

Radio Amateur News & Views

The Official Journal of the Radio Amateurs of Northern Vermont

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APRS and CONNECTORS The June 12th RANV Meeting

Join us for our June meeting as Brian N1BQ will give a hard-hitting two-part presentation. The first part will be a short 20-30 minute discussion on a standardized connector for amateur radio. The second part will be a presentation on the current state of the *Automated Position Reporting System* (APRS) network in amateur radio.

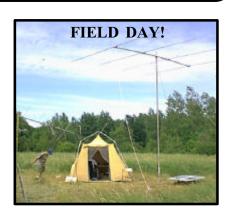
There are almost as many different connections and connectors in amateur radio as there are different radios and manufacturers. A similar situation existed among personal computers in the early 1980's until IBM came along with the PC and everything became compatible. In the last two to three years a similar savior has appeared. After many years of would-be standards the Anderson *Power-Pole* connector system has begun to emerge as the solid leader for the banner of a standardized connection system for amateur radio. Brian will show of a series of flexible ideas for creating your own standard. He will also discuss some problems and some solutions for both audio output and radio keying as well.

The APRS system is most often misunderstood as a neat curiosity; as a way to show the world where you are and for the world to keep track of you. The system has evolved over the last eight years to a more far reaching network that involves satellite and space station communications and tracking, a world wide weather reporting network and severe weather alert system as well as an RF/Internet hybrid "Instant Messenger" type system. Brian will discuss all of these and provide a nice demonstration.

Festivities kick off with Snax-at-Zachs at 6 PM at Zachary's Pizza on Williston Road. The meeting starts at 7 PM promptly at the O'Brien Civic Center, 113 Patchen Road.

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FIELD DAY!

Field Day is June 22-24th. RANV will again set up operations on Redmond Road in Williston and be fully involved. Anyone reading this article will most likely be either a participant, visitor or someone who gives us a contact.

If you cannot possibly participate at Field Day, please make every effort to give us some contacts. We will be monitoring 145.15 MHz the entire time and will be able to let you know what bands are active and on what frequencies. On SSB, look for us on 144.2, 50.13, 28.40, 14.175, 3.8 MHz and on FM, 146.55 MHz. On CW, look around 25 kHz up from the bottom of the bands. If you have the facilities, also look for us on APRS and SSTV on 2 meters. We will be signing W1NVT, except on 10 meters, where we will be N1ALX.

If you plan to visit, there are 3 key visiting times: Friday 4-8pm (setup), Saturday 2-8pm and Sunday 10-2pm. These are the best times to visit, since we will have people to show you around. At other times, we will either be understaffed or very busy or both. To get to the Field Day site, take Route 2A to the intersection of 2A, Industrial Avenue and Mountainview Road. Go east for 1 mile and then make a left onto Redmond Road. Pass the back entrance for IBM and continue to the top the hill, which is where we are. When you get there, you will find 5 tents with various activities. From West to East, they are Phone, VHF,

Field Day... continued on page 5

OUR LAST RANV MEETING

by Grant K1KD, Sec'y

The last RANV meeting was called to order at 7:13pm on May 8th. We began by going around the room with introductions – 23 hams attended the meeting.

We opened the meeting by talking about the club Field Day effort coming up in June. A sign up sheet was passed around for anybody wanting to operate. We took a vote and unanimously approved spending \$350 on Field Day expenses. This money would go towards food, rest room facilities, gasoline for the generator, etc. Finally, an announcement was made reminding hams to help out with communications in the Essex Memorial Day Parade on May 26th.

For the feature presentation, we had our very own Mitch W1SJ talking about Emergency Communication and Preparedness. Hams are often called upon to provide emergency communication during times of natural disaster or public service events. Since Amateur Radio is a public service, it is important for hams to be willing and able to provide this service when asked. Mitch talked about some things a ham can do to be prepared for the next event.

The number one thing a ham can do is make sure he or she has a radio that works! It may seem like a simple idea, but many times hams are caught off guard when the battery in their HT goes dead during an event. Always make sure your batteries are fresh and you have a backup battery in case the primary one fails. Mitch pointed out that before an event, it is a good idea to be familiar with the site, and use your radio like it will be used in the event. For example, if you are providing communication service for a marathon, get to know your post the day before. Before the race, test your batteries in the HT to make sure they can last the duration of the event.

The next thing Mitch talked about was antenna and output power. It is important to use the appropriate antenna and power level to achieve effective communication for the job. Mitch explained that the common rubber duck HT antenna is the best compromise for portability. However, he cautioned that hams shouldn't clip the HT to their belt and talk into a hand mike because the antenna is much less effective when radiating through your kidney! Also, he suggested running an adequate amount of power to ensure solid results into the repeater. Again, it is helpful to be familiar with the physical surroundings of the site prior to the event. For example, knowing where the difficult spots are to get into the repeater along a marathon course is good information prior to the race!

Mitch passed on several other tidbits of information on how to be a more effective communicator. For example, use the standard push-to-talk button on your rig. Don't use VOX during public events because external noise will make it easy to inadvertently transmit. Locking PTT buttons are another thing to avoid because of the possibility of accidentally locking your HT into transmit mode. Carry your credentials with you when navigating through the event so you aren't stopped by security. Research the event before hand, so you can be helpful to the net control or other passersby who have questions.

Operating technique was also covered in the presentation. When transmitting messages during events, be short and concise. If a net control operator is orchestrating the event, always listen to his or her instructions. Be prepared to operate your entire shift - have everything you will need for the whole event with you (clothing, food, water, maps).

Mitch had many good points he brought up that can help us all be effective communicators during a disaster or event. As hams, we are licensed to provide our service to the community. When we look like professional communicators during public service events, we project a positive impression on the public about ham radio.

THE PREZ SEZ

by Paul AA1SU, President

The club's activities are really heating up this Spring and Summer. We have already helped with several public functions, providing communications to help everything go smoothly during special events. This makes us feel good as amateur radio operators, and it puts our hobby in a good light with the public. As a Special Service Club, RANV will always strive to put its best foot forward for these functions, and be ready should the need arise for something unexpected.

As discussed at the May meeting, we should always be prepared to be effective communicators when the need arises. This of course includes being able to operate on battery power for extended periods. You may not be ready yet, but you now have the knowledge to build up your station as time progresses. Perhaps you will be able to add another HT to your collection at an upcoming hamfest. You could even add on a battery or portable antenna to your purchase next time you call your favorite ham dealer for an addition to your shack. Little things like this, over time, will help you be ready for unforeseen events where you may be needed to perform effectively as a trained communicator.

Field Day is here, as you know. If ever you wanted to see how a club like ours sets up and operates under emergency power, this is your golden opportunity. For 24 hours we will be transmitting to stations all around the country, having fun, and showing off how well we can do it. For several hours before this, we will be setting all of this up, which is a major undertaking. At the end, we shall be tearing it all down, comparing notes on how to do it better next year, and going home to try and rest while still buzzing from the excitement.

Yes, this is a fun, exciting, time consuming and nutty hobby, but we love it.

DXCC CARD CHECKING IN VERMONT

by Mitch W1SJ

DXCC Card Checking has come to Vermont! I have received exhausting training, certification and even attitude adjustment and have been anointed as an ARRL DXCC Card Checker.

For new hams out there, DXCC stands for DX Century Club. The basic award is for having valid confirmations from 100 countries. The award is then endorseable in steps up to the current total of 334 DXCC counties. ARRL "countries" follow a different definition than normal, allowing for more countries on the list. Applications for DXCC (and most other ARRL operating awards) require the actual QSL cards sent in for inspection. Boxing up your prized DXCC QSL's and trusting them to the Postal Service makes all hams nervous. We all have had that flash of fear that the box bursts open and a version of 52-card pickup is played at the post office – with your QSLs!

The ARRL has a program called *Field Checking*. The QSL cards are not mailed anywhere, but checked in person by an authorized card checker. Upon submission of the list of cards, award fee and approval from the card checker, the ARRL can then issue the award and the cards stay safe with you.

The rules for Field Checking is somewhat different than normal DXCC rules. Field Checkers can only check cards for QSO's dating back up to 10 years. Also, cards for deleted countries and any contacts made on 160 meters cannot be Field Checked. These would have to be sent to the ARRL in a separate application and submission. As a checker, I cannot waive the rules. It is imperative that the applicant be familiar with the DXCC Field Checking rules, application forms and fees. Go to http://www.arrl.org/awards/dxcc for the full story.

I will commit to do DXCC Field Checking at the Milton Hamfest in February and the Summer Picnic and YCCC Area Meeting in North Hero in August. Other opportunities can be negotiated based on time availability.

We are now proud to have Field Checkers for all of the major ARRL Awards. For DXCC, contact Mitch at w1sj@arrl.net. For Worked All States (WAS) contact Linda at w1mp@arrl.net. For the VHF/UHF Century Club (VUCC) contact Fred at n1zuk@aol.com.

So, let's go out and get those awards! Don't have 100 countries or 50 states or numerous Grid squares worked and confirmed? What are you waiting for? Get on the bands and make contacts!

VHF CONTEST THIS WEEKEND

by Mitch W1SJ

Are you ready for the June VHF QSO Party? This VHF/UHF only contest starts this Saturday June 9th at 2PM and runs until Sunday night at 11. The rules are quite simple: work anyone on any amateur frequency above 50 MHz and exchange grid square. Our Grid Square in Northern Vermont is FN34. For most of our readers, activity will end up being in 3 centers of activity: Six Meter SSB, Two Meter SSB or Two Meter FM.

In the June contest, Sporadic-E openings are a very real possibility. If a good one occurs during the contest, there is the possibility to work hundreds of stations all over the country. To get in on this fun, you need a radio with Six Meters in it, such as the IC-706, DX-70 or other rigs. If there are great openings, a simple Six Meter vertical or dipole, or even a 40 meter dipole will work. However, you really want a nice Six Meter yagi. Why waste a good opening on a less than efficient antenna. The Six Meter SSB portion of the band extends from 50.1 to 50.2 MHz. However, keep 50.100-50.125 clear for DX QSOs.

There is always something to work on Two Meters, whether or not Six Meters is open. To work the SSB portion of the band, you will need a multimode radio and a good yagi, mounted for horizontal polarization. SSB activity is at 144.200 +/- 50 kHz.

If you don't have any fancy radios, but just have a Two Meter FM radio or duoband radio, then your focus is to tune 146.55 and 146.58 MHz looking for contacts. You will be most successful using a vertical yagi at a very high location. Many VHF enthusiasts operate in the Rover Class, and move from one hill to the next. We have a few nice driveable operating spots in our area – Mt. Philo and Mt. Mansfield in Vermont and Rand Hill and White-face Mountain in New York. There are many more possibilities if you are willing to drive further from home. Some Rovers drive hundreds of miles! Of course, if you don't mind backpacking your station in, any mountain will suffice. If you don't have the ambition to do any of the above, simply monitor 146.55 MHz all weekend. You never know what you might hear and be able to work!

The important thing in all of this discussion is to get on and make contacts, no matter what your category or situation. A few of us in the area will be on from home from time to time. I'll be up on Mt. Equinox in Southern Vermont signing WB1GQR. Look for me at the top of the hour, when I will turn the yagis north.

MAY PUBLIC SERVICE

by Mitch W1SJ

Area hams did double duty late in May for various public service events. The *Essex Memorial Parade* went off without a hitch on May 26th. Despite threatening weather, the event remained dry. N1WCK was at the key position – the reviewing stand – where he received last minute line-up changes. W1SJ was the liaison between the ham net on 146.85 MHz and non-ham net on 467.2625 MHz! The rest of the staff, AA1SU, AA1VF, KB1FVA, W1DEB, K2KBT, KT2E, N1HXE and N1LXI got the parade moving promptly. The W1SJ "float" van was decked out with 12 antennas, adorned with U.S. flags (a new Vermont record, we're told) and he managed to make 4 contacts on 40 meters along the 1-mile parade route (another record!).

Early, the very next morning, some 35 hams took to their stations to support the *Vermont City Marathon*. They were greeted by wet weather all day long. In addition to logistics traffic on 146.61 MHz, lead runner information and backup traffic were passed on the 145.32 MHz repeater installed at the Radisson for race day. KC1WH and K1YLB ran the nets on the two repeaters. The cool, wet weather reduced the number of medical emergencies and the addition of the second repeater relieved some of the traffic bottleneck usually experienced.

There seems to be an increasing number of events which amateurs help out in, despite the wide availability of cell phone service. Looking ahead, there are events coming up in July, August, October and November. Are we all ready for them? Judging from some of the traffic heard in May, some work needs to be done. Some 5 stations could not set their frequency or offset properly. There were 2 instances of microphone lock-down (no VOX or locking PTT in an event!). And there were 2 instances of dead batteries or radios (but both had backups!). Take the summer to learn all there is to know about your communications equipment, so when you need to be on the air, you are!

N2V SPECIAL EVENT

by Mark W1MAD

Special Event Station N2V will be Marine Mobile on Lake Champlain! The event will be celebrating 250 Years of Ferryboating from aboard the *M/V Cumberland*. The event is co-sponsored by the Burlington ARC and the Champlain Valley ARC. Look for N2V on July 14-15th from 9 AM until 10 PM on 7.275 14.275 21.250 28.450 50.150 MHz and on 2 meters. For a certificate send a QSL and SASE to: Special Event N2V, CVARC, P.O. Box 313, Morrisonville, NY 12962.

Operators are needed. If interested, please contact Ed N1PEA, Al KB2LML, or Mark W1MAD.

MS-150 EVENT

by Paul AA1SU

The MS-150 Green Mountain Getaway is a major fundraising event of the Multiple Sclerosis Society. Nationally, as well as locally, the event has grown each year in both numbers of participants and volunteers, and funds raised. This year, approximately 300 riders and volunteers will take part. The MS Society has contacted me to coordinate the communications for this event. I have been told that last year, they did this without hams, and there were several breakdowns in communication. I am therefore asking for your help.

On August 11-12th, cyclists will enjoy the 15th annual MS 150 Tour, an exciting 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 a 40, 75 or 100 mile route. Checkpoints are placed every 10 to 15 miles and are stocked with plenty of snacks. Transportation of overnight gear, professional bike mechanics, medical assistance, sag wagons, and a communications network (that's us) support the cyclists. After Saturday's ride, cyclists spend the night at Johnson State College. Then, they get up and do it all in reverse, over a slightly different route.

We will need about 25 to 30 Ham Radio Operators over the two days. Communicators will be needed for Shadows, Sag Wagons, Medical Team, 6 Rest Stops., the Park and the College. For most positions, a mobile station and a good high antenna will be required. Bicycle Mobile is also an option for the daring of you.

If you would like to help out for this event, please E-mail me at aa1su@arrl.net. Please include your name, call, phone numbers, day preference, and the kind of equipment that you can provide. More details, such as times and frequencies will be forthcoming in the weeks ahead.

Contacting RANV

In Person: Meeting, June 12th, 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.

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CONTEST CORNER

by Paul AA1SU

Demo, CW, and Novice/Satellite. Signs should direct you, but they sometimes blow away.

If you plan to be a participant, and haven't let anyone know about it, please do so. Contact either Mitch W1SJ or Paul AA1SU. It is important that we know who you are so that we can get you the proper information and set you up for something you want to be doing. While we accept all help, showing up during the operation and wanting to help out is not the best way to do it, since we are all plenty busy.

There are numerous activities and events going on for participants. One event is the Satellite practice demonstrations. During the two weeks before Field Day, W1SJ will be getting the bugs out of the satellite station. This is a great time to come watch how it is done. Contact him for times. On Monday, June 18th, at 7PM there will be a meeting for all Field Day participants at W1SJ's house. This is the time where we go over the plans and make sure we all know what we will be doing when we get there. On Friday, June 22nd at 2PM, we start the antenna setup. Get to the site as soon as you can. The more people we have working early, the quicker we can get everything in place. On Saturday morning 10AM until 2PM, we set up the stations and power systems. The first CQ starts at 2PM. However, there are numerous details which got skipped in setup which still have to be tended to all afternoon. There is plenty to do besides operating!

In the evening, we will be treated to a wonderful feast, thanks to our in-house chef, Chef Richard WN1HJW. All through the night we operate, meaning that we need to provide fresh operators every few hours for those who tire. At 2PM, 24 hours after the start, we stop operating and take about 30 minute to relax and talk about the event. Then it is 3 hours of hard work pulling down the antennas and carefully packing them away. It would make a military commander proud!

There is a forth category of hams reading this article. They are those who don't participate, don't visit and don't give out contacts. If you are in this category and are in town, shame on you! Get involved!

In light of the fact that we are gearing up for Field Day and the VHF QSO Party this month, and because there are not really any other great contests coming up, this column will be dedicated to one event: *Kid's Day* which is on Father's Day, Sunday, June 17th from 2PM until 8PM. This is a rare opportunity to get the children in your family, or neighborhood, on the air to experience the thrill of Amateur Radio. Try to encourage the young ones in your family to get on the air and make a few contacts. They should call "CQ Kid's Day", and they can work the same station again, if the operator has changed. A typical exchange could be name, age, location, and favorite color. If the child looses interest after a few minutes, that's okay. Just so long as they get on for a little bit to see what it is like. We have several young hams in our club. This is a perfect opportunity for you to get on and show others that it is indeed possible to obtain a Ham Ticket at a young age.

Suggested frequencies are 28.350 to 28.400 MHz, 21.380 to 21.400 MHz, and 14.270 to 14.300 MHz. And two meter repeaters can also be used for this event. All participants are eligible to receive a colorful certificate. Just send a 9x12 SASE to Boring Amateur Radio Club, PO BOX 1357, Boring, OR 97009. Logs and comments may be posted to kids@contesting.com. You can review these postings at http://www.contesting.com/kids.

So, if you have young ones in the neighborhood that have always wondered what all of those wires and aluminum were about, you can show them first hand, right from the comfort of your own radio shack. It will be a fun way to kill some time on a Sunday afternoon.

FOX HUNT NEXT FRIDAY

Our June Fox Hunt will be held Friday, June 15th starting at 6PM on the 145.15 repeater. We want to start early so that there will be more time hunting in the light. We also realize that some of our hunters travel a bit to get to the hunt. If you are still enroute, check in on the repeater at 6 PM and we will delay the start of the hunt slightly to give you a fighting chance. The usual rules apply: check-in on 145.15, boundaries in Chittenden County, the Fox located in a public accessible place and the Fox transmits at least 10 seconds out of every minute. W1SJ will be your Fox of the evening. I am digging up new reading material as you read this!

ACHIEVEMENTS

Some of you may be wondering where Paul AA1SU has been lately. Our intrepid N&V reporters find that his has been busy collecting wallpaper! Throughout March and April, Paul earned the following awards: Worked All States -RTTY, Worked All Continents and DXCC. Wow!

The results are out for the November Phone Sweepstakes. Mitch operating as WB1GQR landed his 25th consecutive Phone Sweepstakes win from Vermont, edging out Ron KK1L by around 120 QSO's. When asked about his plan for celebration, he mentioned something about retirement or operating the SS from a nice beach.

NEXT MEETING: APRS and Connectors Tuesday, June 12th 7 PM O'Brien Civic Center

FIELD DAY
Friday-Saturday June 22-24
Redmond Road, Williston

RANVP.O. Box 9392
South Burlington, Vt 05407

http://www.RANV.org