

# Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

OCTOBER 2001 10 Great Years of RANV Vol. 11 No. 10

# ANTENNA MODELING The October 9th RANV Meeting

For our October meeting, Dave WX1C will give a talk on antenna modeling programs and how to use them. This meeting was held over from last month when the RANV meeting was cancelled due to the terrorist attack.

The concept of antenna modelling is simple. You enter all of the antenna's parameters into the computer and it will predict how well the antenna will work. In the old days, we built antennas and hoped for the best. Sometimes we got a winner and sometimes we got nothing more than a sculpture with little artistic or radiation value. With modelling we can also make predictions on what antenna heights work the best and what locations work well. All commercial antennas today are designed with computer models.

So, join us for the October  $9^{th}$  RANV meeting on Antenna Modeling. The meeting takes place at the O'Brien Civic Center, 113 Patchen Road, South Burlington and starts at 7 PM sharp. Pre-meeting festivities and slopping of the hogs and hams will be 6 PM at Zach's on Williston Road.

## FOX HUNT OCTOBER 12th

Join us for the last Fox Hunt of 2001 as Mitch W1SJ will attempt to foil a cast of hunters. The hunt will take place Friday, October 12th, starting at 6pm. Co-foxing with Mitch is Debbie W1DEB, who is sure to be offering some nice etiquite tips.

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 (and public unfindable 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 next Fox Hunt and receives all bragging rights associated with this honor.

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#### HOSSTRADERS

Just as you receive this newsletter it will be time to head down to Hosstraders. The location is the Hopkinton State Fairgrounds in New Hampshire. Take 1-89 into New Hampshire and head for the Exit 7 - Davisville exit. After getting off, go left under the highway for 0.2 miles and then go right (should be Kearsarge Avenue). The fest will be a little over a mile down on the left side. The whole trip should be about 2 hours from Burlington.

The fest opens at 9AM on Friday, October 5<sup>th</sup> and winds down 1PM on Saturday. Try to be there both days for the best deals. Exams will be given on Saturday at 9 AM. Admission is \$10 before Friday at 3, \$5 afterwards. Sellers pay \$10 additional.

The Hopkinton Fair Grounds is a real nice place. There are plenty of areas shaded in pine trees, as well as open areas. It is very reminicent of the old Deerfield Fair Grounds. There is a map of the Fair available. Got to http://www.ranv.org.hossmap.jpg to download a copy.

The 145.15 MHz repeater should take you virtually all the way there, although it will be spotty for the last 25 miles. The 145.33 MHz repeater is a popular frequency near Hanover. At the hamfest, check in on the 146.67 MHz repeater to find the gang. I plan to have a link into the 145.15 MHz repeater from the hamfest, if it works out.

### VETERANS' DAY PARADE

by Mitch W1SJ

All hams are invited to help out at the Essex Veterans Day Parade, to be held on Saturday, November 3rd. Our job is to be marshalls to ensure safe and efficient movement of people down the parade route. This is probably the easiest and most fun amateur radio public service event there is! All you need to do is march down the parade route with your assigned group, keep in touch on the radio and have everyone cheer as you walk by! At the middle of the parade is the RANV "Float" decked out with antennas and banners. If this sounds like a carbon copy of the Memorial Day Parade, you're right!

Things will be a little bit different for this parade since I will not be able to be there. I will collect the volunteers, but we need someone to head up the event. We also need someone to set up our Float. This can be as simple as a vehicle with all the RANV banners and several antennas thrown in for good measure. A van would work well. A pickup truck with a full station on the back would be nice also.

All you need to take part is a reliable HT and a spare battery. We meet up at 7AM at St. James Church, just to the east of the Fairgrounds. Early posts will be done by 10, the latest anyone is needed is until noon. If interested in helping out at the Parade, contact Mitch at 879-6589, Email: w1sj@arrl.net.



**Everyone loves a parade!** 

#### THE PREZ SEZ

by Paul AA1SU, President

The events of last month's terrorist tragedy left us unnerved, upset, and angry. You may have a few choice words about it yourself. We could not bring ourselves to go on with the monthly RANV meeting after such an emotional shock. This included several members, our guest speaker, and myself. For those of you that made the trip to the O'Brien Civic Center that evening for the meeting, I sincerely apologize for the inconvience. I was driving around all day with the news radio on, and except for a fuzzy picture on a TV in a truck shop, I did not get to see any of the terrible footage until I arrived home, late in the afternoon.

As is usually the case, ham radio operators came to the aid of the rescue workers at both the World Trade Center, and the Pentagon. Several Vermonters volunteered to go down to the sites to offer aid, but were not needed. For two weeks the ARES/RACES teams in both states passed traffic for the effort. On September 24, the ham operations were reduced, but still continue today. A few Amateur Radio operators are among those listed as missing at both sites.

In our area of Vermont, some of us are concerned about our preparedness for major catastrophic events. If we were called upon to react to a national disaster in our area, would

### OUR LAST RANV MEETING

The September 11<sup>th</sup> meeting was not held due to the event of the terrorist attacks in New York and Washington. Our hearts go out to the families and friends of the many victims of this senseless tragedy.

we be ready for the job? Would our members have enough battery power, power output, free time, and knowledge to be up to the task? These are some of the things that we are reviewing. We will talk more about this in the coming months.

In the meantime, keep reviewing your own equipment and operational status. Stay active on the local repeaters, while keeping in touch with your ham friends. Ours is a very strong club. In fact, it is the largest in the state of Vermont. You should be very proud of that; I am. I am also very proud of all of you. Our members have taken the initiative to experiment with the latest in groundbreaking technologies. This goes back to long before I was a ham, when some were experimenting with new modes like packet radio. The veterans in our club have offered us a wealth of knowledge over the years. The others are soaking it right up. Please come to our next meeting, as we will have a great opportunity to do just that.

#### **Contacting RANV**

In Person: Meeting, October 9th, 7pm,

O'Brien Civic Center

113 Patchen Rd, So. Burlington

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.

#### **BE PREPARED!**

#### Radio Stories At and Near Ground Zero

by Mitch W1SJ

Those of you who have been involved with Scouting are familiar with the title of this piece. "Be prepared" is the motto of the Boy Scouts. They teach and strive for this in everything they do.

Be prepared. We weren't. Every single one of us learned that on September 11<sup>th</sup>. Statements such as "who would have thought?" are not a consolation. Life is filled with uncertainty and the unexpected. It just came in a much bigger package this time.

Be Prepared. With one exception, television in the world's largest and foremost television market, containing the flagship stations of all U.S. television networks, went silent and dark. Many people in New York did not see the live pictures we saw on Tuesday. The north tower of the World Trade Center had a 360 foot tower holding antennas for 8 television stations, 5 FM radio stations, 6-10 ham repeaters and countless radio services, including cellular. They all went dark after the hit. WCBS-TV channel 2 retained a backup in the Empire State Building since 1980, when all television stations moved to the Trade Center. Knowing how expensive midtown Manhattan real estate and tower space is, they paid a king's ransom over 21 years for a backup. That all paid off. For the most part, unless you have cable, many viewers in the New York metro area (encompassing some 20 million people) only get one watchable channel. Although cable penetration is high, it is estimated that 5 million viewers still do not have very much to watch. That is an interesting story which has not been mentioned much by the national media. Meanwhile, the rest of the television stations are struggling with low sites miles away from the city or low power lashups at the Empire State Building until something permanent can be put into place. That is months away. Some reports say it might be years. Of the FM stations, one, WKTU, a major station, had a fairly new backup on a high building in Times Square. **They were prepared**. And it is a good bet that every major station will now have a hot backup somewhere else besides their main transmitter site.

As an aside, and on a very sad note, it turns out that I do know people who are presumed dead in the attack. This suddenly makes it very real and more depressing. All week I was looking for names of hams that I knew had repeater sites in the towers. I assumed (hoped) that most of the transmitter sites were unmanned. I later read in Northeast Radio Watch that Steve N2SJ, transmitter engineer of WPIX channel 11 (a station we get on cable here) was on duty on the 110<sup>th</sup> floor. Steve also operated a 222 MHz repeater at the site. I first met him in the 70's at the Empire State Building when all the television stations were located there. Minutes after the crash, around 9:00, he reported that the heat and flames were overwhelming. Attempts to contact him after that were unsuccessful. It is likely that no one was alive above the 90th floor for very long. Three of the six missing transmitter engineers from all the stations were hams. Also reported missing is Bob KA2OTD. He operated 440 and 50 MHz repeaters. Besides conversing occassionally, we also did some E-Bay trading last year. He was a Port Authority police lieutenant and EMT. It is reported that he went into the north tower to help with the rescue. There is no official count, but it is likely that around 20 amateur operators became silent keys that day.

Amateur radio has been involved heavily with providing communications at "ground zero" and all over the New York area. While a lot of infrastructure in lower Manhattan was damaged, there was still a lot of communications ability available for police, fire and rescue. Amateur radio provided communications for the Red Cross, Salvation Army and backup communications where needed. It is very rough and dirty work. Many rescuers were injured climbing around the rubble.

**Be prepared.** In Vermont, we're NOT. If a major disaster struck our area, we would be hard pressed to mount much of a response. Hold the chorus of boos, I'm telling it straight and like it is, whether you like it or not. For those pointing to organizations like ARES and RACES, the sad fact is that there is no organization. We have a lot of hams willing to help but not much else. Part of this complacency is that we don't get large disasters here. Our emergencies are usually bad weather (which we get all the time) and the occasional localized flood. And anyone who is thinking that terrorists won't strike here because of the small population needs to quickly change his or her thinking based on current

How do we get organized? It starts with hams adopting the motto "be prepared" and implementing it always. Start with having a charged HT battery! It means that as hams, we are ready to provide communications for something unknown, AT ANY TIME. It means that we have a corps of leaders who work seamlessly with each other and with all levels of government. Talk has already started at one of our meetings on how to pursue these goals. Soon, all hams will be asked what they are willing to do to help. Now is a good time to collect your thoughts and help in the process.

Be prepared!

#### **CONTEST CORNER**

by Paul AA1SU

In what may be an unprecedented move, the *National Contest Journal* canceled the *North American SSB Sprint* for the evening of September 16<sup>th</sup>. This was done out of respect for those affected by the terrible news earlier in the week, and so as not to interfere with any emergency communications that may have been going on. Naturally, all of the hams in this area were pleased with this announcement, as they did not really want to participate in a fun event while they, and the nation were in shock.

Some recent scores have been posted in the magazines. In the *ARRL 10-Meter Contest*, several **RANV** members took to the airwaves, and as usual, we took advantage of the many classes. Brian N1BQ operated as Phone, QRP. Jim N1BCL had a blast doing Phone, Low Power. Mitch W1SJ made the Top Three list for the Northeast Region using Phone, High Power. Paul AA1SU and Grant K1KD used CW, Low Power. And finally, the *Road Kill Amateur Radio Club* W1PU entered as Multi-Op, High Power. It looks like we all took First Place for Vermont, except for Grant and I (*I spent several hours at W1PU*). It seems contesting among us is increasing. N1BCL's Soapbox comments were so upbeat that they made QST! Keep up the good work, folks.

By the way, QST keeps showing **RANV** as a Medium Category Club, even though we are a Local Category Club. We are working to resolve this. However, the other problem is that only three of us put down **RANV** as our affiliated club on the Summary Sheet. We all must remember to do this, as winning this category was one of my primary objectives when I started this column. If all six of us had done this, we would have done much better in either category. Except for DX Contests, enter **RANV** (not YCCC)!

In the *ARRL RTTY Roundup*, I was the lone Vermonter posting a score. I jst received a very nice certificate for my efforts too. It looks like I came close to making the Top Three list for the Northeast Region, but not quite.

Local Hams participating in the *CQWW SSB* were Ralph KD1R and myself using Single-Op, Low Power. Also running up the numbers was the team of KK1L, featuring Ron KK1L, Grant K1KD, and Bob WJIZ. They were in the Multi-Op, Single Transmitter Category. Bob WJ1Z also posted a nice score as Single-Op Assisted when he wasn't at Ron's.

In the *CQWW CW*, local contesters included Grant K1KD and Ron KK1L as Single-Op, Low Power. Bob WJ1Z pounded the brass as Single-Op, Assisted. I was out of town.

In the ARRL DX CW Contest, I decided to try it as Single Band. I only worked 80 Meters. This was a nice change of pace, and it freed up my days. My score of 16K came very close to the 80 Meter Top Ten of 19K. Loyd W1CX also operated, using high power. In the Multi-operator, Single Transmitter category, our old friends Ron & Grant put KK1L on the air once again. Congratulations to all of us for the extra effort.

For upcoming contests, we have two biggies. On Friday, October 26<sup>th</sup> at 8 PM the *CQWW SSB* Contest gets underway. For goodness sakes, get on for this one. It is 48 hours long, and there will be a lot of DX! As K1HD once told me, "You can yell, can't you?"

Looking ahead to November 3<sup>rd</sup>, you can work the *ARRL CW Sweep-stakes*. It starts at 4 PM on Saturday, and ends at 11 PM on Sunday. The exchange is long, so you must use the practice mode of your favorite contest software before this date. There is a lot to the rules, so read them ahead of time.

Next month, we are into the thick of contest season.

## PREFIXES and DX POSTAGE

by Paul AA1SU

It has been almost two years since I last presented information on postage rates for QSLing.

According to a list from the Post Office, the RSGB Prefix Guide, and contest software updates from AD1C, here is a list of DXCC Countries and their Ham Radio Prefixes that qualify for first class (34 cents) postage.

Country	<u>Prefixes</u>
American Samoa:	AH8, KH8, NH8,WH8, some KS6
Baker & Howland Is	: AH1, KH1, NH1, WH1
Guam:	AH2, KH2, NH2, WH2, KG6ASO
Palmyra & Jarvis Is:	AH5, KH5, NH5, WH5
Johnston Is:	AH3, KH3, NH3, WH3, KJ6BZ
Kingman Reef:	AH5K, KH5K, NH5K, WH5K
Midway Is:	AH4, KH4, NH4, WH4
Navassa Is:	KP1, NP1, WP1
Mariana Is:	AH0, KH0, NH0, WH0, KG6SL
Puerto Rico:	KP3, KP4, NP3, NP4, WP3, WP4
U.S. Virgin Is:	KP2, NP2, WP2, some KV4s
Wake Is:	AH9, KH9, NH9, WH9
Marshall Is:	V7, KX6BU
Palau:	T8, some KC6s
Micronesia:	V6

QSL instructions differ from station to station. Some operators might be visiting one of the above islands and prefer to have you send the QSL to their home address. In addition to the countries listed above, don't forget that Alaska and Hawaii are also considered DXCC entities.

Sometimes, the QSL instructions ask you to QSL directly to the DX station. This leaves out the QSL Bureau, and the cheaper postage. Below you will find a list of postage rates. Keep this handy, as you never know when you might stumble across a country that you need a QSL for, in a certain band and/or mode.

	<u>USA</u>	Can/Mex	<u>Other</u>
Post Card	21 cents	50 cents	70 cents
1 ounce letter	34 cents	60 cents	80 cents
Addl ounce	23 cents	23 cents	23 cents

International Reply Coupons (IRC) are now up to a whopping \$1.55! This makes the QSL Bureau very attractive. Some stations will actually prefer that you send a dollar, also known as a USD, or a Green Stamp. This can be much cheaper for you,

#### Prefixes and DX Postage –

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but beware of sending currency overseas. It could be intercepted along the way and the QSL Card discarded. You might want to keep in touch with the station by E-mail to make sure that it is received.

An International Reply Coupon is a method of postage payment which is redeemable for one first class postage in the country that it is SENT to. For instance, it costs you \$1.55 to buy one at your local Post Office. You then send it out with your card and envelope, and the ham on the other end takes it to his or her Post Office for one stamp. But, if you receive one from a ham overseas, it is only worth the cost of overseas postage – 80 cents.

A nice way to track down the QSL address of a needed station is to use the QSL Info Server. This is my personal favorite way of acquiring a needed address. It is a robot of sorts. You send it an E-mail with one call sign on each line; as many as you want. A few minutes later, check your E-mail, and you will have a reply. If the ham is on file, you will be sent a call sign of a QSL Manager, and sometimes even the name and address. In fact, if you get just the call sign, send that call back to the info server, and it may send you back the address of the manager. The email address is: qsl-info@datasync.com.

I hope that this will help some of you with the sometimes-confusing world of QSLing. It is a time consuming part of the hobby, but it can be worth it for those of you chasing your DXCC or some other award.



## **SEPTEMBER VHF CONTEST - Best Conditions Ever!**

by Mitch W1SJ

If you were planning to get on for the VHF QSO Party in September, you missed probably the best conditions in a lifetime! Weather conditions produced a tropospheric duct which propagated signals many hundreds of miles up and down the coast. It was so crowded on 2 meters, it sounded worse than 20 meters during Field Day!

I knew something was going to happen as I was driving up Mt. Equinox. I was monitoring the local repeater on 145.39 MHz and about 34 of the way up, I heard the 145.39 repeater in Queens, in New York City. Under normal flat conditions, New York repeaters cannot be heard at the top, even with the yagi. With a little "lift" they can be heard weakly. This signal bombed in while I was still climbing! I switched to 145.15 to make a call and heard the repeater out of Tabernacle, in Southern New Jersey (N1BQ's old stomping grounds). About the same time, a UHF repeater from Trenton came in on the UHF side of the radio. Oh boy, it was going to be a hot time as I raced to set up the antennas.

Once again, everyone abandoned me in this contest and I was operating as a low power single operator. In front of me were 7 radios (50, 144, 222, 432 SSB and 146, 223, 440 FM), 7 microphones, 3 rotor controls, a mixing board for all the audio outputs, and (thankfully) one computer. The game plan is simple – keep making contacts on all radios. Of course, when things get busy and people are calling on multiple radios, it becomes a free for all.

The first hours of the contest weren't really all that spectacular. The opening subsided – a typical behavior when contests start! There were no great openings, but things weren't all that bad either. It appeared that it was easier to work stations on the higher bands like 222 and 432 MHz, but nothing all that exciting was heard.

Right after sunset (7:45), all hell broke loose. W4NH from EM85

called in on 2 meters. That is the corner where Tenessee North Carolina and Georgia meet! Then signals from many far-away stations started getting very strong. K8GP in West Virginia can be heard every year, at about S-1 or 2. He was pinning the S-meter solidly and was 10-12 kHz wide. Trying to work some of the weak stations on 432 MHz is often difficult and time consuming. This time most were quite loud on all bands. Around 9:00 came a flurry of stations in 4-land from all over Virginia, Tennessee and the Carolinas. It sounded like a sporadic-E opening on 10 meters. This business continued right up until 3 in the morning, at which time I dropped from exhaustion.

I managed to drag myself out and get moving the next morning. After chatting briefly with Mike N1JEZ who had come up to work some microwave, I set down to business. Conditions were good, but not as great as the night before. There were certainly still a lot of people to work. By 2:00, conditions went flat and the typical Sunday afternoon doldrums set in. However it didn't last long!

Again, right around sunset (a very spectacular one, at that) things began to happen. VA1LW in Nova Scotia called me on 50 MHz off the back of the beam! I managed to get a few stations up that way and worked them on 2 meters as well! Then, I started getting stations out to the west. N8KOL worked me on the upper 3 bands. He is in Mansfield, Ohio - a little north of Columbus. I know this because I drive through there every year on the way out to Dayton! I picked up a few more throughout Ohio. This all occurred in the wild and wooly last hour of the con-

I ended up with 1125 QSOs and 188 Grids for a score of 274,000. Normally, I get around 800 QSOs and 120 Grids and 120,000. It is likely that records will be set all up and down the East Coast!

# SEPTEMBER MEETING: "Antenna Modeling Programs" with WX1C Tuesday, October 9th, 7 PM O'Brien Civic Center

## HOSSTRADERS Friday-Saturday, October 5-6<sup>th</sup> Hopkinton NH Fairgrounds

FALL FOX HUNT Friday, October 12<sup>th</sup> 6 PM on 145.15 MHz

RANV P.O. Box 9392 South Burlington, Vt 05407

http://www.RANV.org