



RADIO AMATEUR NEWS & VIEWS

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An ARRL Special Service Club

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February Meeting

Brian Duerr, WB2JIX

The story behind WB2JIX acquiring True Ladder Line and a Business Discussion about the use, myths, and efficiency of open wire feedline.

HAM RADIO BREAKFAST

Mitch W1SJ

We had another fine gathering at the annual Vermont Ham Breakfast this past weekend. The final tally was around 27, but we may have missed a few who snuck out the back. We didn't have as many from the outlying areas as the group from Canada and from Central Vermont was missing.

The question of the day was, "When was the last time you were on HF?" Surprisingly, most of the group was on the air in some form during the last week. The other question was "What ham radio project are you planning on for this year?" I would say, unofficially, the best answer had to come from KB1FRW, as he is working on draconian measures to persuade a bunch of large fact birds to stop roosting on and bending up his beam!

RANV members attending: Paul AA1SU, Carl AB1DD, Kathi K1WAL, Bob KB1FRW, Steve KB1IVE, Jon KB1LIE, Alan KB1MDC, Bob KB1WXM, Larry KB1ZEB, Dave KC1APK, Brian N1BQ, Glenn N1WCK, Allen W1AAT, Dave W1DEC, Mitch W1SJ, Sarah W1SLR, Bob W4WFJ, Brian WB2JIX.

HAM-CON PREVIEW

Mitch W1SJ

In just a few weeks, it will be time once again for HAM-CON. We have another super program lined up for you!

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Web: www.RANV.org

Reflector:
groups.yahoo.com/group/RANV

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

Repeater: 145.150, PL 100; WB1QR

New Hams, Mentoring:
RANVMentor@gmail.com

Our special guest speaker this year will be Joe Rudi NK7U. If you work contests, you will recognize this call – usually the first one you work in Oregon. Over the years, Joe has assembled several super stations, always looking for the right

combination of propagation characteristics and antenna design. In the 70's Joe's work kept him from doing a lot of ham radio – he was the first baseman and left fielder on the Oakland Athletics during their big championship run. Ham radio contesting and ball playing - it will be a real interesting talk! Stop by at 11:30 to join Joe in his winter shack in Nevada.

We welcome back Joel Hallas W1ZR who will present another session of “The Doctor Is In”. Bring all your pressing technical questions and Joel will provide an answer. Joel will lead off the forums program at 8:30 with a talk on Multiband Antennas. Everyone wants to know what kind of antenna to put up. Well, here is your chance – but you must get there early!

Remote control of our ham stations has always been a fascinating topic. And more and more hams are doing it today. Long time Remote Controller John Grow VE2EQL will give a talk specifically on the RemoteHams program. With this program, you can connect up to super ham stations all over the world, for a fee. Tired of getting beat up with your Buddipole? No problem! Just hook in to a station somewhere else, running a kilowatt and a beam, and blast away! John will also talk about the RemoteRadio software, where you can control your own station.

Have you heard about the ARRL Program, “National Parks On the Air”? Maybe you've come across a small pileup where stations are giving out cryptic letters and numbers. Bob Henneberger KB1WXM, who has already put a few National Parks on the air this year, will be on hand to describe the program, and explain how you can take part.

People are still asking, “What is all the hub-bub about digital voice radio”? Frankly, I am too! Have no fear because we have Don Price KB5VP, who will join us and explain all the details and pros and cons of digital radio. Don is active on the Mt. Ascutney digital repeater, so he knows the details.

There never seems to be an end to questions about how to build a ham shack or put up an antenna. So, we got the master Field Day station builder himself, W1SJ to give an introductory talk on this topic. Not only will we cover the station, equipment and the antennas, but will also cover operating as well. All this in an hour – you bet!

While all this is going on, what is the ARRL doing for us? I don't know! That's why we have our New England Division Director and Vice Director, Tom Frenaye K1KI and Mike Raisbeck K1TWF here to talk about that very subject.

No convention is complete without the closing ceremonies where we draw door prizes and say goodbye until next year. The main prize is a 40" HD Smart TV with Roku, donated by

WCAX. There will be many smaller prizes as well. But you have to be present to win, which means that you have to stay until 1:00 and eat lunch a little later. Folks who zip out of the show early (we know who you are) will not be prize winners!

Once again, we will have the Activities Room (sometimes called the “3-Ring Circus”) going strong. There you will find the W1V Special Event Station, the Tech table where you can check performance on your radios, and a variety of 10-minute demos, including Digital Radio, RemoteHams operation and Precision Timing measurements. Refer to the program for exact times.

The VE Session will be at 1:15. It is FREE this year. No charge to take a test. BUT, you have to study. Please be considerate of the hard working examiners by properly preparing before taking the exam. Commercial FCC exams will also be given (not free).

Oh, and did I mention we have vendors in the big room down the hall? Frankly, I don't know who will be showing up or what they will be bringing. That's the fun of it – you never know what you will find until you start looking.

So remember – HAM-CON: The Vermont Ham Radio Convention in South Burlington, Vermont. It is not the HAM-CON in Keystone, Colorado; it is not the HAM-CON in Torrance, California; and it is certainly not the HAM-CON Anime Convention in Halifax, Nova Scotia! It will be held at the Holiday Inn, I-89 Exit 14, South Burlington, Saturday February 27, 8AM-2PM. There are still discount early admission tickets left (\$6 early, \$8 at door). Buy them at the club meeting or on line. Details can be found at ranv.org/hamcon.html. See you there!

VT QSO PARTY

Mitch W1SJ

This weekend is the Vermont QSO Party, starting at 7PM Friday and ending at 7PM Sunday. The purpose is to put Vermont hams on the air. As such, we need Vermont operators (many of them) to actually get ON the air, not just talk about it. In running this event for several years, the chief complaint I hear, “Where are all the Vermont Hams”?

This is an easy event to do. Pick a time during the day or early evening. Try 20 meters daytime until around 5, then 40 meters after that, and perhaps 80 meters if you want to stay on later. Sadly, you won't get much activity out of 15 and 10 meters – they have been very poor lately.

To be useful, you MUST CALL CQ. Non-Vermont stations CANNOT FIND YOU if you simply tune around and call others. If you call CQ and don't get an answer, call again. Try changing frequency. Keep at it. You don't get a fish on the line with just one cast. If you still are not getting anything, find me and I'll spot you on the cluster – that should get some action going.

When you work someone, exchange a signal report and your county. They will reply with signal report and state, or province. If it is DX, your contest software will know where they are from the prefix and log it for you.

If you don't have a station, go somewhere where there is a station! I will have my station open for the duration of the QSO Party. Besides making contacts, our main goal is to train operators. If you would like to operate, please contact me and I'll set you up with an operating time.

Besides the Vermont QSO Party, there are several activities running concurrently. The Minnesota QSO Party and British Columbia QSO Parties run on Saturday afternoon. Work them as well, and have fun figuring out how to spell the many counties in MN with French and Indian names or the many cryptic electoral districts in BC. You will undoubtedly also run into some National Parks operations as well. On Sunday, the band even gets quieter, which means your signal will be stronger. To hell with the Stupid Bowl – stay on and make QSO's'!

Details on the Vermont QSO Party are at ranv.org/vtqsol.html.

Getting started with 18650 Lithium Batteries Bob KB1FRW

This all started with two flashlights bought at the last two Nearfests.

Due to some interest I have with 3.7volt #18650 rechargeable lithium batteries as a light weight power source (Portable 12 volt power , flashlights) and conversations with Bob KB1WXM and a friend of John, K1JCM, I bought a battery capacity discharge tester/cycling maintainer/charger, a BT-C3100 v2.2. (\$45) and salvaged some batteries from a laptop pack that had fallen into disuse.

I tested the cells and found them to be about 2000mAh at 4.1V, wow 16.4V for a four pack. 12 batteries in series-parallel would be 6 AH and weigh 1 ¼ pounds, .208lbs per AH. A 4.5 AH sealed lead acid is 4 lbs., .88lbs.per AH, more than 4.2 times as much.

This lead me to look for ways to reduce four series cells to a safer voltage limit. One suggestion is to use biggish diodes in series which will produce a .7V drop per diode. There of course are other solutions and the web is full of them. Some people have retro-fit them to their HTs. As some HTs run at 7.2V. The 12a buck converter on Ebay caught my eye but I worry about its switching supply characteristics causing noise, but it is only \$8.97 shipped.

In poking around I found this site that should save you from having to buy the BT-C3100 which only charges 4 batteries at a time. The site is: <http://www.lygte-info.dk/>, apparently this fellow likes reviewing things like batteries and chargers.

Salvaged batteries are a good, cheap source I think, but I would check out the individual part numbers you find on

individual cells in the packs on the web, the ones I got out of a HP laptop battery turned out to be Sony good quality cells. A word on cell quality/capacity, I currently own 5 "Ultrafire" cells that are labeled 3600-4800 mAh, none of them test better than about 480mAh! Oddly enough in the tests of the reviewer that low capacity is not indicated. I recommend cells from known long term manufacturers like Panasonic, Sanyo, and Sony.

I found a 6 pack of dual chargers for \$14 here:
<http://www.ebay.com/itm/6PCS-100-240V-Battery-Charger-for-18650-4-2V-Rechargeable-Li-ion-Battery-US-Plug-/361454632510?hash=item54285ffe3e:g:9RwAAOSwSdZWemXk>

There are others that have multiple slots, look at the reviewer above for some guidance and online of course. I know this is in no way complete, but the rechargeable lithium battery world is huge with some competing technologies. I am just sharing what I have learned so far and maybe by Field day I will have the tennis ball launcher power supply down to about 1.25 lbs.

A word to the wise, lithium rechargeables have been known to short internally with high heat and fire resulting so keep that in mind when charging and using. Don't use anything but a charger designed to charge your type of battery. Other battery technologies have safety issues also and if you keep them in mind you generally won't have problems.



NEWS & VIEWS

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NEXT MEETING Discussion on Ladder Line

Tuesday • February 9th • 7:00pm
O'Brien Civic Center • Patchen Rd
South Burlington, VT

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

www.RANV.org