



# RADIO AMATEUR NEWS & VIEWS

The Official Journal of the Radio Amateurs of Northern Vermont

April • 2010

An ARRL Special Service Club

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## Next Meeting:

**APRIL 13, 2010—SOLDER ON!**

**LIGHTNING PART II IS POSTPONED**

**S**OLDER IS THE NAME—burned finger, the game. Join us for an evening focused on soldering, particularly those devilishly dainty Surface Mounts. Soldering, of course, is something we do all the time, but how many do it really well? Come, ask our experts, give your hand a try at some of the weeny little SMDs that are so ubiquitous. See if you can learn anew trick or two. [Bring your glasses!]

After the fun, we'll adjourn for snacks and chats.

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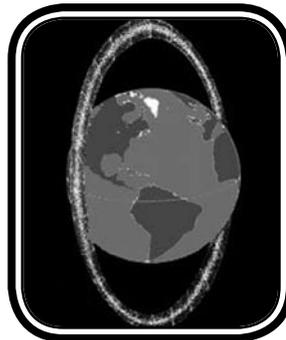
## PROJECT WEST FORD —THE ARTIFICIAL IONOSPHERE

by Jeff Bonn *NIYD*

*Note: This article is not an April Fools joke. If that's what you are looking for, check out this month's QST article about using moles to install buried radials.*

**I** RECENTLY READ THAT the International Space Station occasionally changes course to avoid space debris including "small needles." The needles are left over from Project West Ford, a cold war experiment to temporarily create an artificial ionosphere by releasing 480-million small copper needles into earth orbit. The military was interested in a means of communications that would work even if the Soviets cut undersea cables.

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## UPCOMING, NOTICES, & OTHER MISC

- RANV: Next Meeting—May 11
- Essex Memorial Parade, May 29—Help needed, contact Mitch *W1SJ*
- Vermont City Marathon, May 30—Help needed, contact Mitch *W1SJ*
- Junior Diabetes Tour: S. Burlington to Middlebury & back; July 19—Help needed, contact Tom *KB1NGQ* [[@comcast.net](mailto:@comcast.net)]
- 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)

## OPERATORS NEEDED FOR MARATHON AND PARADE

Mitch *W1SJ*

**I** HAVE A STRONG NEED FOR ham operators for public service events in late May. These events have had a loyal following of hams supporting them over the years. Unfortunately, as time goes on, people move on to other things and we lose communicators without replacing them.

The largest public service event in Vermont is the Vermont City Marathon. This entails over 8000 runners, tens of thousands of spectators and only 40 hams to tie it all together. We have typically used 43 hams to run this event and have made do with less than 40 last year. With more people retiring, moving away or getting less active, we have a very critical need for operators. We are getting close to the point where we will not be able to sustain the tremendous level of service we have provided over the years. Not only is it important to have past years operators return, it is also important to bring on and train new operators for this year and the future. There is no better training for emergency preparedness than a full blown Marathon!

Operating in the Marathon requires commitment. You cannot simply waltz in at the last moment. Not only is there some training and orientation required, but the organizer, Run Vermont, requires a complete list of participants ahead of time. This, in fact, is true of all Marathons today. So, to operate in the Marathon, you have to spend some time reading the documents, attending a staff meeting and operating at the Marathon, which typically runs from 7<sup>AM</sup> until 2<sup>PM</sup>. Some operators start a bit later, some end a bit earlier.

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## **RANV: March Meeting**

### **SECRETARY'S REPORT**

Jeff N1YD, Secretary

#### **Business:**

- We started our March meeting by congratulating each other on a successful Ham-Con.
- Mitch gave us some bad news about the repeater. A new company has taken over the site where the repeater is located and they want to charge a monthly rent far exceeding our ability to fund. Previously we had been paying no rent. An agreement was reached to continue to pay no rent, but to pay a monthly electric charge, if we move the antenna off the tower and move the equipment out of the building. Our engineering people are working on making this happen over several months. We hope to continue to maintain the same coverage when this job is completed.
- Next month Melanie WB1BZD will bring the snacks.

**Movie Night!**—Then we saw the movie *Desecheo Island DXpedition 2009*. A group of dedicated hams got permission from the US Fish & Wildlife service to operate from Desecheo Island near Puerto Rico. Desecheo had been closed to the public and to operators for fifteen years. Our former secretary, Grant Kesselring K1KD, was part of the team. They used helicopters and boats to bring in equipment and supplies for two weeks of operating. They worked frantic pileups in grand style and racked up some record-breaking QSO totals.



Paul AA1SU logging at the HAM-CON station



The Prez at HAM-CON

## **RANV**

### **THE PREZ SEZ**

Bob KB1FRW, President

**W**ELCOME TO APRIL and the next exciting edition of my newsletter column. It is a cold spring day, but it is not without hope because yesterday I helped a fellow ham take a tower down and that can only mean one thing; the poor fellow will soon be sweating bullets under the blazing summer sun, digging holes much larger than you would think would be necessary to hold up 250 pounds of aluminum and steel fifty feet in the air. Although this a bit of bad news for him it is good news for the rest of us that have decided maybe the sun spots will return soon and we can talk around the world on that piece of wire strung up in the shrubberies in the back yard. Why the good news you say? Well because the weather will warm up, the world will turn green again and you can start mowing the lawn (is it really good news?) Of course! If we didn't have this break we would never get anything fixed from last winters damage but then again if we didn't have winter then we wouldn't have to repair all the broken stuff.

Well enough of the welcome to spring chatter, the club is off and running with an exciting April meeting. "How to Solder" including a Surface Mount Devices (SMD) demo, short videos, and some hands-on stations to try various techniques. This is your chance to get an eyeball on a local expert, Mike, N1FBZ, solder and desolder some SMD components. Also there will be a few stations available to solder discrete circuitry and how to desolder the same. So come and burn your fingers and learn from the best, it should be very interesting.

So did you get on the air this month, this week? I hope you did and had a good time, I know I did, especially this last weekend while the CQ WW WPX contest was running, I manage to snag a few more DX stations I never really had thought of as DX like HC8GR in the Galapagos Islands, HH4/K4QD in Haiti and VP5OV on the Turks & Caicos Islands (where is Turks & Caicos?) but when they popped up on the DX spotting cluster I took the time to work them and then look them up as needed (I had never heard of the Turks & Caicos Islands) but now I know. Looks like a grand spot to have a radio station. A few other interesting places last month included Grenada, Angola, Iceland, Senegal, Greenland and Kuwait. I just worked a guy in Nuvavut, Canada, on East Pen Island, NA-231, who was working stations in Japan at 1800 EST on 20 meters, that normally wouldn't have been open in that direction especially considering that he was using a lashed together antenna because his main antenna broke. The world is slowly starting to become available by radio, so fire up the rig and join in!

So keep on stringing antennas in the bushes or putting them on towers and get on the air, there is a very interesting world out there just waiting for you. The sun spot numbers seem to be improving and hopefully they will continue.

Good DX

#### **CONTACTS**

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

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

Repeater: 145.150, PL100; **WB1GQR**

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

## MEMBER PROFILE

### RON ROSSI KK1L

RON WASN'T AROUND HAMS GROWING UP, although he knew they existed. His father taught electronics in the army and was an engineer at RCA and IBM. As a kid he always enjoyed building kits and tinkering. He became familiar with Amateur Radio in college through friends Brian WA1ZMS and Todd KA1KAQ. His interest grew over time and with Todd's coaxing he earned his No-code Technician license in 1993 and then his General license in 1994. A few weeks after his General he earned his Extra at the Milton Hamfest. His original callsign was N1PBT, which he changed to KK1L in November, 1996.

In the beginning, Ron's rig was a TenTec Omni-D HF transceiver, his antenna was his dog's run, end-fed through a tuner, and he spoke through a salvaged tank commander's microphone! These days he uses a Kenwood TS-850 HF transceiver and a Yaesu FT-1000D HF transceiver (on loan) and two HF amps—a Dentron 160-10L and a Heathkit SB220. Antennas include a Hygain TH6DX at 90 ft, and another at 60 ft (both tribanders), a 2-element 40M beam at 100 ft, and an inverted-V dipole for 80M and 160M at 85 ft. The tank commander's microphone has been upgraded to a Heil Pro-set.

Ron's primary interest in Amateur Radio is contesting, stemming from an introduction to contesting at the 1994 W1KOO Field Day, with Carl KC1WH. In the 1994 WPX contest he worked CE9PUA in Antarctica with his dog run antenna! It was his 17<sup>th</sup> ever HF contact and his 8<sup>th</sup> SSB contact on HF! "I must say that was an outstanding feeling to get in through a bunch of Spanish stations calling this Spanish scientific mission. I ended up with a 33 report from him and he was 59 to me," Ron said of the contact. He is still thrilled about talking around the world and marvels at contacts like T32RD on East Kiribati Island in the South Pacific with an amazing signal on 160M.

Most of Ron's many projects are related to contesting. These include developing a 2x6 Antenna Switch (Relay Unit & Control/Band Decoder Unit) for 2 Radios to 6 Antennas, and a SO2R (Single Operator 2 Radio) Audio/Rig Controller. He also has written software routines for the logging program *TRLog*.

One of his more recent projects allows him to run his station remotely. He recently ran a few hours of the January NAQP from his hotel room in Yokohama, Japan, and worked several of the RANV folks! At our last HAM-CON, Ron ran a demonstration of his Remote Control Station for the participants. He even managed to work some of the International DX contest, remotely, while at his daughter's gymnastics meet!

Beyond Amateur Radio, Ron is involved in several other activities. Foremost, he is a family man with 5 daughters! Ron is active with his church and is a member of the Knights of Columbus. He has been volunteering as an EMT since the 1986 and currently serves with Essex Rescue.

Ron's boyhood enjoyment of kit-building and electronics has grown into a rewarding hobby that is not only satisfying, but also provides a service to others. He is always happy to Elmer and help out fellow hams.

## MARATHON cont.

The training includes both standard ham radio emergency protocol and procedures used specifically for this event. Operators will receive access to a web site with all of the detailed information which is downloaded and read at your pace. Finally, the training culminates with a staff meeting before the event where we meet with the Marathon staff and work out any and all situations so that everyone knows exactly what the job is on race day.

Your thank-you for this event includes an official Vermont City Marathon T-shirt and a ringside seat for the show. And of course, the experience in helping out at a community event is considered priceless.

If you are interested in operating in the VCM, contact W1SJ right away. I need to have the operators list in place later this month!

The other event which I run is the Essex Memorial Parade on the Saturday before the Marathon. The Parade is being run by a whole new team of people, so it will be interesting to see how it comes together. This is a far easier task than the Marathon. We help the groups line up and try to keep them marching down the route like a parade (as opposed to an unruly mob). No pre-training is required and typical operating times are 7<sup>AM</sup> until noon. Please contact W1SJ if you are interested.

## NEEDLES cont.

Each needle was 18mm of fine copper wire, designed to act as a half wave dipole at 8000MHz. Launched into a 3700 km orbit in 1963, the needles dispersed into a band that encircled the earth. Shortly after launch, voice communications between Cape Parks, California, and Millstone Hill, Massachusetts, were successfully tested using two 18.5 meter dish antennas. After about two months, the needles had dispersed so much that they were ineffective.

Most of the needles reentered the atmosphere over the years. A few clumps that did not disperse are still in orbit, along with the launch vehicle.

For further reading:

<http://www.damninginteresting.com/earths-artificial-ring-project-west-ford>

<http://www.thecrimson.com/article/1963/5/24/project-west-ford-pfour-hundred-million>

[http://en.wikipedia.org/wiki/Project\\_West\\_Ford](http://en.wikipedia.org/wiki/Project_West_Ford)

## HAM-CON 2010



Cal from HRO



The meandering crowd



John Bee from Quicksilver



**RANV**

**PO Box 9392  
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# **NEWS & VIEWS**

**April • 2010**

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

## **NEXT MEETING**

Tuesday • April 13 • 7:00<sup>PM</sup>

O'Brien Civic Center

113 Patchen Road • South Burlington

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**“Soldering SMDs”**