albany, contacted me by E-mail and asked me if our club could use his father's mobile rig, and that he had already donated the base radio to BARC. I wrote back to him, passed on the condolences of the club, and told him that we would accept the rig and put it to good use.

The club now has a Kenwood TM-211A, that we will make available to a club member that could use a 2-Meter radio to get on the air. There is no manual with it, but according to Fred N1ZUK, one is available from Kenwood for \$14, which we may purchase. It is not available on line. I have experimented with the radio on the local repeaters and received fine reports about the audio. It is an older, less complicated rig, but I still have trouble with the features, so the manual may be a necessity.

If you are a club member that could use the rig, please let me, or one of the other officers know, and we will loan it out for a 3-month period. In the meantime, I may experiment with it, and see how it would work in a packet radio station. I will bring it to the next RANV club meeting for members to view.

THE PREZ SEZ

by Paul AA1SU, President

While reading through a ham radio magazine lately, I noticed a recurring theme. It seems that Software Defined Radios, or SDR's are the wave of the future for most forms of two way radio communication. What this means is that instead of configuring a radio using the hardware as the primary way to set the parameters, computer software would be used. This would apply to every parameter of a radio, including frequencies and modes. This could save a radio manufacturer money because only one radio platform would be needed, and the specifics of the radio's application would be determined by the software. Imagine the possibilities. A radio could be reprogrammed on the fly to perform different tasks, or to communicate with different groups.

The other buzz phrase going around these days is digital communication. Hams, long the leaders in radio experimentation, are now being encouraged to experiment more with spectrally efficient communications techniques, especially digital techniques. This would have many benefits for ham radio, including showing that we are good stewards of the public's airwaves, and increasing the attractiveness of the service to new and old users alike.

So, if you think that the hobby is (or is not) exciting now, just wait and see what the future will hold. Why, just combining the two new ideas mentioned here, could keep many of us busy with ham radio fun for years to come, not including the stuff that we haven't discovered yet. As I've said before, we don't always have to be the hams doing the experimenting, we can just be the ones utilizing what the others have discovered. That's what makes this such a great hobby.

SUMMER FOX HUNTING

By Mitch WISJ

The Fox Hunt at the Picnic

For the first time, a fox hunt was part of the RANV Picnic as I devised a plan to hide 4 transmitters throughout Knight's Point State Park. A prize I won at the Dayton Hamvention was put to good use for this. This was something called the *Picon Fox Hunt Transmitter Controller*. It is a nice little kit on a 1-inch square circuit board, which went together in 30 minutes. The circuit is very similar to a repeater controller – it controls transmit on/off times, sends a callsign and a series of programmable tones – and it is programmable on the fly as long as the hidden transmitter has off times in which it is listening. I paired this controller with my IC-2AT HT and stuck the whole thing in a small black box.

For the second transmitter, I took the exciter board from an old commercial transceiver, plugged in an available crystal (146.94!), stuck a battery in it and dumped all of this in another box. The third transmitter was nothing more than a portable scanner. As most hams know, scanners are notoriously dirty in sending out the local oscillator frequency. In my scanner's case, it is the frequency shown, minus 10.85 MHz. Finally, for the fourth transmitter, I had everyone look for a signal which bugs me every time I get in the car – the 147.005 MHz birdie from the engine computer!

Each transmitter (*except for the car*) was hidden somewhere in the brush, and each contained a unique number on it. The first one back with all of the correct numbers was the winner. Eric N1SRC distinguished himself as the premier fox hunter on this day, as he took 2 hours 17 minutes to find all four transmitters. Honorable mention went to Charlie KB1CNR who finished just 5 minutes after Eric. I had to talk him out of quitting the hunt a couple of times, but he did an excellent job. Charlie is no stranger to hunting, being a member of CAP, but this is the first

time he did it on foot. Paul AA1SU found all of the transmitters after taking a 1-hour break to run the YCCC meeting! And new ham Leo KB1EZE managed to find one of the transmitters and was he ever overjoyed to find it!

Fox Jumps in the Lake!

Six days later, we held the normal Friday countywide hunt on 145.15 MHz. Right on cue, it rained. Debbie and I planned to spend a lovely evening at the beach on the old railroad fill off of Mills Point in Malletts Bay. Because these hunts traditionally take a long time, we packed dinner! Along with dinner, we had a 25-watt transceiver, battery, antenna, 20 feet of mast, coax and even a tent to keep dry! All of this was trucked in ½ mile on bicycle. What was not brought was a flashlight! Our site was right on the water, between some rocks. While we could be seen from the path, you had to look carefully.

I started the hunt, but put Debbie on while I adjusted the antenna and hid the bikes. She quickly became ham radio's version of Miss Manners and she read all sorts of proper etiquette situations out of one of her *Good Housekeeping* magazines.

In quick order, all 4 hunters ended up circling around Colchester, but none could seem to get close. With nightfall descending, I gave out a major clue: "*it is impossible to drive to the fox.*" That got the wheels of strategy turning. Later, I decided to crawl out from the beach and look down the path to look for hunter activity. I saw some non-descript character running down the path. Someone this crazy had to be a jogger, or worse yet, a fox hunter. I ducked down to wait for him to go by and looked up to check, but too late – I was caught! It was Paul AA1SU. He said that others were behind him so I told him to continue down the path so as not to give our hiding spot away. Sure enough from the safety of the fox hole on the beach, another ham went

running by at high speed. It looked like Fred N1ZUK. After waiting 5 minutes I went up to the path to see if he was still looking and he was clean out of sight. "My God", I thought, "I hope he doesn't plan to run all the way to the end of the path, 2 miles further ahead!" In the failing light, Fred never did find us and walked back out, even though we didn't see him come back out. A little later Dan N1PEF came walking by and saw me.

By 8:45 it was quite dark and with no lighting on the bike path, it was time to pack up and go. The last hunting team of N1YWB and KB1FLE was told to find my car at the trailhead, but they were already too far away, so we all convened at Zack's for eats.

This was a fairly difficult hunt since you could not find the fox simply by driving around. A good map and good direction finding capability was required. Once on foot, good signal sensing was needed, otherwise you would have ended going right by the fox. All of this in an evening of practice.

The next hunt will be October 13th, at 6pm with Paul AA1SU officiating. See you then!

Official Results

Hunter	Found	Tot Time
AA1SU	8:13	1:38
N1PEF +1	8:31	1:56
N1ZUK	DNF	--
N1YWB + KB1FLE	DNF	--

A REAL Fox Hunt?

This past month, an Alinco DR-112 two meter transceiver belonging to FredN1ZUK was lifted from his car, right in front of his house. Bummer. I really hate that kind of stuff! Anyway, the radio was programmed with 145.15, 146.61 and 146.85 MHz. In the off-chance that the perp decides to put this radio on the air, you might want to see if you can locate its source. If you do find the location, don't intervene, simply report it to the police.

CONTEST CORNER

by Paul AA1SU

This month, we have more exciting contest results to report, as well as the usual reporting of upcoming contests. In the *CQ WW DX Contest SSB*, held last October, Ted K1HD led the RANV pack with a great high power score. Also using high power was KK1L, who put in a shorter weekend effort. In the low power category was yours truly, AA1SU, with a fairly good score, as well as Jim N1BCL. Jim contacted 44 countries in just one weekend on 10 Meters, on low power. Is this an incentive to learn the code, or what!

The *ARRL 10-Meter Contest* was held last December, and RANV was listed in the Club Competition with a nice combined score. We are still showing up in the Medium Category, instead of the Local Category and I'll get that fixed. This year, there was increased Vermont competition. Fran KM1Z won as Mixed Mode, Low Power. Bob N1MEZ (now WJ1Z) won as Mixed Mode, High Power. Jim N1BCL/T won Phone Only, Low Power, in the Novice portion of the band. In Phone Only, High Power, Mitch W1SJ beat out Frank N2FF, who was visiting from Long Island. AA1SU beat out W1SA in the CW Only, Low Power category, and Ted K1HD's new station edged out AA1VT in the Multi-op division. Congratulations to all for such a fine effort. In the *ARRL RTTY Roundup* held in January, I was the only entry from Vermont. With the growing popularity of PSK-31, let's hope for more involvement for RANV members in the future.

For the month of September, there are a lot of specialty contests which are good for Search & Pounce practice. The *Washington State Salmon Run* starts at noon on Saturday September 16 and ends at 8pm on Sunday with a 9-hour break at 3am. The *Tennessee QSO Party* is on Sunday 2pm to 9pm; a short one. The *Scandinavian Activity Contest (SAC)* CW is also on the air from 8am Saturday to 8am Sunday. Great CW DX for you here!

The following weekend is the SSB portion of the SAC with the same hours. Again, good DX and good practice. For those of you that want to get your DXCC and WAS in RTTY, there is a 48-hour contest called the *CQ/RJ WW RTTY Contest*. This is a tough one to get your feet wet in, but worth it. Alabama will also be on the air with their *Heart of Dixie QSO Party*. On the 30th, there is the *Louisiana QSO Party* where you collect parishes instead of counties. The *Texas QSO Party* will be the big feature of this weekend though.

Finally, on October 7th, is the great *California QSO Party*, the biggest and best of them all. A bottle of wine is one of the prizes for the top 20 stations outside of California. You can work California stations on 5 bands in one weekend in this fun contest. In CW, you will hear them calling CQP. You can also run them for long spurts.

As always, details can be found in the Contest Corral of *QST Magazine*. Next month, it's *CQ WW DX SSB*.

NORTHERN VERMONT YCCC MEETING

by Paul AA1SU

The Northern Vermont Area Meeting of the YCCC, was held in conjunction with the Radio Amateurs of Northern Vermont (RANV) club picnic at Knight's Point State Park. The weather cooperated nicely, even if 10 Meters did not. With a wire antenna strung up in the air, a freshly charged battery, and a Kenwood TS-430, we searched for a few good QSOs. On 20 Meters, I gave out about a dozen contacts in the NAQP CW with our club call W1NVT. On 40 Meters, we found a few special events and Lighthouses on SSB. Once again, no luck on the County Hunters Net trying to give out our rare county – Grand Isle.

Meanwhile, whilst the grills were warming up, Mitch W1SJ set up a 4 transmitter fox hunt to keep us entertained. Ranging in power from 1 to 150 milliwatts, some of us spent our time honing our fox hunting skills. This



Tom W1EAT (eating), Ted K1HD, Paul AA1SU, Ron KK1L & kids

hunt was done entirely on foot within the confines of the Park. This gave us a chance to eat between finds. Considering that Mitch won the fox hunt at the Dayton Hamvention this year, we knew that this would be a most challenging hunt. For winning that hunt, Mitch was awarded a controller kit that is specially made to control an HT in a transmitter hunt. It sends out a goofy little tune and identifies in CW at specified intervals. This was in turn, used in our hunt. The cagey fox even had us DF a spur coming from his vehicle's computer!

While some of were raising eyebrows around the park with that activity, most of the group just hung around and ragchewed. Everyone was having a good time, shooting the breeze, eating, and wondering if Paul was ever going to start the YCCC meeting. I finally did start the meeting and gave a little overview of the club to the guests attending. For the main part of the discussion, we talked about Ron KK1L's recent tower raising and zoning adventures. I encouraged everyone to pay dues and even collected some.

Attendees: Paul AA1SU, Tom W1EAT, Grant K1KD, Ron KK1L, Mitch W1SJ, Rick WZ2T. Guests: Ted K1HD, Jay N1WTT

VHF QSO PARTY

By Mitch W1SJ

The ARRL VHF QSO Party is coming up this weekend and I urge all of you to take part. The QSO Party is a contest which takes place on all amateur frequencies above 50 MHz. Thus, it is an excellent contest to get involved in if you are a Technician class licensee. Many higher-class amateurs also take part.

There are 3 basic ways to partake in the QSO Party. The simplest way is to connect a handheld or mobile radio to your base antenna. Don't have a base antenna? Take some old metal hangers and build yourself a -wave ground plane and stick it up and high as you can. Or, if you are really adventuresome, buy or build a small yagi. They work real well. Don't forget to consider UHF! If you have a duoband radio, make sure you try to move everyone you work on 2-meters to UHF. Of course that means you should consider an antenna for this band as well. The popular frequencies are 146.55 and 446.0 MHz. From the Burlington area, you won't hear a tremendous amount of activity, but leave the radio on all during the day and you will certainly make a few contacts.

The next best way to participate is to take your handheld or mobile radio and drive or walk up to a high spot. The higher you are, the better you get out! Popular drive-up spots include Mt. Mansfield, Mt. Philo in Charlotte and Rand Hill and Whiteface Mountain in New York. If you love to hike and backpack, you can virtually go to any spot to operate. Just make sure you are in good shape to get there and back! A 25 or 50 watt radio from one of these locations will work quite well with a $5/8$ -wave antenna on your car. A small yagi will work even better. Operation from a high spot with a good antenna will generate a fair amount of activity.

Another great way to participate in the VHF QSO Party is with an established multiop group. Groups usually set up at superior locations and have the equipment and resources for a maximum effort. Some operate all bands, which literally means 50 MHz to light. Contacts are even made on laser! Some stations operate in the limited mode, which means only 4 VHF/UHF bands are used. These groups operate both SSB and FM with higher power and big yagis. The operations look a lot like a Field Day! RANV members will be on Mt. Equinox for the September contest operating a limited multiop station. This ends up being 4 SSB and 3 FM stations, each with power supply amplifier and yagi (some as big as 27 elements). Trust me, there is plenty to do! Fortunately, unlike Field Day, we get the whole operation going in about 3 hours. For the first few hours of the contest, 2-meters sounds like 20-meters. It is wall-to-wall QRM and the contact rates approach 100 QSO's per hour. And that is just on one band! If 6-meters opens up, it gets even more crazy. Later in the contest, things slow up a little, but it rarely gets boring.

If you want to share in the craziness of mountaintop operating let me know and plan to join us on Mt. Equinox. It is only a short 100-mile stroll down Route 7! The views from the mountain alone make the trip worth it. Oh, that's if it's not cloudy.

Otherwise, the contest starts at 2pm Saturday and ends at 11pm Sunday. Simply exchange your grid square, which is FN34 in the Burlington area. From Mt. Equinox, we'll try to point the beams north on the top of the hour to look for you. Have fun!

ELECTIONS

November is the month we hold elections for RANV officers. Enclosed with your November newsletter will be a ballot. Between now and then, we need to decide who will be running for (*or away from*) office. Paul AA1SU will continue the fine work he is doing as president. Richard WN1HJW will be stepping down after 2 years as Vice President/Treasurer. The books have never been more organized and he'll be a tough act to follow! This is a great job as you get both the official RANV checkbook and attaché case! The prerequisite is that you need to know how to add and subtract, or use a calculator effectively. I believe Fred N1ZUK will be stepping down as secretary and we'll miss his humorous accounts of past meetings. The new secretary will get to write the famous Last RANV Meeting and engage in any other correspondence. But since we never write to anyone, there isn't much work.

The nomination process is informal. Just let Paul know you would like to run for an office and your name will appear on the ballot. Nominees must agree to serve, be a member of the club, and be warm-blooded, air-breathing, etc.

CONSTRUCTION... continued from page 1

Next, I'll show the various projects we have that night and finally we will get down to building them. I will have handouts with schematics and diagrams and home brewer resource sheets from the Web. There is an amazing wealth of resources out there for the home brewer. A good starting point is the New Jersey QRP Club <http://www.njqrp.org>.

I will initially supply most of the materials and then set up a donation jar. Tom, W1EAT has offered me access to a well-stocked junkie box of parts as well. I am in need of PC board material (double or single sided scraps 2"x3" and larger, any shape) to make small project boards for that night. I can bring two soldering irons and a desoldering tool. I plan to bring my MFJ SWR Analyzer, Grid Dip oscillator and multimeter. In addition, I'm hoping that we can get a few more irons, tools and outlet strips.

Please contact me and let me know what types of projects you would be interested in so that I can plan to bring the right amount of stuff. My E-mail address is n1bq@wulfden.org and phone number is 899-4527. I'm looking forward to having a great time building things at the October meeting!

NEXT MEETING:
“Vermont Traffic Handling”
Tuesday, September 12th 7PM
O’Brien Civic Center

RANV

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