



RADIO AMATEUR NEWS & VIEWS

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An ARRL Special Service Club

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Next Meeting:

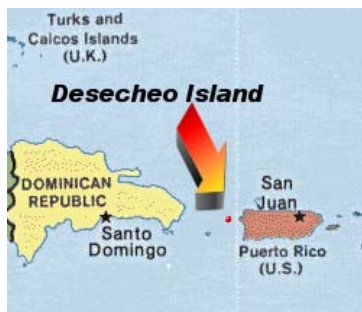
MARCH 9, 2010—MOVIE NIGHT!

Desecheo

—so rare,
—so near,
—so far

Come and enjoy the video of the 2009 K5D Dxpediton to Desecheo Island in the Mona Channel off the coast of Puerto Rico.

Due to heavy seas and rough surf, helicopters were used to transport crew and supplies when boats couldn't navigate. Occasionally the helicopter flights were delayed due to high winds. The movie details all the logistical issues involved in planning and executing a big Dxpediton, with rousing footage of the helicopter trips, views of the island from the air, and of course all the DXing activity!



This uninhabited island was first set aside as a nature preserve in 1912. During World War II it was used as a bombing and gunnery range then, later, used by the U.S. military for survival training until 1964. Since 1976 it has been part of the Caribbean Islands National Wildlife Refuge Complex managed by the U.S. Fish and Wildlife Service and is closed to all visitors.

There will be pizza at the meeting so plan on attending a bit earlier to have a bite before the show begins. Please send a note that you are attending, and what kind of pizza

you prefer, to Bob at kb1frw@arrl.net. If you *really hate* pizza, he'll be getting them at Costco and could possibly pickup a Caesar salad or chicken Caesar instead of one of the pizzas, they have a bunch of pre-made things like that, be sure to send him a note—he's promised to "see what I can do." Keep in mind that Costco sells cheese, pepperoni, combo, and veggie pizzas—let Bob know what you want!

UPCOMING, NOTICES, & OTHER MISC

- ♦ RANV: April 13—Lightning - Part II
- ♦ RANV Website: Downloads of Some of the HAM-CON 2010 Forums
- ♦ Dues due? Pay online at www.ranv.org/ranvpay.html
- ♦ VT Ham Radio calendar—www.vthrc.net

HAM-CON

Mitch W1SJ

Months of planning culminated Saturday in HAM-CON 2010. Based on feedback I have received from many attendees, it was an unqualified success. Last year, we managed to pull off a very difficult transition to a new site. This year, we got to address several of the problems from last year and make them right. Last year's crush was resolved by using the entire ballroom for the flea market and moving one forum room down the hall. This allowed us to keep the flea market from spilling into the hallway and use wider aisles to permit smoother flow through the sales area. There was concern about people not wanting to walk down to Forum Room 2, but after seeing a packed house for some of the forums there, we knew that was not a problem.

Some lamented about the lack of food last year, so we had snacks and lunches provided this time. The snacks did very well, whereas the lunch option was not very popular, although the folks who did buy lunch really liked it.

I didn't hear any complaints about parking or room temperatures being too wildly out of control, so I will assume these are OK. There was a complaint that the hot tub was closed (due to some kids dumping food color into it), but we managed to live through it!

Vendors reported that they did OK, but not great. A lot of people were "kicking the tires" likely due to the poor economy. The vendor space was down by about 8 tables, mostly because while we were enjoying sunny weather, KJI was buried in snow down in New Jersey and couldn't get dug out. Fortunately, Cal from Ham Radio Outlet agreed to bring a small selection of goodies and we had a bunch of new stuff to buy. While there was some slushy driving in southern Vermont and we picked up an inch of snow Friday night, weather was really not much of a factor.

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RANV: February Meeting

SECRETARY'S REPORT

Jeff N1YD, Secretary

Business:

- We voted on a proposal to attract new members. Starting now, RANV will give a one year membership to new hams in the area who 1) Pass the FCC exam, 2) Show up at a meeting. The proposal passed by a large margin.
- We also voted to have pizza at our upcoming movie meeting.

Presentation—Bob Frost *W1FP* gave a well-received presentation on Software Defined Radio (SDR), with a special twist on interfacing to old radios. SDR is a kind of receiver that converts RF into "I" and "Q" streams, which can be received by the stereo input of a computer sound card and processed in amazing ways. The result is a remarkable improvement in dynamic range and sensitivity, the ability to receive almost any mode, and "brick wall filtering."

Bob brought his S-40A Hallicrafters receiver from 1940 to show how it works. His SoftRock software defined radio connects to the 445kHz intermediate frequency section of the Hallicrafters, and then into a laptop computer's sound card. This took some clever work because the IF section of the Hallicrafters is high voltage. Bob found that inductive coupling (a few turns of wire around one of the high voltage conductors) gave good results.

Bob tuned to a weak station and showed us the difference between the Hallicrafters' regular speaker output and the processed SDR output. The SDR sounded quite good, while the regular Hallicrafters' output was almost complete static. For software, Bob uses "Rocky," a free program from *dxatlas.com*, or "PowerSDR," a free program from Flex-Radio Systems, the makers of the SoftRock.

Bob also told us about a program called "WebSDR." It is an SDR connected to the internet which lets you hear how your transmissions sound at a distant station.

Finally, we got a demonstration of how a software defined radio can filter out nearby frequencies. Bob tuned Canadian time station CHU, then set very tight filtering. The strong high frequency beep that is output once per minute was inaudible, while lower frequency parts of the audio were still heard.

Until these January and February SDR presentations, I thought that my first HF radio would be a fancy thing with a couple dozen knobs and switches. But it looks like a plain black box might be a better way to go.

RANV

THE PREZ SEZ

Bob KB1FRW, President

WELL IT MUST BE SPRING, the RANV winter hamfest, HAM-CON, has come and gone (it wouldn't have if I had written this article when I was supposed to), the snow is melting and right now it looks like we are headed for the fifth season (mud season) early this year. I know this because where we erected the W1V tower this year was a sea of mud when we got done.

I want to give special thanks to the members and non-members who assisted with putting on HAM-CON, without you this event would not exist, great effort that went very smoothly, Yeah!!

Fortunately we were able to hold the line on admission costs and expand the flea market space by 50%, making the experience better for both attendees and vendors. This layout seemed a good fit for the number of hams who came, and the distant forum room appeared to be well-visited despite some trepidation that the remote location would lower the attendance somewhat. But, at least, the ones I looked in on seemed well-filled. Thanks to all who attended; I hope you had a good time.

So the stuff is all put away, the snow is still melting, and I'm thinking of all the meetings, events, and projects coming up. To start with, for all of you who missed the movie in forum room #1: there will be a repeat showing at the next RANV meeting. The movie is on the 2009 DXpedition to Deseccho Island and one of the operators is an ex-RANV club member, past secretary, and contestor, Grant K1KD.

The springtime also brings a few walk- and bike-a-thons as fund raisers for charitable causes like the March of Dimes walk which is May 1st (contact John N1LXI) and the walk for Multiple Sclerosis on April 24 (contact Bob KB1FRW). These are reasonably low-key, short events that help good causes and give you a chance to hone your Emergency Communications skills in the real world. And sometimes you'll get a cool tee shirt or a bit of food for your efforts! Remember that these will be the skills you need to play in the bigger events that aren't so low-key, like the Vermont City Marathon or the MS Ride, so sign up early and often.

As far as projects go, this is up to you, as the club doesn't have anything right now in the works. This is good opportunity to start planning your antenna project or shack cleaning/reorganization, start your bigger projects like a tower as soon as you can because if you don't you might end up having results like I

did. Went to put up my tower starting in July, plenty of time, right? Wrong!! Mis-judged some of the construction and antenna rehabilitation time and ended up looking up at an empty tower all winter. That stunk!, so start early and spend the long winter *getting* on the air not *wishing* you were.

A last note: five 2-meter Yagi-Uda (http://en.wikipedia.org/wiki/Yagi_antenna) portable tape measure beam antennas were sold and assembled at HAM-CON. The club still has 5 of these antenna kits for \$10 each

The purpose of these antennae is radio direction finding or hidden transmitter hunting (*foxhunting*). RANV has had foxhunts in the past and anyone interested in taking it back up again can contact me, KB1FRW@arrl.net. It's nice to have 4 or more hunters; all you need is a receiver (*HT*) with an S meter of some sort, most HTs have this, one of the above antennas, and you are in the hunt. It's a lot of fun!!

See you at the next meeting,

73, Bob KB1FRW

CONTACTS

Bob **KB1FRW**, President 434-2517
mcamp@gmav.net

Carl **AB1DD**, V-Pres./Treas. 482-3878
ab1dd@arrl.net

Jeff **N1YD**, Sec'y 879-1789
jbonn@us.ibm.com

EDITORS

Kathi **K1WAL** 985-8535
k1wal@arrl.net

Robin **N1WWW** 349-0214
n1www@arrl.net

Newsletter submissions to either:
n1www@arrl.net or k1wal@arrl.net

US Mail: POB 9392
South Burlington, VT 05407

Web: www.RANV.org

Reflector:
groups.yahoo.com/group/RANV

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

Repeater: 145.150, PL100; **WB1GQR**

New Hams, Mentoring:
RANVMentor@gmail.com

MEMBER PROFILE

JEFF BONN N1YD

JEFF BECAME INTERESTED in amateur radio after seeing a flier at the Essex Junction Radio Shack for Mitch's class in 2002. He attended the weekend classes and earned his Technician ticket that October.

He would have earned his General as well, but had to learn Morse code first, as this was before the code requirement was dropped. He used *Morse Academy* from the RANV website. For added incentive he told himself he would not buy a rig until he got his General ticket. Although it didn't come easily he became proficient enough in CW to pass the General exam in December, 2002. He also took the Extra exam when one of the VEs suggested he try it. Since he had not studied for this he wasn't surprised when he didn't pass, however he did well enough to encourage himself. He earned his Extra ticket six months later.

Jeff's rig is a FT-8900R Quad-Band (29/50/144/430 MHz) FM transceiver with cross-band repeater capability. He uses it both in his car and at home. A mag-mount antenna on the car and a mag-mount antenna, on sheet metal, in the attic crawlspace complete his mobile/stationary setups. For portable use, he has a Vertex VX-150 ht.

Not too long ago, Jeff has built a 'Litz special' crystal radio which he customized with an impedance matching transformer and sound powered headphones. He has set up demonstrations at Field Day for the educational activity bonus, including the crystal radio set and soldering. He also built an active attenuator at one of the RANV Building Nights, and uses it in fox hunts.

Jeff has volunteered with the Boy Scouts for several camporees, helping to demonstrate HF, VHF, and Morse code. Together with John *K1JCM* and Brian *N1BQ*, the scouts were able to speak with an operator in Bulgaria, hunt a fox box, and see how a repeater works. To help satisfy their endless curiosity, he brought a big box of assorted equipment. The scouts got to tune in a variety of scanner frequencies, and they enjoyed trying out his power/SWR meter, multimeter, and code practice oscillator.

In the near future Jeff would like to try building an antenna powered device. He would also like to design and build a Jacob's ladder—a high voltage device which generates an electrical arc that 'climbs' a set of electrodes. Jeff is becoming interested in software defined radio and is looking into an HF transceiver using SDR technology.

Jeff is our recently elected RANV secretary, graciously agreeing to the position after only minimal arm twisting! He plans to continue to participate in club and community activities. He is a wealth of information and is very helpful when you have a question or need help.

HAM-CON cont.

The door prize drawing, usually relegated to secondary status, became very huge this year. Through the generosity of WCAX-TV and the hard work of Carl to set it up, we had a High Definition TV to offer in the door prize drawing. And EVERYONE wanted it! It really was the perfect prize as both hams and non-hams dreamed of being the big winner. A whole "Closing Ceremonies" was developed to work around the door prize drawing. It worked great except that we were a victim of our own success. We expected 40-50 to stay around and they all would fit into Forum Room 1. However, this number swelled to well over 100, spilling out into the hallway. Next year, we'll do this in the Flea Market room where there will be enough room and perhaps some last minute sales that vendors always like to see.

The forums did great—even better than last year. The two early forums, which usually get smaller numbers, did well. The Antenna Forum by Ed Hare packed 40 people into

the room and most of the other forums had numbers past 25.

The one negative in all this remains attendance. We were down 50 people from last year, or a 12% drop. We know that this wasn't really due to weather. We also know that some 20% of the attendees each year are non-ham walk-ins. With 1500 licensed ham operators living within an hour of the building, we really should be doing better. Many long-time hams have lost interest, sold their equipment and don't bother with ham radio activities. I know this because I get e-mails and talk to people. Every week I seem to get a phone call which goes like this: "I have a bunch of old ham equipment I want to get rid of..." I mention this because we work very hard to produce the best Ham Convention there is, but we are ultimately slaves to the economy, the weather, and the sad fact that the majority of hams today are licenses in the database and not much else.

Ah, the heck with 'em. We still had a great time!

A MESSAGE FROM THE NEW RANV NEWSLETTER CO-EDITORS

HELLO FROM Robin *N1WWW* and Kathi *K1WAL*. We are privileged to be the new co-editors of the RANV newsletter. We've made a few formatting changes and hope you enjoy the new look.

It comes as no surprise that it takes more than one person to replace Mitch *W1SJ* as newsletter editor. He has been at the helm for a long time and we appreciate all he and others have done to get the newsletter written, printed, and distributed. Mitch will still contribute articles and thoughts to the newsletter so we will continue to enjoy his knowledgeable and sometimes acerbic writing.

The call for newsletter articles continues! All members are encouraged to contribute to our newsletter. Our newsletter is an important forum where members can share news, points of view, projects, product reviews, etc. Please consider submitting at least one article a year. If you don't, you may find yourselves reading recipes, or more emergency management stuff than you can shake a stick at.

Then you'll want to fire us.

Then you'll have to replace us.

Then *you*'ll have to do it!

Submissions can be sent to Kathi at *k1wal@arrl.net* or Robin at *n1www@arrl.net*.

We look forward to learning a lot, having a few laughs, and generally having a good time. Join us, contribute!



RANV

**PO Box 9392
South Burlington, VT 05407**

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www.RANV.org

NEXT MEETING

Tuesday • March 9 • 7:00^{PM}

O'Brien Civic Center

113 Patchen Road • South Burlington

MOVIE NIGHT:

**"KP5 Desecheo
2009 DXPedition"**