



# RADIO AMATEUR NEWS & VIEWS

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An ARRL Special Service Club

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## NEXT MEETING:

### “SUMMER PICNIC”

RANV's ANNUAL SUMMER PICNIC will be on Sunday, August 5<sup>th</sup> at Kill Kare State Park in St. Albans Bay. We start at 11:00, and run all afternoon until 5:00, so there is plenty of time to work in the picnic with other activities. RANV will supply park admission, soft drinks, and charcoal. You bring the rest. Be sure to bring family and friends, food to eat, appropriate sporting goods and clothing, and any radio stuff you would like to play with. Leave pets at home since the park doesn't allow them, and it is too hot to leave a pet in the car.

Directions: Take I-89 North to Exit 19, St. Albans. Go past the light and down the access highway 1 mile to Route 7. Make a right and head 0.5 miles into downtown St. Albans. Look for Taylor Park (big green) on your right and then look for Lake Street and make a left. Go 3 miles on Lake Street until you see The Bayside Pavilion at your left and a Shell station at your right. Make a right turn and head north. You will pass St. Albans Town Park. Keep going!

You will only go 0.7 miles from the turn and will cross a small bridge. Right after this bridge, turn left on to Hathaway Point Road. Unfortunately, the Park sign is often missing, so pay attention. Go 3 miles to the Park entrance.

Let's have a great turnout and a great day at the picnic!



## FIELD DAY RESULTS

MITCH W1SJ

THE FIELD DAY BOX SCORE, shown here, gives a quick break down of QSO's and points. For more detail, go to the RANV website where a comprehensive description of QSO rates, and narrative of how we did, can be found. While there, also check out all the nice Field Day pictures.

2012 RANV FIELD DAY BOX SCORE			
80 CW	257	80 SSB	365
40 CW	399	40 SSB	270
20 CW	600	20 SSB	1320
15 CW	109	15 SSB	559
GOTA CW	0	GOTA Ph	500
VHF CW	2	VHF Ph	61
Sat CW	0	Sat Ph	4
Total CW	1537	Total Ph	3102
4830 QSOs 2480 Bonus 14802 Pts			
	2011	2010	2009
QSO's	547	498	471
Bonus	279	228	210
Points	1000	1000	1004

## WORLD RADIO TEAM CHAMPIONSHIP TRIAL RUN

“...Field Day all over again, ...”

MITCH W1SJ

THE WORLD RADIO TEAM CHAMPIONSHIP (WRTC) is the Olympics of Amateur Radio. The best operators (59 two-person teams) from all over the world are selected to compete head-to-head in a single contest. As we all know, in ham radio location is everything. So what we strive to do is to create 59 stations which have similar propagation characteristics and provide identical antennas for each. Ultimately, the winner will prevail based solely on skill (and of course, a bit of luck).

WRTC will convene in 2014 and is always held during the IARU Contest in July. For this July, we set up a trial run—13 stations located in the same spots which will be used in 2014. The locations are in suburban Boston, roughly forming an arc along I-495 starting at the New Hampshire border and running almost all the way to Cape Cod.

Imagine the logistical nightmare involved. Our Field Day is tough enough, with 3 towers, 12 antennas, 3 tents and 4 generators—at ONE site. WRTC 2014 will be 59 towers, 59 beams, 118 dipoles, 59 tents and 59 generators spread over 59 sites which are 80 miles apart! Key to making this all click is teams of volunteers: the Beam Teams who put up antennas, the Site Teams who manage the tents and generators and, for this year, the Operator Teams, who operate and check it out!

This looked like more fun than I could imagine, so I signed up for the Beam Team and Operating Team. Training was done at NEAR-Fest, with on-line manuals and even a teleconference following that.

WRTC, p. 2

With much trepidation, I set out on this adventure. My site was Mansfield Municipal Airport, which is right near where I-495 intersects with the south end of I-95, or about 26 miles SW of Boston and 16 miles NE of Providence. We got special permission to drive onto the field and set up on the grass runway which was closed for the weekend. We were alongside runway 140/320 which was open with small aircraft traffic. The rest of the Beam Team came in from NH, headed up by Jerry K0TV. Jerry is a long time ham with lots of tower experience. We both expected we would take a couple of hours to put the tower up. The actual time was more like 6 hours! And we were one of the more organized groups!

I assigned myself to put together the yagi, model number TX38, manufactured by Cycle 24. This antenna has 8 elements on a 14 foot boom, all of which are single band elements: 2 on 20, 2 on 15 and 4 on 10 meters. I know I can build our 7 yagis at Field Day inside of an hour so this shouldn't take too long. Wrong again! There were no element markings and only some sketchy instructions in the Beam Team manual. I literally had to measure elements and piece things together. But after 2 hours (!?), I had the yagi assembled and the elements measured perfectly. Unfortunately the SWR did not measure up on 15 and 10 meters. A call to the Beam Team coordinator identified the problem—the balun was attached to the wrong element. Moving it a few feet this way made it all perfect.

Meanwhile the rest of the team carefully put together the Rohn 25 Tower sections, which wasn't all that easy due to globs of galvanizing blocking the tubes. When that was finished the rest of the Floating Derrick Tower System was assembled and we were ready to raise the beam. Throughout the day, most of the team, who are pilots, would stop and "rate" the many landings which took place on the runway, 200 feet away!

The site team got the tent and generator going and I moved in with all of the radio equipment. The beam team got the tower and dipoles up and we were ready to go. It was Field Day all over again, 3 weeks later!

The IARU/WRTC Contest starts at

8 in the morning, which meant that I had to get moving at 6AM from where I was staying to travel 25 miles over back roads to the site. The second operator, Joe KM1P, showed up and put his equipment on line, and immediately we found a problem where his TS850 was not putting out power. I put him on CW on my TS830 while I tried to figure it out. I noticed that the power supply was not holding voltage. I gave it a good swift kick and that did the trick (you'd be surprised how many problems are solved this way)!

Joe and I continued operating throughout the day, on CW and Phone, respectively. We were using a triplexer and bandpass filters so that the single yagi fed both radios. It worked fabulously—I never heard the CW transmitter and vice versa. But it was tough going, since we were running only 100 watts to a smallish antenna and trying to work Europe under poor conditions. But what we were trying to prove was that our station worked just as well or as poorly as every other station. During the day various WRTC officials came by to inspect the site and make sure everything was running OK, which it was. The small planes seemed to be buzzing our tower upon takeoff, but that didn't bother us very much. What did bother me was the 99 degree heat. Even with multiple fans, it was mighty toasty in that tent!

At night, Joe checked out, as he only signed on for a day shift. This left me to figure out how I was going to operate phone and CW simultaneously—which I did anyway, but don't ask me how. The rates got better as I got a good run going on 40 CW. Outside, the blue runway lights would come on every so often, forming a eerie backdrop. Towards the south, I heard fireworks—coming from a show at the Bomcast area, which featured two types of music—Country and Western!

Morning came and at 8:00 it was all over. The various teams came in and like a determined group of army ants, disassembled the station inside of 2 hours!

The committee collected on-air data to compare the signal strengths of the stations and will review that. The various volunteers provided a ton of feedback. All of this will be used to put in corrections

for the next trial run in 2013, which will have more stations on the air.

You can't imagine the number of volunteers needed to pull off running 59 stations. Dave KM3T will be at our club meeting in September to talk about the WRTC with an eye towards increasing the number of volunteers and donations. Just considering the cost of the generators is a \$50k outlay of money! But from the standpoint of doing the work to pull off WRTC 2014 this can't be beat. You would be rubbing shoulders with the best operators in the world. The opportunity for learning and fun is tremendous.



## CONTACTS

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

Repeater: 145.150, PL100; **WBIGQR**

New Hams, Mentoring:  
*RANVMentor@gmail.com*

## BOTH SIDES OF MENTORING

KATHI K1WAL

THE RANV WEBSITE HAS A SECTION called *NEED HELP?* with a link for asking any ham radio questions you might have, technical or otherwise. Jim Hefferon KE1AZ prepared a great brochure entitled *Making Contacts, What's next, now that you have your ham ticket*. I, however, chose to fumble along and learn the hard way.

When I first earned my radio license I had no equipment, was acquainted with no hams (other than Mitch W1SJ, from his course, and the VEs during the exam), and wasn't sure where to go next. Then, I got my General ticket...but still didn't do anything ham-wise for over 6 months. One day a friend mentioned that her next door neighbor had antennas all over his roof and a big one sticking up in his back yard. That sounded promising, and she was prevailed upon to introduce me to Bob, W1DQO.

Bob was wonderful! He loaned me his son's Icom 718 with an old Radio Shack power supply and a Micronta Field strength/SWR tester. He made a 40/80 dipole and helped set it up in my back yard. It was amazing to see a man in his 90s shinny up a tall ladder to tie off one end of a wire! Bob was in his element, doing something he enjoyed and it showed! He helped me make my first contact and later told me about *EasyPal*, a freeware program for using SSTV.

For a long time I would just listen to local nets and whoever I could pick up while surfing the bands available to me, and receive pictures. No matter what I tried, I never seemed to be able to transmit. I, also, wasn't sure of the proper terminology and got all the Q-terms confused.

Eventually it dawned on me that what I really needed was other hams, so I went to a RANV meeting—some club the guy who taught the licensing class mentioned. I met a lot of wonderful people, but still was reluctant to display my utter ignorance of things radio, especially since I was a General! Somehow, having the General made me feel that I should have some sort of practical experience to go with it. However, that old truism, that the hardest part about asking for help is knowing what to ask, kept getting in the way.

Nonetheless, I persevered and started

becoming more active through community events such as the Vermont City Marathon, HamCon, Field Day, the Quad Parade, and a trip to NEAR-Fest. Through these events and the RANV meetings I got comfortable enough to ask questions. When I heard about the International DX contest in February, 2010, I put out a plea for help on the RANV reflector and got wonderful responses. With tips from Ron KK1L, I made over 30 contacts! That may seem a modest number, but I was delighted! It was my first time ever with both contesting and making international contacts.

That May, I surprised myself by coordinating 8 hams for a Half Marathon in Shelburne, for RaceVermont. I was comfortable with it since it was near where I live, so I was familiar with the area. By then, I'd gained confidence and an increased comfort level having participated in similar events before. My only reservation was being Net Control—a job which I gladly passed to someone else. It was a small event but a big step for me, and the RaceVermont people were extremely grateful.

Lately I've become interested in digital modes. I mentioned it in passing to Bob W4YFJ and he got me started with PSK-31 and RTTY. I aquired a Yaesu FT-736R from Moe N1ZBH. It got a tri-band vertical antenna at Ham-Con which my husband dutifully attached to chimney. He doesn't seem to trust me on the roof. What probably doesn't need to be mentioned [but I will] was that I had the \$#@!~ thing over a year (two?) thinking I needed to pay \$ for a power supply, then discovered at this years Field Day that the power supply is internal and I don't have to buy anything! Works like a champ! At this point, I am the happy owner of two shack radios, a mobile unit, and several HTs—these things do seem to proliferate.

In 2011 I found myself on the other side of mentoring, as advisor to a CVU student who used ham radio as a topic for her Graduation Challenge project. One of her goals was to earn her Technician license. We thought that, perhaps, together we could conquer CW!

Although I'm still far from being an expert (despite gaining that license), now I know

### STARC 2012 SUMMER HAMFEST

Saturday, August 11 • 8AM to 1PM  
RAIN or SHINE !!

**Admission only \$5.00**

Includes: Tailgating & Inside Sellers  
Indoor /Outdoor selling spaces available

**FREE ADMISSION FOR  
COMMERCIAL VENDORS**

**VE TESTING**—Tech Class Only  
Alcoholic Beverages available Noon–3pm  
(must be purchased from within the VFW)

### LOCATION

**Veterans of Foreign Wars—Post 758  
353 Lake Street • St. Albans, VT**

**More Info & Directions:**  
[starc.org/hamfest/STARC\\_HAMFEST\\_INFO.html](http://starc.org/hamfest/STARC_HAMFEST_INFO.html)

where to go when I need help or advice. And I am knowledgeable enough to at least get someone else started in amateur radio!

There is so much to learn—radios, tuners, amplifiers, power supplies, antennas, all the electronics, all the test equipment, all the stuff that can be done...it's endless. One can move forward with new technologies or step backwards with vintage equipment. There is always some new avenue to explore!

And we can be on both sides of mentoring at any stage of the game.



### VE Exams

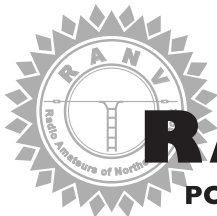
Every 2nd Friday  
6:30–8:00<sup>PM</sup>

29 Mansfield Ave. • Burlington

Tech, General, Extra class licenses.  
Bring 2 forms of identification, copies of existing license and CSCE (if applicable), pens and pencils, and the exam fee (\$15—exact amount only please).

**Directions:**  
[barcvt.net/directionsarc.html](http://barcvt.net/directionsarc.html)  
CARL AB1DD@arrl.net

Bring the above, plus form 605 that can be filled out on line and printed ahead of time. Not required, but very helpful! Find it here:  
[www.arrl.org/files/file/nvec605-3.pdf](http://www.arrl.org/files/file/nvec605-3.pdf)



# RANV

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### Upcoming, Notices, & Other Misc

- RANV: September—Summer Picnic
- **STARC Summer Hamfest: 8/11**, St Albans;  
[starc.org/arns-opening-flyer.html](http://starc.org/arns-opening-flyer.html)
- ARRL New Eng. Div. Convention: 8/24–26, Boxboro, MA;  
[www.boxboro.org](http://www.boxboro.org)
- RANV: Election Nominations—October
- Steering Wheel: 3rd Tues, 6:30-8:30  
Ninety-Nine Restaurant, Taft Corners
- Dues due? Pay online at [www.ranv.org/ranvpay.html](http://www.ranv.org/ranvpay.html)
- VT Ham Radio Calendar [www.vthrc.net](http://www.vthrc.net)

### NEXT MEETING

SUNDAY • AUGUST 5 • 11:00<sup>AM</sup>

Kill Kare State Park • St. Albans

***“Summer Picnic”***

*www.RANV.org*