



# RADIO AMATEUR

## NEWS & VIEWS

The Official Journal of the Radio Amateurs of Northern Vermont

### FIELD DAY 2014 Mitch W1SJ

Field Day is June 27-29th. This is a mere 3 weeks away. If you haven't already, please fill out the Field Day survey from the link I sent you via E-mail. When you consider the logistics of tracking the whereabouts of 40 participants across the 40 hours of Field Day activities, you realize that this is necessary to keep track of everyone at the planning end.

If you have been to Field Day before, you know what is involved and what jobs we are looking to fill. If you have never been to Field Day before, by all means plan to make it your major activity that weekend. Field Day is amateur radio's greatest classroom. You will learn more about radio than reading any book or Internet posting.

We recruit people for 3 specific tasks: Setup, teardown and operating. Setup occurs Friday starting at 2 PM and lasts until early evening. During this time, we erect 4 towers, 6 yagis, 3 dipoles, 3 tents and a partridge in a pear tree. With a good, motivated crew, we knock most of this out inside of 4 hours, which is why recruitment and training are so important. And then on Sunday at 2 PM all the toys have to be taken down, packed up and hauled home, emphasizing the need for a rested crew to do all of this.

During the period of Saturday through Sunday afternoon, we operate and make contacts. That is where operators of all experiences are needed. The main CW and Phone stations are for hams with contest experience. For casual or first time operators, the GOTA and VHF stations are the place to be. We schedule seven 2-hour blocks for each of these stations, and that means we need YOU to operate. Training and mentoring are provided. Last year, we fell short in staffing these stations, so this will be a focus this year.

Another area we fell down in was in youth participation. We get bonuses for putting youngsters on the air. Unfortunately, youngsters have been avoiding ham radio events like the plague in the last few years. **Continued on Page 2...**

### VHF QSO PARTY JUNE 14-15 Mitch W1SJ

The ARRL VHF QSO Party, the premier VHF/UHF operating event, will take place Saturday-Sunday, June 14-15th. Things get underway at 2PM Saturday afternoon. June is often the peak of Sporadic E season and lots of stations can be worked – IF the band opens. But you won't know that unless you get on. Look for activity at 50.125 MHz and up on 6 meters. If there are no large openings, 2 meter activity can be found around 144.200 MHz. You might find FM activity on 146.55 MHz, although this has dropped off in recent years.

I plan to be up on Mt. Equinox in Southern Vermont. I generally will point the Yagi north at the top of the hour, so that is a good time to call. If you have an outside antenna, or a high powered mobile, there's a good chance I'll hear you, so give it a try. Otherwise, consider driving to a high spot to really explore what you can hear on VHF. Mt. Philo and Mt. Mansfield are two popular hilltops to try in our area.

If you are on VHF, please make a point to get on during Field Day weekend, two weeks later. Our VHF station screams CQ for many hours with little local activity. If everyone turned on their VHF and UHF radios for a bit, there would be a lot more contacts to be made. We hope to see you on the air for both the VHF QSO Party and Field Day.

Please consider bringing kids down to the Field Day site so that we can show off the operation and put them on the air for a few contacts. It will certainly be a memorable experience for them.

The hardest job we always have to fill is food wrangler. Tending to the culinary needs of 20+ people is a complicated task. If we don't fill this job, food gets reduced to ordering off the Chinese or Pizza menu!

You can read details on Field Day on our website, and also search the newsletter library on articles describing the operation. A good portion of the June meeting will be devoted to describing Field Day activities and getting folks signed up for various jobs. Monday, June 23rd is the final Field Day planning session at the QTH of W1SJ. There are plenty of ways to learn what is going on.

Be sure to plan your activity at Field Day ahead of time. Simply showing up unannounced will be less than satisfying. This is because everyone is quite busy and there is little time to explain it all. Signing up in advance will get you the info you need to enjoy Field Day to the max.

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**MEMORIAL DAY  
DOUBLEHEADER  
Mitch W1SJ**

Ham radio operators in Northern Vermont engaged in their annual Memorial Day Weekend Doubleheader: The Essex Memorial Parade on Saturday and the Vermont City Marathon on Sunday.

Despite days of rain and a threatening forecast, the Essex Memorial Parade played out during a perfect Spring Day. Eleven divisions were adeptly handled by nine ham radio marshals plus a few non-hams. A last minute move to the 145.15 repeater had to be made when the 146.85 repeater was not working properly. There were the usual episodes of missing groups, last minute changes and the marching band which decided to jump across 2 divisions at the last moment. Our experienced staff of marshals handled all of these issues quickly and efficiently, although jumping in front of a marching band is always exciting! Yours truly managed to score a mug shot in the back of the local Essex paper! The parade staff included K3BH, KB1FRW, KB1THX, KB1ZEB, N1LXI, N1WCK, N6PRT, W1SJ and W4YFJ.

After lunch with the gang, it was time to rip everything out of the van and repack for the Vermont City Marathon. Saturday's mission was to adorn several "handicapped parking only" signs along North Avenue with tall vertical antennas in preparation for Sunday's Marathon. The Marathon itself played out to near perfect weather, record crowds and near-perfect logistics, which on the surface, appeared spot on. It was a very successful day and the Marathon people were most appreciative. Our communications net executed the job with near perfection. The 36 member ham radio crew included RANV members

K1WAL, K1ZK, K2MME, KB1FRW, KB1IVE, KB1OAH, KB1RQX, KB1THX, KB1VJD, KB1WIZ, KB1WJA, KB1WXM, KB1ZEB, KB1YGP, KB1ZEB, KC1APK, KK1L, N1LXI, N1WCK, N6PRT, NW1V, W1SJ, W1ZU and W4YFJ.

If you cannot wait to take part in the next public service activity, consider joining us for the MS Bike Ride Plus on the weekend of August 2-3.

**CONTACTS**

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Web: [www.RANV.org](http://www.RANV.org)

Reflector:  
[groups.yahoo.com/group/RANV](http://groups.yahoo.com/group/RANV)

Meetings:  
2<sup>nd</sup> Tuesday • 7:00 PM  
113 Patchen Road  
South Burlington  
The O'Brien Civic Center

Repeater: 145.150, PL 100;  
WB1QR

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New Hams, Mentoring:  
[RANVMentor@gmail.com](mailto:RANVMentor@gmail.com)

## **W1AW/1 – AGAIN!**

### **Mitch W1SJ**

Did you enjoy operating as W1AW/1 last March? Did you miss the show and want another crack at it? Well, this is your final chance. The second W1AW/1 operation from Vermont will take place August 5th through August 12th. Andy K2LE is the coordinator of this operation and he is looking for stations to help put W1AW/1 on the air, especially on the digital modes.

Most of the players from March will be back for this bash. The scheduling will use the same system as last time.

If you were not in the previous event and would like to put your station on the air, I'll put you in touch with Andy, who is the coordinator. You have to be an ARRL member and have a station capable of putting out a decent signal to take part in this manner. Or else, you can help out operating at W1SJ.

Our summer picnic will take place right smack in the middle of this on August 9th. There are some wild plans to haul a beam out to the park and go at it while cooking the burgers!

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## **Secretary's Minutes**

### **Kathi K1WAL**

#### **Business and Announcements:**

Carl announced that there are still a few slots for the Museum Ships weekend on the Ticonderoga June 7&8.

Howie K2MME offered to bring snacks to the June meeting.

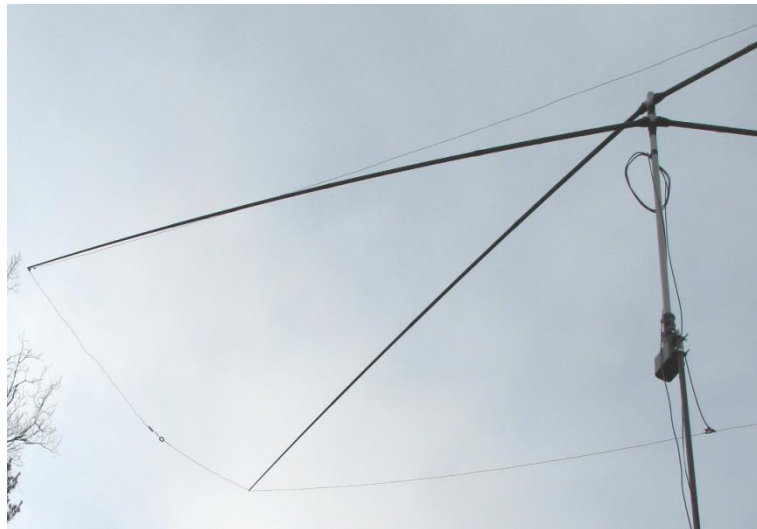
Field Day is coming up! Kathi K1WAL volunteered to run the GOTA station so anyone interested in operating or mentoring please contact her.

Final details were worked out for the Essex Memorial Day Parade and the Vermont City Marathon. A rundown of those events is in this issue of News & Views.

#### **Presentation:**

##### **Small Beam Antennas Theory & Practice**

Cathy N5WVR gave a talk on small beams including several she has built herself. She began with an overview of the baseline beam (3-element Yagi) then went over the typical gains for a 1-element (dipole) 2-, 3-, 4-element yagi. Since the 2-element beam give 75% of a 3-element and is simpler to build she focused on 2-element antennas on 20-meters.



She discussed the pros and cons of the X-Beam, VK2ABQ Square, and Moxon Rectangle antennas. X-Beams are relatively easy to build, have good gain (5-6 dBi) over a reasonable bandwidth, and are easy to get a 50 ohm match but have a poor effective F/B ratio. The VK2ABQ Square is also easy to build, has excellent SWR bandwidth, and a good F/B ratio over a reasonable bandwidth but has less gain and is hard to measure the frequency of best F/B. Although harder to build, the Moxon Rectangle has good gain, excellent F/B ratio (over 30 dB peak), and has an active builder community online with forums, tools, and examples (see <http://moxoantennaprojet.com>.)

Cathy went on to tell how she built her Moxon with a PVC hub and vertical support, 416 ft crappie fishing poles for X-support, #22

insulated solid wire, a 20 foot TV mast, and a Radio Shack TV antenna rotator. It stands about 25 feet high and has a 25'x9' footprint. She shared her adventures in tuning and testing, particularly after having to disassemble and store when moving from Minnesota to Vermont.

She described her 6-meter moxon and for a lark her attempt at building a 430 MHz Moxon with a wire coat hanger.

Cathy advised that no antenna does it all. When building an antenna you first need to decide what you want taking into account gain, the bandwidth, how easy/difficult it is to build and tune, and how much will it cost. Cathy showed that homebrew beams can not only be cheap and simple, but that sometimes bigger is actually better! Just be prepared for some challenges!





## NEWS & VIEWS

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### NEXT MEETING

TUESDAY • June 10 • 7:00 PM

O'Brien Civic Center • Patchen Rd  
South Burlington, VT

Antenna Analyzers

### Upcoming, Notices, & Misc

- Field Day
- Steering Wheel: 3<sup>rd</sup> Tues 6:30; Ninety-Nine Restaurant, Taft Corners, Williston
- VE Exams every 2<sup>nd</sup> Friday; Red Cross Building 29 Mansfield Ave, Burlington
- Dues due? Pay online at [www.ranv.org/ranvpay.html](http://www.ranv.org/ranvpay.html)

*www.RANV.org*