

# FeedPoint

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JUNE 2020

ST JOHN VALLEY  
AMATEUR RADIO  
ASSOCIATION

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Watch for the Tesla coil to see where you can contribute to the newsletter!

### Mailing Address

SJVARA  
Attn: Travis Devoe  
3191 Aroostook Rd  
Eagle Lake. ME 04739

## SJVARA Monthly Newsletter

The purpose of this publication is to keep you updated on club events and news as well as everything new in ham radio. It includes thoughts and ideas from our club meetings and events as well as new tech and news in the amateur radio community.

If your not already subscribed,  
email [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: newsletter



Photo of the Month

New 715 site in Eagle Lake. Tower raising circa fall 2017.

To submit a photo, email it to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: photo of the month



# Monthly Meeting Review

Unfortunately due to a recent outbreak in the Houlton area, the club canceled this month's meeting and any future gatherings planned until this is once again under control. We urge you all to take precautions and follow the CDC guidelines for social distancing. Stay safe and we hope to see you all on the outside when this is all over.

I will try and set something up with Zoom for next month's meeting. The program we use now is slow and clunky. I will email everyone ahead of time if I can work something out.

The one day tech class on Saturday (20th) was a success and thanks to Roy, Sam, and Dave for grading the tests and completing the paperwork necessary to make this all happen. Also another thanks to Dan KB6NU for letting us use his study guide. Seven new hams received their call signs by the end of business Monday. Darren is working to set up five more of these classes around the county. Check out our club website or facebook page for dates and locations. If you know anyone who would like to attend another class email Darren at [darren@arostookema.com](mailto:darren@arostookema.com).

Name	Call Sign
Patrick Aldrich	KC1NHH
Brian Goff	KC1NHJ
Stacy Shaw	KC1NHK
Barrett Drost	KC1NHM
John Gibson	KC1NHN
Wade MacFarland	KC1NHI
Lucy Devoe	KC1NHL

At some point this summer, I would like to host a Summer Radio Day. This would be a great opportunity to get some publicity. This would be an all day event to showcase ham radio to the public. If you have any ideas or gear to assist in this event email us at [sivarafk@gmail.com](mailto:sivarafk@gmail.com)

Membership  
Payment Links



Snail Mail

SJVARA

Attn: Carl Pelletier

22 Municipal Drive

Fort Kent, ME 04743



## Motivation

Since the beginning of the United States amateur radio service in 1912, amateur radio operators have made significant contributions to radio technology and the understanding of radio science. This work must be continued today, as Part 97 of the FCC rules states that a primary purpose of the amateur radio service is the "Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art." Recent advances in the fields of computing, software defined radio, and signal processing provide unprecedented opportunities to meet this mandate, specifically in the field of radio science. These opportunities are already beginning to be realized with the advent of systems such as the Reverse Beacon Network (RBN), the Weak Signal Propagation Reporting Network (WSPRNet), and PSKReporter. In addition, enabling amateurs to make and contribute legitimate scientific observations will expose amateur radio to a wider community of people interested in science around the world.



# What's New With Amateur Radio

## What is HamSCI?

HamSCI, the Ham Radio Science Citizen Investigation, is a platform for the publicity and promotion of projects that are consistent with the following objectives:

- Advance scientific research and understanding through amateur radio activities.
- Encourage the development of new technologies to support this research.
- Provide educational opportunities for the amateur community and the general public.

HamSCI serves as a means for fostering collaborations between professional researchers and amateur radio operators. It assists in developing and maintaining standards and agreements between all people and organizations involved.

## What is HamSCI's scientific focus?

HamSCI was started by ham-scientists who study upper atmospheric and space physics. These scientists recognized that projects such as the Reverse Beacon Network, WSPRNet, PSKReporter, DX Cluster, ClubLog, and more are generating big data sets that could provide useful observations of the Earth's ionosphere and related systems. Because of this, HamSCI's initial focus is on these fields of research. In the future, other researchers may join HamSCI and broaden its scope.

[www.hamsci.org](http://www.hamsci.org)



# Club / Member Projects

By the time you read this 146.715 should be up and running. New batteries were installed and connected to the charger. The repeater will remain as a stand alone repeater for the time being. Once we work the bugs out of the 640 machine and get the controller and tone access working to our liking, we will install the linking controller on 715 and link the two. If anyone has any experience with the Vertex VXR 7000, Arcom RC210 repeater controller, or external CTCSS tone decoders, let us know!

We're trying to sell the engine and transmission from the ambulance we acquired. If we can sell it for some amount of money we can invest it back into the trailer. The motor is a 1993 International Navistar 7.3L IDI Non-Turbo, it starts ok (takes a few seconds longer than an ambulance should) and runs great. The transmission (also a '93) is a 4 speed automatic that shifts smooth and doesn't slip. These are available as one unit or individually. The only thing that does **not** come with the engine is the alternator. The main engine wiring harness can also go with the engine. Any other parts from the engine bay are also fair game (heater parts, AC parts, etc.) If you know anyone who might want this motor or motor/trans combo, let us know and we can hopefully get some cash for the project like a trailer hitch and jack. Let us know if anyone is interested.



To submit your project send an email to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: projects



## Reader Submission

While this story is not a reader submission, I feel like it is a part of the hobby that people tend to forget. With the current state of affairs in this country, now more than ever we need to remember we're all here to help each other.

On Tuesday, June 15, Alden Sumner Jones IV, KC1JWR, was hiking on the southern part of the Appalachian trail in Vermont (it's also been reported as being on the Long Trail) with his cousins at around 12:30 PM. Alden started feeling light headed, his pulse was racing and the next thing he remembers is waking up with an EMT named Dave, from AMR out of Springfield, MA, who was hiking and saw Alden go down. Alden had suffered seizures. It was later determined that this was caused by low blood sugar. Dave attempted to call 911 on his cell phone. He could connect, but the 911 operator couldn't understand him. At this point, Alden pulled out his HT ham radio, a BaoFeng.

He made contact through the K1FFK repeater. This repeater is located on Mt. Greylock on 146.91. The repeater is owned and maintained by the Northern Berkshire Amateur Radio Club. The initial call went out just before the Cycle 1 of the



If you would like to submit something, email it to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: reader submission

Western Massachusetts Traffic Net. Ron Wonderlick, AG1W, took the call. Alden initially asked if the 911 call went through. Ron began an eight hour process of acting as a relay between Alden, the emergency crews and various others.

The Traffic Net was truncated and the frequency was cleared by Peter Mattice, KD2JKV, who also stood by as a backup for Ron. KC1JPU, Matthew Sacco, was also monitoring and after a short consultation with Ron & Peter, proceeded to head to the staging area where the Fire and EMS crews were going to come from.

In Matthew's own words, this what happened when he arrived at the staging area:

As I arrived at the staging point set up by the Fire Department, I met up with Fire Chief Scott Moore (95-C1) of the Wilmington Fire Department who was Incident Command. I told him how I heard about the incident and offered my services. I then got to work attempting to make contact with Ron over the 91. We were in a bit of a shadow as far as coverage went from the 91 and my first attempt to make contact with my HT was to no avail. I then went to my truck to try my mobile radio which also failed to open up the repeater. Running out of options, I went into my radio bag and was able to construct a roll up J-Pole out

What are you working on?  
Let us know what projects  
your starting as summer  
heats up!

This section relies on you!

Do you have a new  
invention or idea you want  
to share?

Did you buy a new piece of  
gear you want to review,  
or just brag about?

Have a funny story or  
personal experience?

If you would like to put  
together a short write up  
about it, send it in!



# Reader Submission Cont.

of some 450 ohm ladder line, a short length of coax, and male UHF connector. In that bag I keep some basic soldering equipment and a power inverter for the truck. Once it was constructed and tested, I grabbed my fishing pole from the back seat, put a weight on the end, and cast the weight into the highest branch I could find. I tied the J-Pole to the end of the line and reeled it up about 20' into the tree with the help of a barrel connector and about another 24' of coax. I tried that antenna plugged into the back of my mobile radio and we were up and running! I was then in contact with Net Control!

Now the struggle was to find the hiker. Alden's (KC1JWR) status was communicated between the EMT on site through the ham radio and impromptu net set up through Ron (AG1W) and Matthew (KC1JPU). The information passed through the net was used to determine what type of rescue equipment would be necessary. Finding the location based on landmarks was proving too difficult. One of the people on site had a cell phone with a GPS unit and they were able to get a location in Google Maps Plus Code. That was converted into latitude and longitude. At this point, it was 4:30 in the afternoon.

On site were members of the Wilmington, VT Fire Department, Wardsboro, VT Fire Department, Deerfield Valley Ambulance, and Rescue Inc., all served through the ham radio net being operated on the K1FFK repeater.

Once the rescuers were getting close to Alden's location, it was determined that they were not going to be able to get an ATV to the location for an evacuation. So, the determination was made to contact New York State Search and Rescue for a helicopter. Again, this need was relayed through the ham net. Almost all the communication, all day, was through the ham net, or, relayed to the phone by Ron (AG1W) or Peter (KD2JKV).

Meanwhile, Alden is conscious and spending time talking to the EMT and the rescuers about ham radio and how to get their licenses.

An area is cleared by another hiker as a place for the helicopter to lower its basket. The GPS coordinates are relayed through the ham net to the helicopter crew. The rescuers took Alden through the woods to the clearing and the helicopter arrived at around 7PM. While the rescuers were talking the helicopter in on their radios, they were having trouble making contact through their rubber duck antennas. So, Alden, who had a better antenna for his HT, lent it to the rescuers for better communication. Alden was initially flown to Woodford Mountain for evaluation and treatment. He was then flown to

the hospital in Albany NY. During the flight, Alden again talked to the pilots and the other rescuers about ham radio.

During the rescue, one fire fighter from Wilmington was injured. This forced part of the team to stay the night with him in a shelter along the trail. He was brought out safely and is doing well. Alden is suffering from a number of injuries from the seizures, but he is also recovering.

Neil Van Dyke (N1TNC), the Search & Rescue Coordinator for the Vermont Dept. of Public Safety was the one who called in Search and Rescue. When asked about the event, Mr. Van Dyke said "Ham radio was a key part of the incident and played a major role in the rescue". Alden said it even better, "Ham radio saved my life last night and I am very thankful for how everyone helped me."

Well done to all involved in this event. Thank you for all you did for Alden Jones and for being great ham radio operators.

[Article and photo from ARRL](#)

**HAM  
RADIO  
IS \_  
READY**



If you would like to submit something, email it to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: reader submission



# Upcoming Events

Stay tuned for the SJVARA Summer Radio Day, it's a work in progress and it will most likely happen towards the end of the summer, late July - mid August.

Another Idea I had was a VHF Simplex contest. There is already a contest hosted by the Wireless Society Of Southern Maine at the end of March. I would like to hold another contest hosted by SJVARA and would be similar in nature but with different scoring and rules. Not only would this be a fun contest for hams in Maine, it's an excellent way to map our 2 meter coverage area across the state. Check out the WSSM's rules and scoring to see how they do it.

<http://www.ws1sm.com/2-Meter-Challenge.html>



To submit an event, email the description, date, and other pertinent info to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: projects

As I said in the meeting review a recent outbreak of corona in the Houlton area has put our club gatherings on hold. Stay tuned to find out when we fire things back up again.

The folks at HamStudy are now administering tests online via W5YI VEC, Exam Tools software, and Zoom video conferencing. For more information or to take a test online check out the website below and select 'online sessions' on the top left.

<https://hamstudy.org/sessions>

Make sure and read the notes on the session your interested in. Some are by appointment only, some are not. All sessions have a procedure that must be followed to guarantee a successful test session.

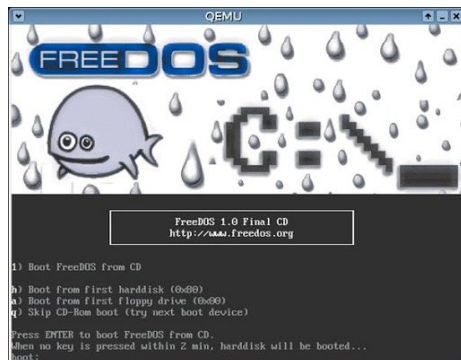
## Quick Tips

Podcasts are a great way to keep up on new technology, events, or almost any other topic that interests you. Recently I've started to listen to them while at work instead of the radio and I've come across many new modes, infrastructure design, new sources of information, and general ideas on how the rest of the ham community thinks and is progressing. I own an Android device but **PocketCast** is also iPhone compatible and can be found in the Google Play Store or Apple's App Store. The user interface is very streamlined and intuitive and it didn't take me long to figure it out. If you have a PC the best option I've found for podcasts is **iTunes**. The user interface is a little tricky to get used to but once you figure out how everything is laid out its not too bad. Now the fun part begins, wading through the wealth of knowledge out there to find what interests you. These are some of my favorite ham related podcasts that will get you started.

- \* **QSO Today** by Eric 4Z1UG is an interview podcast between the movers and shakers of amateur radio.
- \* **Ham Radio 2** by Jason KC5HWB is a YouTube video podcast that he puts up as audio also. This is the place for anything new in amateur radio.
- \* **AmateurLogic.tv** by George W5JDX is your source for practical amateur radio and technology hacks, mods, and tips.



 **Pocket Casts** iTunes



Tired of dual booting dos with windows only to use it once a year to program one or two radios that still use it? FreeDos is an open source Dos "look alike" that runs exactly the same and as far as I can, tell programs can't tell the difference. Motorola RSS runs exclusively on Dos and will not run on a Dos prompt over windows. As some of you will know Mother Moto's RSS programs can be extremely picky even refusing to run on native Dos if your processor is too fast. I've been using FreeDos on a bootable USB stick for a few years now and I have yet to experience an issue with it, even with Moto RSS.

Check out <https://www.freedos.org/> for more info.



If you would like to submit your tips or tricks, email them to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: just the tip

Send Us Your  
Tips & Tricks  
Hacks & Mods



# Swap / Buy / Sell

# Swap

Buy  
Sell

The SJVARA is looking for donations for their club event trailer and "go box" Any gear you would like to donate or let us borrow would be greatly appreciated.



This is the club's new station!

Lets fill these shelves with equipment!



ISO  
Free  
Trade



To get your gear listed or to list what your in search of email [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: swap buy sell

## Random Stuff

You'll find anything unrelated or off topic here.

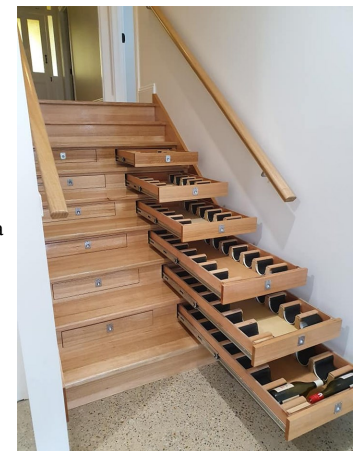


"I hate dead space when renovating a house, as you're essentially paying for nothing," Murray shares. "So we thought of putting the wine in drawers in the staircase rather than behind it."

30 year old veteran builder Murray Berrill decided he needed to do something with the unused space under his stairs. While some of you may have seen clothes and other random things stored in drawers like these, I've never seen anyone make a wine cellar out of it.

With the twelve drawers, six on each side, he can store 156 bottles of wine. Each level is supported behind the stairs to reduce vibrations and "creaking" when you ascend to the second level.

While it is insulated, Murray says he may add a cooling unit in the future to keep the beverages nice and chilly.



<https://www.awesomeinventions.com/wine-cellar-storage-staircase/>



If you would like to submit your random stuff, email it to [sjvarafk@gmail.com](mailto:sjvarafk@gmail.com) Attn: uh, that's random



# A Few Words From KB6NU

## Securing Powerpole Connectors

In preparation for this year's Field Day, I made a bunch of cables with PowerPole connectors to connect the solar panel, charge controller and batteries that I used. If you're not familiar with PowerPoles, you might want to check out this YouTube video. They're really great connectors, and have become the DC connector of choice for many hams.

When I make up PowerPole cables, I normally don't bother trying to secure the two halves together, especially if you're using some decently heavy gauge wire. They fit together pretty tightly, and don't come apart easily. Even so, I think securing them together is a good idea. You can buy a little roll pin to insert between the red and black housings that is supposed to prevent them from coming apart, but many folks complain that the pin has a tendency to fall out. This not only defeats the purpose, but could also damage your equipment.

Securing them is the right thing to do though, and I recently came across some great suggestions on how to do this in the daily digest that I receive from the Elecraft-KX mailing list. Here are the best tips from the thread, Securing Anderson Power Poles:

Rudy K8SWD: You can thermally bond the red and black housings with a soldering iron like you are making little welds on both sides. Permanent (mostly) but it works better than the roll pins. Just clean the tip really good before soldering!

Dave K0CDA: [Anderson] also make connectors that are thermally bonded together in pairs. They do NOT come apart.

Don W3FPR: I use a drop of Super Glue on the junction of the plastic pieces. Warning – that glue grabs quickly, so slide the 2 pieces only enough to start the assembly, then apply the drop of glue and quickly finish sliding them together. I have never had ones prepared like that come apart, and I don't use roll pins. I will say one more thing – use only the genuine APPs. I have seen some knockoffs that do not mate well.

Greg KC9NRO: Take a hot soldering iron. Wipe the tip with sponge. Run the tip down both side of APP bonding the black and red sides together. Clean soldering iron tip and apply some solder to tip. That's how I roll. Never comes apart

Mike AI4NS: PVC cement will soften the plastic enough to bond them together. You can also get plastic welding rods, such as Daindy Plastic Welding Rods. Chuck a rod in a Dremel and weld them together. I have made plastic boxes and panels using this method.

Jack WD4E: Snip the cotton end off a Q-tip, cutting at an angle. Insert into hole made for roll pin, cut off excess, save remainder of Q-tip for next requirement.



Powerpoles have become ubiquitous in amateur radio stations.

Troy K4JDA:  
2.5mm screws work well, stay in, and are easily removable.

I posted these suggestions to my blog and got a few more great suggestions:

Tom KB8UUZ: Fat tooth picks also work great. Jam it in, break it off.

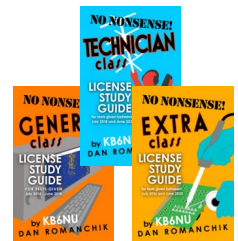
Bruce N0NHP: I use MEK (Methyl Ethyl Ketone) replacement to clean my circuit boards after soldering. A single drop of MEK on the junction between the two halves of the PowerPole shell will fuse them. It can be broken with a sharp tap but not accidentally. It will set and dry in seconds and should be applied after the shell pieces are put together.

I think these are all great suggestions. I think that I'm going to try the cotton swab method. While reading them, another thought occurred to me. I haven't tried this yet, but I'm thinking a little drop of hot glue on the roll-pin hole might work, too.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not thinking up new ways to keep his PowerPoles together, he likes to teach ham radio classes and operate CW on the HF bands.

Check out Dan's website for [study guides](http://www.kb6nu.com), (Tech guide is free!) ham shack gear recommendations, and a daily blog.

[www.kb6nu.com](http://www.kb6nu.com)



## Info / Links

Fort Kent Repeater - 146.640- 100hz

Eagle Lake Repeater - 146.715- 100hz

Echolink Node - Not working

Facebook - [www.facebook.com/sjvara](http://www.facebook.com/sjvara)

Website - [www.sjvara.com](http://www.sjvara.com)

[Google Drive](#)

Exam Study Guides - [www.kb6nu.com/study-guides](http://www.kb6nu.com/study-guides)

Flash Cards and Practice Exams - [www.hamstudy.org](http://www.hamstudy.org)

Online Meeting App - In Progress - Soon to be Zoom

## Affiliates

Aroostook Amateur Radio Association

[www.k1fs.org](http://www.k1fs.org)

Maine Amateur Radio Foundation

[www.mar.foundation](http://www.mar.foundation)

Amateur Radio Relay League

[www.arrl.org](http://www.arrl.org)

Can Am Crown

[www.can-am-crown.net](http://www.can-am-crown.net)

The **SJVARA** is a membership of hams with the similar interest of promoting radio knowledge as well as advancing the general interest and welfare of amateur radio in the community. Monthly meetings are held in Fort Kent but membership spans the entire valley and more.

Check out the club [website](#) or [Facebook](#) page for other info or events.

### Mailing Address

SJVARA

Attn: Travis Devoe  
3191 Aroostook Rd  
Eagle Lake, ME 04739



### Why Become An Amateur Radio Operator?

“Ham” radio is a fun, exciting hobby that allows you to talk to the world using different technologies and modes of transmission. It’s also a great way to meet people in your area with the same hobbies or interests, and exchange information and experiences.

### Officer Contact List

Club Email	<a href="mailto:sjvarafk@gmail.com">sjvarafk@gmail.com</a>	N1SJV
President	Travis Devoe <a href="mailto:coolman1987us@gmail.com">coolman1987us@gmail.com</a>	KB1ZPP
Vice President	Derrick Ouellette <a href="mailto:kw1a@arrl.net">kw1a@arrl.net</a>	KW1A
Treasurer	Carl Pelletier <a href="mailto:cjpmail211@gmail.com">cjpmail211@gmail.com</a>	N1EVO

