Radio Amateur News & Views

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RANV SUMMER PICNIC
August 7th at Kill Kare State Park

Our August meeting will be the annual **RANV** Summer Picnic, **Saturday, August 7th.** There are two changes this year. First, we are moving back to our normal first Saturday of August. Second, the location has changed to Kill Kare State Park in St. Albans Bay. Driving instructions can be found at the end of this article. Kill Kare is on a peninsular jutting out from St. Albans. It is directly across the inland sea from Knight's Point State Park, only 5 miles away. It is about the same size, has similar facilities, and is more shaded than Knight's Point. Hopefully, the staff will be a lot friendlier. Festivities get underway starting around 11 AM and run all afternoon.

RANV will supply park admission, soda and charcoal. You supply the rest! For those who are new to the picnic, major activities include eating and talking. There is also fox hunting, antenna stringing, working DX, yakking on the repeater and perhaps even some interesting modes like PSK-31 or SSTV. Other activities include swimming, hiking, boating, volleyball and fishing. We can even take a ferry over to Burton Island and activate a rare DX island. When all is said and done, eating appears to be the hands-down favorite!

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. DO NOT bring pets! Unfortunately, the park doesn't allow them, and it is too hot to leave a pet in the car. Please let Brian know how many are in your group so that we can plan.

Directions to Kill Kare are as follows: 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 come to the lake and the community of St. Albans Bay. The Bayside Pavilion will be 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, there is no sign for the Park at this junction, so you will have to pay attention. Go 3 miles to the entrance of the Park. We should be in the corner. If you have a GPS, the coordinates are: N44 46.778 W73 11.035. If you get lost, give a yell on 145.15. See you at the picnic!

FOX HUNT
AUGUST 20th

Don't forget to plan for the next **RANV** Fox Hunt, Friday, August 20th starting at 6 PM on 145.15. Paul AA1SU will have his return engagement as the Fox.

The rules of the **RANV** Fox Hunt are simple. The fox is located on publicly assessable property within Chittenden County, in such a spot where there is at least an S-1 signal at I-89 Exit 14 *(Fox should check this ahead of time)*. The fox transmits on the input to the 145.15 repeater *(144.55 MHz)* for at least 10 seconds out of every minute *(more is desirable, though)*. First finder of the Fox wins the hunt, receives all appropriate bragging rights and becomes the Fox for the October Hunt.

IN THIS ISSUE...

OUR LAST RANV MEETING

by Dave W1DEC, Sec'y

The July meeting was short on discussion and long on activities thanks to the efforts of Mitch and Brian, who put in many hours planning and hiding several fox boxes and caches. Also many thanks to Brian and Sara for both hosting a wonderful barbeque and for providing superb weather conditions up at Wulfden and in the Kluge Block of the Underhill State Forest.

The formal meeting was called to order by President Brian N1BQ at 7:05. There was an announcement of the annual picnic which will take place at Kill Kare State Park in St. Albans on Saturday, August 7th. Also remember that W1SJ will do his very best to stump you fox hunters, so bring your sensitive fox hunting equipment as well. Festivities kick off around 11:00.

Mitch W1SJ gave a brief and thorough demonstration on the art of fox hunting and exactly how to track down the feisty critters, including a description of his all but patented "Paper Clip" antennas.

There was a combination of 28 Geocachers and Hams in attendance. Amongst the Geocachers who joined us were Hawkeye *(Hank)*, Snowdigger *(Moe)*, Kriek *(Kyle)*, RebeccaPolewczak *(Rebecca)*, Woakus *(Gary)*, Dingodude26 *(Eric)* and Dweebus *(Steve)*, in addition to Brianbr *(Brian)* and DX Hunter *(Mitch)*. Hams in attendance included AB1DD, KB1IWK, KB1JRR, KB1KPO, KB1LAY, KB1LIF, KB1LKP, N1YWB, WB2JIX, W4YFJ W1DEC and several others.

Four large groups of Cachers / Fox Hunters departed from Wulfden at 7:25 and the last of them straggled back to home base at about 9:15 in the failing light. Success was reported by almost all participants, with many commenting that they would like a repeat performance in the near future.

THE PREZ SEZ

by Brian N1BQ, President

The annual **RANV** picnic is coming up. Our new venue is Kill Kare State Park in St. Albans. A skeptic or two may ask, "Why attend?" The answer is simple – because it is fun! The scenery is nice, the company is excellent, it's a family affair and there will be a chance to do some casual ham operating that you don't often get to do.

Nominally we start arriving at 11:00 but there is no fixed start time. Several of us will be arriving when the park opens to claim a good spot. **RANV** covers the tab for entrance, supplies the soda and charcoal. You bring the food and a little extra to cover the last minute arrivals. You, your family, friends and any would-be ham friends are all invited! I would ask in general that you let me or Bob know ahead of time how many people you are bringing so we can make a reasonable count on bringing drinks.

We are planning the meeting topics for the coming year at the Steering Wheel meetings. Mitch has been on the Steering Wheel forever, I have been on it over four years, Bob for about two years. I won't say we have run out of ideas but so far, we have operated in a near vacuum with regards to input. We have had only one topic suggested in the last 14 months and thinking up great new ideas is becoming difficult. We discussed what we perceived was the membership's general attitude towards meeting topics, "to be entertained" and "desire to learn". What do you want to happen at meetings? We will be happy to do the legwork, but it would really help to hear from the membership about what you want.

Contacting RANV

In Person:	Picnic, August 7 11:00- Kill Kare State Park	
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.

BOXBORO

The ARRL New England Division Convention will take place August 14-15th in Boxboro, Massachusetts. It is a highly recommended event for all hams to attend. It only happens every 2 years! Most of the activity is on Saturday.

The Convention has a flea market, forums, meetings, exhibitors and lots of hams. The forums and meetings are what set this show apart. If you like the forums program at Milton, you will find even more at Boxboro! There is an exhibit room with dealers and manufacturers from the major ham radio companies. If you like fox hunting, Boxboro features Fox Box hunts both days! Finally, Boxboro is a great place to meet up with many ARRL staffers, officials and volunteers. The flea market provides a diversion, but it is small, and only a minor part.

Boxboro is located at the Holiday Inn Convention Center off of the *Boxborough* exit of I-495, 25 miles west of Boston. The 3.5 hour trip is all interstate: I-89, I-93 and I-495. Their website is: www.boxboro.org.

LIMITED SPACE HF OPERATION

by Jake WA2MDF

After deciding to get back into Amateur Radio last year after a 30 year hiatus, I found myself in a small apartment with very limited space both inside and out. I pondered the situation while resurrecting my old Heathkit DX-60B and HG10B VFO combo, with a Radio Shack DX150A receiver – vintage 1970. The major issue was the implementation of a reasonably efficient antenna in a congested area with limited outdoor open space. This was somewhat of a familiar problem, as I remember in the mid-70's operating 80-10 meters out of my college dorm room with a homemade 6-foot whip antenna, using a hand-wound loading coil and a variable capacitor stolen from an old tube AM/FM radio.

In this present case, I elected to go with an inexpensive commercial antenna tuner using a random length wire antenna. The flexibility of working with a random and most convenient length of wire was attractive. Since the apartment building next to me is only 3 ft away, and my ham station was to be on the second floor, I saw the opportunity for a stealth antenna running to the roof of the neighboring building, and extending as far as possible in that direction.

Hams often extol the benefits of a good RF antenna ground for efficient radiation. Rather than actually running a ground wire two stories straight down and pounding in an 8-foot ground rod, I opted to ground to the closest electrical outlet. Note that this type of ground connection is notoriously NOT a good RF ground – and in some older buildings, it may not even be a good electrical ground! However, the utility of trying this grounding approach was too attractive to ignore, despite its possible problems.

I found at Radio Shack a "Shortwave Antenna Kit" for around $10 that consisted of 75 feet of copper antenna wire, 50 feet of insulated lead-in wire, and several insulators and a window feed-through. My first experimental antenna configuration ran about 50 feet in length across the neighboring building's metal roof to attach under the eaves of a dormer at the further side of the building. The DX-60B and antenna tuner were employed initially, with 1:1 SWR between the rig and tuner obtainable on 80-10 meters. I operated with this configuration for the better part of the month of April, 2003, using the DX-60B's AM modulation to check into a regional 75 meter net a number of times, and also working CW on 80, 40 and 20 meters. My favorite was a QSO on 20 meters with Vic G0WKW in Bristol, England with 579 signals both ways.

Encouraged by my initial results, by the end of the month I was operating with a new Icom IC-718 transceiver running 100 watts. I was now operating and making numerous contacts on all bands except 160, 12 and 10 meters, which didn't appear to have viable signals, at least at the time. A favorite QSO was on 40 meter CW with Brian G3JFC in Boston, England, which lasted over a half hour, with 589 signals both ways for the entire time.

By early summer, I decided to try an enhancement to my RF radiation by adding another 20 feet or so of wire to my existing 50-foot random wire. I further followed the roof-line of the building next door and in the traditional stealth antenna manner, tucked the wire way up under the eaves of the metal-roofed building, essentially completely out of sight. I noted improved antenna loading, especially on the lower bands, such as 80 meters, and found I could tune the antenna to a 1:1 SWR on 160 meters with careful tweaking. I also experienced better signal reports into the regional 75-meter SSB net that I frequent, particularly into southern New England.

Thus began an expansion of my operation onto 160 through 10 meters. At this juncture in the sunspot cycle, 17 meters is often an attractive band for my operations. On a good day, there can be signals heard from all over the world, both on CW and SSB. Also, 30 meters can be very interesting, if you are into CW. Although I am not at all an avid state or country hunter, I have worked at least 43 states, 6 provinces and around 45 countries in the last year of operation. Amazingly enough, without any particular effort I've also worked 8 states on 160 meters, using an antenna of dubious efficiency for that band.

One of my more interesting and memorable contacts occurred on the evening of December 22nd, at 9:00 on 10 meter CW. This was with Pierre VE2OZ in Montreal. Pierre was running 1 watt *(one transistor crystal transmitter)* to a vertical on a 200-foot tower on a hill. I was running 100 watts to my now famous random wire. This was about a 15-minute QSO, with my RST a 519 and his a 529; a definite example of 10 meter ground wave propagation!

I also remember well hearing a bicycle mobile station in California on 17 meters, in conversation with a Hawaiian ham, and being able to monitor both ends of the QSO. No attempt was made to contact either station, however, as I didn't want to interrupt their conversation.

Another interesting sidebar: while I was writing this article I was listening to a DX pile-up on 17 meters involving Gerard F2JD in the French Alps, who was working both East and West Coast stations with a kilowatt of power. It took me only three calls to contact him, and we had a short but pleasant QSO, with his signal a 59 and mine a 58. These types of QSOs and signal reports are not at all uncommon, regardless of the band or mode, using this very basic antenna.

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OPERATOR TRAINING FOR EMERGENCIES

IV. How Did You Do?

by Mitch W1SJ
Vermont Technical Coordinator

"How Did You Do?"

"How did I do what?"

I gave you a month off from this series to go out and get some experience by participating in Field Day, a public service event or another contest. "What"! "You watered your lawn, instead?"

It's the sad truth. At most, 150 Vermont hams took part in Field Day. That may sound like a lot, but consider that there are 500 ARRL members and close to 2300 hams in Vermont and that's a paltry number. But, participation was up this year, so we should acknowledge that.

So, how did you do? What did you learn? What mistakes will you get to repeat next year? Mistakes are wonderful and glorious learning experiences. Repeat mistakes are just plain stupid. Now is the time you must go over every aspect of Field Day and document it. It is quite simple: What worked, and what didn't work and what will you do to fix the things that didn't work. If you don't document it and pose a solution, you will make the same mistake again. I'll bet on it. And you don't just do this analysis for Field Day. Any activity with serious logistics needs to be analyzed so that you can gain improvement.

I can't talk about the glorious mistakes you made, since I wasn't there. I can talk about my own glorious snafus and it's likely many of them are similar to yours.

One of the most common problems in large events is that a key piece of equipment gets left behind. The key piece doesn't have to be very large. Often something as simple as a specific connecting cable will bring everything to a screeching halt until it is retrieved. I have detailed equipment lists for just about every conceivable event. These lists include not only radios and cords and connectors, but also things like food and clothing. The lists detail each antenna, not just by name, but by the number of pieces which have to be packed. I can't go wrong, right? Well, just because the list is smart, doesn't mean its user (me) is always on the ball.

I operate the VHF QSO Party from Mt. Equinox, an activity which, for me, is very much like Field Day. I come fully self-contained, put up antennas, operate, take things down and go home. Last month, when setting up the antennas, the middle section of the 19 element 22-foot long 2-meter yagi came up missing. I broke into a cold sweat when I realized that this key piece was left home. I saw it in the garage and reached for it, but had to remove another part of the antenna first. Something diverted my attention for a second, and I forgot to grab the piece. Later I routinely checked off that I had all 5 pieces of the 2-meter yagi. Imbecile! I'm standing up on a mountain holding two pieces of a yagi and have no way to retrieve the missing piece. With no one else to blame, I set about making something work. I reached into my extensive box of hardware and clamps, grabbed the drill and created a fix. The antenna went up without incident and worked well all weekend. The key item: check everything twice *(just like Santa).* Another key item: carry an abundance of spare parts, hardware, little junk, masts and tools so you can save your butt when you have a major brain fart. As I'm sure every Field Day group left something home, these are all lessons which are useful.

> ***"Mistakes are wonderful and glorious learning experiences. Repeat mistakes are just plain stupid."***

Folks who operate Field Day with me know that I'm a real pain in the rear when it comes to checking equipment. I spend a lot of time checking equipment before Field Day. If something is wrong, I'd rather solve the problem on Monday, than Saturday, just before the start of Field Day. I build the phone station twice. The night before Field Day I drag all the parts and pieces for the station into the living room and assemble it and test it there. If something is missing or broken, I'll know it immediately.

Even if something is tested and known to be working, nothing will guarantee that it will remain in that state. And, anything which obviously seems to be the culprit, is most likely not. Just before the start of Field Day, the GOTA station didn't load up properly. Fingers started pointing at the yagi. But wait, several people previously tested that antenna, and all found it to be working. I put the coax right to the radio and it loaded properly. So, the problem would have to be in the tuner, filter, switch or any of the connecting coax jumpers. I was told that it couldn't be the tuner, since it worked fine 4 months ago. Guess where the problem was! Once we accepted that this tuner could be faulty, it was a quick fix to drop another tuner in its place. Now, you do bring spare everything, don't you?

Speaking of spares, while I had an incredibly great hour on phone during Field Day, a horrible thought popped into my head. "I don't have a spare microphone!" I kept my great rate, while warding off a panic attack. But it was true. The micro-

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phone was part of a boom headset, which can break if dropped or stretched. I had a spare microphone at home or we could have soldered an adapter onto another boom headset. Either option would have killed 30 minutes of operating. Suffice it to say there will be a spare microphone next year!

Sometimes, a tragedy or near-miss will force improvement. We had that experience this year. An intense storm created very high winds which knocked over the dining tent and almost took down two other tents if it had not been for quick thinking. The order for large anchors for the tents is already in for next year.

Homework: Sit down, collect your thoughts and analyze the ham radio events you have been involved in over the last two months. This would include Field Day, public service events and contests. This isn't just the job of the event organizer. It is up to everyone to observe, report, and share this information. A good organizer will take the voluminous data, boil it down to key components and document it. Your analysis will not only touch on the obvious disasters, but also the small miscues and the myriad number of "*almosts*" (i.e. the antenna *almost* fell down, the radio *almost* went up in smoke, etc.). Finally, the analysis will point to ways to streamline the setup and logistics while, at the same time, increasing score, performance and participation. Throughout this process, you will become more knowledgeable, and who knows, you may be the organizer one day!

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Another antenna improvement which was done at the end of last year was to further tuck this "stealth antenna" out of sight by judicious rerouting of some of the copper. Thus it is now nearly impossible to spot, even if you are up on the roof, unless you know where to look. This does place the antenna more deeply within the metal roofing maze of the neighboring building. However, it has not seemed to affect it's performance, except perhaps in a positive way. Go figure.

If you have been reluctant to become involved with operating on the HF bands due to concerns about an antenna, RFI or how the neighbors might react, it is not at all as difficult as you may imagine. In the interest of brevity, I have not touched on RFI issues in this article. As you might well expect, though, there are ways to deal with this problem, should it become evident.

The rewarding aspects of HF operation can best be known through spending time on the air, mostly listening at first, but also through judicious transmitting. As one gets more experience, successful operation becomes more and more a matter of habit, and less and less a conscious effort.

You will also find the there are a wide variety of stealth antenna designs and approaches available, depending on your particular needs, locations and operation habits. The first step is to dare to try!

FIELD DAY DETAILS

Details about the Field Day contest have been posted to the **RANV** Web site. I've compiled a wealth of information including QSO rates per hour, per operator and per band. I even have a spreadsheet with the QSO rates, if you like to graph the results. There is also the Field Day story, which is a point by point discussion of everything which worked well and which needs improvement. Much of this information will be only available for a few weeks into August and then removed. The basic results and logs will remain for future reference. Members can contact W1SJ for details on viewing this information. Thanks to everyone who made Field Day such a success.

RANV NEEDS YOUR HELP

At a recent **RANV** Steering Wheel meeting, we were racking our brains trying to come up with programs for the fall meetings. We have put on so many good shows that it is becoming difficult to improve on what is being presented. The question of the night was, "what would members be interested in?" So, please let us know what your interests are. Better yet, come to the Steering Wheel and help discuss the direction of the club. The Steering Wheel is an open meeting to handle club business, held on the 3rd Tuesday of the month at Friendly's in Colchester. Most of what goes on is eating and telling of tall tales. Everyone likes to do that, right? Somewhere during the night we throw around ideas and come up with a program. We invite you to join with us.

Two months ago, I made a request for submissions to the newsletter. The response was great. However, this must be sustained over every month! Always keep an eye out towards information *(especially personal stories)* which would be of interest to our readers.

You can help in two other ways. Please renew promptly when you receive the renewal slip. Better yet, send the dues in just before the expiration. Or, if you choose to not renew, *(why?)* please let us know that too. Keeping your membership current goes a long way in cutting down a lot of the work in processing the renewal slips and including them with the newsletters.

Finally, check your mailing address on the label and check your E-mail address on the web site. If anything is incorrect, please let us know immediately. It is a real drag to get mail returned!

Now get on the air! And have a great summer!

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FOX HUNT:
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