



RADIO AMATEUR

NEWS & VIEWS

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HAM-CON Mitch W1SJ

“There were hordes of hams!”

That was one of many comments on HAM-CON 2015 which just completed its 33rd year or first 1/3 of a century.

We were blessed with perfect Hamfest weather – cold with no precip anywhere in the forecast. Every little bit helps! Attendance was up 11% over last year, which was low year, and pretty much the same as 2011-2013. Attendance is but one measure. Unlike earlier years, we are getting folks to the show earlier and keeping everyone around longer.

Each year I set out to outdo the previous year’s program. That, obviously, gets harder and harder to do each year. But, based on the numbers of people at the forums, I think we nailed it! Scheduling forums is always tough because we cram 8 presentations in 4 hours. Historically, the earliest and latest forums tend to suffer because the attendance is less. We did not have that problem this time! The 8:30 Kit Builder’s Forum had around 45 people, perhaps even more, depending on who is counting. OK, so they kind of cheated by giving away free stuff (always a good plan). But then the 9:30 Wire Antennas Forum had 65, and they gave away nothing. Who would have thought Wire Antennas were all that interesting? Well, at least ¼ of the entire Convention did

The Digital Voice Forum had a big crowd and I’ve just learned that a bunch of new Canadian digital repeaters are being planned. The Elecraft forum was also mobbed and the new WebX software that Ron KK1L set up allowed the viewing of slides and the speaker simultaneously with an on-line connection. Ultimately, I heard great things about all of the forums. Folks seemed to be pleased and are now asking for larger forum rooms!
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REPEATER NEWS Mitch W1SJ

On Sunday, January 18th, heavy snow dropped a tree on top of the 13 kV power line running up through the Bolton Valley Ski area. Witnesses say it made one hell of a fireworks display. Apparently, two of the phases shorted out and before the 100 amp circuit breaker opened, the power rerouted itself up the neutral line. That is a very, very bad scenario and to prevent that from happening, the neutral is always solidly grounded at a building entrance. But really, how well can you ground a system when sitting on top of a rock?

The damage was pretty bad. Several amplifiers were blown at the radio station. Both the FAA and Wireless Internet provider had major damage. While attempting to restore power, a line shorted out, filling the building with smoke. As far as the repeater was concerned, I was expecting the worst. Fortunately, I had Jon, the radio engineer, quickly check us out. He replaced the primary (120v) and secondary (12v) fuses and had voltage going to the system, but there was no indication of lights or life on the controller.

The entire week was spent collecting parts and pieces and arranging the logistics to get up to the site. With the damage reported by the other services at the site, virtually anything could have been wiped out. I had parts to fix the controller, a spare controller, a 10 volt power supply for the repeater and, if all else failed, an entire small spare repeater and power supply. Thanks to Tony WA2LRE for the repeater and controllers and Bob W1ICW for the spare parts. For much of the week, I poured over the schematics to come up with a plan to test and figure out what might be bad. You have to do that – it is very cold in the building there. Think how sharp you would be standing in a meat locker, and you get a good idea of the working conditions.

Last but not least is access to the site, which is one of the worst sites to get to in the entire Northeast. There is a trail, but it is rough. A snowmobile can make it, but only a wide track machine with a very experienced driver. Continued on Page 2

Repeater News Continued Mitch W1SJ

Or one can take the lift and then walk up the last mile and 400 foot vertical climb with a 30 pound pack with all the stuff you need. I used to do that when I was young and stupid, but no more. Fortunately, Karl Rinker was going, up in a snow cat, taking a full crew of people up to work on the FAA equipment, and was gracious enough to allow me to tag along. Even though we rode in the open back, it was like riding in a limo compared to other forms of transportation up the hill.

The good news was that I had the repeater back on in 5 minutes. I verified we had power, and there were no other hidden fuses we forgot about. I opened up the controller and found the 15 volt protection zener shorted. I cut that and everything worked. Phew, that was easy! That zener sacrificed its life by doing what it was paid to do – protect all the other chips in the controller. I put a new zener in, brought up the audio, which was too low, and brought up the power on the UHF transmitter. I ran a bunch of tests with Tony and all was fine, so I had lunch. With 7 engineers on site, we had ample time to talk shop and tell mountaintop war stories!

The ride down was smooth, albeit cold. In the parking lot, it was 0 degrees, which translates to -8 at the summit. I don't know what the wind chill was, but it was pretty bad. But the worst part of the day was the fact that the heat did not work in car going home, meaning sitting in 5 degree temps for 30 minutes. Now I know what a frozen steak feels like!

The Activities Room next store was a victim of its own success. We had so much stuff going on in there that it was hard to hear anything above the din. With the TWO W1V stations (live and remote), the Digital Demo, Jeff's signal demo, QRP showings and the Tech Table, it was a real 3-Ring Circus! And, that is exactly what I planned for. With so much stuff going on, there was little opportunity to get bored.

The twin W1V stations were quite a hit. We had initial problems with how we were going to mount the yagi, but eventually Carl and WCAX saved the day with a lift truck. Some hams always suggest stringing a dipole across the parking lot. But the yagi PLAYS WELL, and if you saw the ops running European pileups, you saw firsthand how that works. And besides, a yagi outside of a Hamfest has great symbolism. You know that this is a HAM event, and not just a gathering of any old collection of geeks! But if you got tired running Europe on 15 meters, then our other station (sans antenna) was equal to the task on 10 meters. Some asked me, "where the antenna?" To which the reply was, about 150 miles south of here! Remote control is here, it works well, and it is oh, so slick. Great demonstration!

And if none of the above interested you, there also happened to be a flea market a few steps down the hallway. The room was full, people

were buying & selling stuff (I saw boat anchors hauled out at 7:15AM) and folks were happy. Not bad, given that we only had 1 dealer in the room. But, if you add a lot of hams who empty out their basements, you do find a lot of stuff to sort through.

We got closing ceremonies starting and ending on time and there was a very good turnout of attendees. Besides the door prizes, it is real fun to have everyone in the same place for 20 minutes before we head off in our separate ways. Jeff N1YD was the big winner of the TV and some 20 prizes were dispensed during the proceedings.

One hears a good deal of alarming things on the radio. Some sample quotes heard in the last week on local repeaters, "I won't go to the fest – don't need nothing" and "Ham Radio is a dying hobby." To answer these, first, life isn't about what you need, it is about the journey and second, if you looked around HAM-CON and saw some 300 people enjoying and reveling in their avocation, you know that reports of our demise have been greatly exaggerated. Keep having that fun and we'll do it all again next year.

VERMONT QSO PARTY OPERATION Cheryl KB1VJE

On Saturday, February 7th Dick KB1VJD and I (Cheryl KB1VJE) headed over to Mitch's W1SJ for the Vermont QSO Party. With food in hand, we arrived a bit after 4 PM to witness Eric N1CFO on the air and a good amount of contacts coming in. Dick had signed up for the 4 PM slot and I was going as the casual observer and occasional food consumer. What started out as a 2-hour slot ended up with us leaving at about 9 PM or later. You know how these things go when ham's get together - they TALK. Eric headed home and I spent a fair amount of time chatting with Tim KB1THX (over food of course) about the setup we are attempting to rig at home while Mitch got Dick set up for contesting. Dick pulled in a few longer range contacts - one from New Zealand and the other from Japan which is always a treat. The accents are a bit challenging and it can be a bit daunting when you don't get on the air on a regular basis. Thankfully, Mitch is there to help us contest newbies and keep us encouraged. Later in the day, Melanie arrived, which was a treat especially for Cheryl, to have another YL in the mix. Tim, who had a special date with his daughter that evening, headed out to find a dead battery - not a problem, as hams always seem to be able to find "juice" and with a jump start, he was off for a night of dancing. Dick worked the contest until about 6 at which time Melanie N7BX got on. One station commented that a female voice on the air was a nice change. Listening to Melanie got me intrigued and when she took a break I jumped on the air. You all know how this goes - you may plan to stay on the sidelines, but once the headphones are on it's like a drug - you just keep going. The food aspect of the party fades away, time seems to evaporate and you keep hoping you will get some rare contact. Near about 9 PM we called it quits and began packing things up to head home. A really fun day - a chance to meet some new hams and overall good times both on the air and off. A "shout out" to Mitch to thank him for opening up his home and station, so we could gather together to enjoy and participate in the contest.

Adventures in CW - How I got on the air
KCIAPK SKCC #12860 FISTS #16847



I love operating CW!!! It's one of the most exciting, efficient, and established digital modes ever. With a desire to learn, some practice, and the right guidance, acquiring this new skill is within reach of most hams.

You would think that Morse Code might have died off after the FCC eliminated the code requirement 8 years ago, but I'm happy to report that this mode is very much alive and the number of new CW operators is steadily growing!

Do you remember the fear and excitement of getting on the air for the first time? Well, it was no different for me when I first pounded out my call sign in September and had the other station respond. *Yikes! No turning back now!*

Leading up to this, I'd been practicing with software but didn't seem to be advancing - I could copy most letters and numbers but was struggling to understand on-air QSO's.

We were talking about this on the local repeater when Scott Anderson (W1ZU) gave me some great advice... He suggested that I enroll in CW Academy. He had recently completed the 8 week course along with Cesar Barrios (K1TNT) and found it to be structured and very helpful.

CW Academy is free, offered three times a year (Jan/Feb, Apr/May, Sep/Oct), and is hosted by advisors from the CW Operators' Club. Because it is in such high demand, there is often a wait list of about 100 people and classes sometimes fill up a year in advance. There are only two requirements 1) that you have a commitment to learn and 2) have access to some basic hardware - a webcam (cost ~\$25), a code practice oscillator (most rigs have them built in), and a key (straight key, bug, or paddle). Fortunately, I didn't have to wait that long and found myself enrolled in the September 2014 class along with Larry Day (KB1ZEB) and two other hams. We were given some practice exercises to work on before the start and assigned homework to complete between classes which met twice a week for an hour.

The course was led by Barry Fluxe (K8QI), a retired music teacher, who was a really nice guy and a great instructor. Our initial focus was on recognizing letters and numbers, but the goal was to train our ears to recognize complete words by "head copy" (UR, RST, ANT, PWR, FB, etc.). Once we recognized the characters or word being sent, we simply raised our hand. If anyone was struggling, Barry would send a couple more times before offering additional help and advice. Although we initially started copying around 10 WPM, we were quickly able to improve to 15-18 WPM by the end of the class.

The biggest advantage of this class was learning all the abbreviations, protocols, etiquette, and being able to head copy. For example, you'll find that most QSO's follow the simple three part exchange:

1. Call sign, name, QTH, and signal report
2. Station description (rig, power, antenna)
3. Conclusion (good luck, hope to see you again, 73, etc.)

Software is great, but having access to an instructor or Elmer to guide you is invaluable!

About half-way through the course, I got up enough courage to make my first contact (W1AW/7 - ID). I figured this would be a safe first step since the exchange is simple and most contesters just want to establish contact and move on - *no need to worry about finding myself in over my head with a long QSO!*

Since my first contact in September, I've made almost 200 more contacts and worked 40 states using my grandfather's J-47 straight key plugged into my ICOM-7200 running between 1 and 100 watts into a simple dipole. Contacts have included QSO parties, contests, special events, QRP to QRP, and some really enjoyable ragchews. I still use a decoder as a backup (just in case I have trouble copying), but just like any language or skill... improvement comes with time and practice.

If you're ready to rediscover the thrill of ham radio, want to talk with some of the nicest and most experienced hams, work contacts when propagation is poor, try new contests, build new skills, and have fun... then CONSIDER LEARNING CW!!!

Advantages of CW

- IT IS FUN!!!
- Most efficient way to work QRP and is great for SOTA
- You won't wake up the household calling CQ or having a QSO
- Narrow bandwidth
- Used on many simple and inexpensive homebrew transceivers - an advantage for chasing DX or QRP
- You can still get on the air using simple or covert antenna - ideal for people living in neighborhoods with restrictions
- Easy to use for international contacts and is widely understood around the world
- Equal access - no accents or dialects, man, woman, young, or old... it doesn't matter
- Most operators are using 100 watts or less so you generally don't get overpowered
- Less susceptible to interference
- Works extremely well when propagation or noise floor is poor
- A lot of hams only work the CW portion of the band - you won't find many of them anywhere else
- CW operation is permitted throughout all amateur bands *You can use CW in the phone portion of the band but not the other way around*
- Access to additional contests and sprints
- Working prime contest stations (Ex: W1AW/portable) is easier than phone. Less pileups and quicker exchanges
- Most CW operators are experienced and very knowledgeable. Some of the nicest, most professional, encouraging, and supportive ham's you'll meet

HELPFUL LINKS

- CW Academy (<http://www.cwops.org/cwacademy.html>)
- Learn CW Online (<http://www.lcwo.net/>)

CLUBS DEDICATED TO PROMOTING CW

- Straight Key Century Club (<http://www.skccgroup.com/>) - 13,463 members
- FISTS (<http://www.fistsna.org/>) - 17,139 members
- CW Operators' Club (<http://www.cwops.org/>)
- North American QRP CW Club (<http://www.naqcc.info/>) - 7,600 members

TIPS ON LEARNING TO OPERATE CW

- HAVE FUN - don't stress yourself out!
- Commit time to learning
 - Best to do daily or twice daily practice
 - No more than 5-10 minutes per session
 - Choose an optimal time - not when you're hungry or tired
- Learn it like a new language
- Avoid barriers to learning
 - Code tapes - you'll just memorize the sequence not the actual letters. Better to have software that sends sets of random letters. Consider the MFJ-413 or -418 code tutor
 - Slow speed copy - It is better to copy slightly faster than your comfort level
 - Trying to catch up - if you miss a character, forget it or mark with an underscore... move on or you'll get so far behind you'll get lost. Chances are you can figure it out afterw_rds.
- Practice sending / Get a code practice oscillator (CPO)
 - Most HF rigs have a built-in CPO. Consult your owner manual
 - Buy or build a CPO. I used the Cheaper Beeper plans (by W8WG available on ARRL website) to build a kit for under \$20 - just look it up on Google.
 - Use your code practice oscillator to practice sending as often as you copy - sending is the other half of the QSO and is just as important!!!
 - Practice doesn't make perfect. PERFECT PRACTICE MAKES PERFECT - it is hard to copy people sending fast code that is full of mistakes. It's much better to send good code slower!
 - A good CPO is better than an app on your smart phone, but you can always use your smart phone when the CPO is not available. I use the "MORSEKEY" app
 - When driving or walking, look at street signs or numbers and practice sending your head or by tapping your fingers.
- Practice learning the most common words (head copy) instead of trying to write down each individual letter. You don't read "CAT" as C, A, T... you recognize it as a "sight word"... CW is no different.
- Again... HAVE FUN!!!

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NEWS & VIEWS

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Upcoming, Notices, & Misc

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

NEXT MEETING

Tuesday • March 10th • 7:00pm
O'Brien Civic Center • Patchen Rd
South Burlington, VT

To Be Determined