N1SJV

FeedPoint

VOLUME 1, ISSUE 6 SEPTEMBER 2020

ST JOHN VALLEY AMATEUR RADIO ASSOCIATION

WHATS IN THIS ARTICLE:

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 Attn: newsletter

Photo of the Month

Old Deboullie Fire Tower Cab. Circa January 2019

To submit a photo, email it to sjvarafk@gmail.com Attn: photo of the month

Monthly Meeting Review

Derrick (kw1a) has been nominated and selected to represent the hams in his district as Assistant Section Manager to the ARRL. Make sure to send him all your suggestions and ARRL hate mail.

Congrats and good luck Derrick!

I would like to do a 2 meter or 70 cm fox hunt before the year is over, preferably before the snow flies. If anyone has any idea where to get a cheap 'fox' let me know. Even if its something we can hook to a Baofeng, I'm sure we can come up with a few of them. I would like to have at least two different fox but three to four would be ideal. The goal is to get everyone to each beacon, get a ticket or take a picture with the beacon or a landmark and get back to the start in no more than 5 hours. This would be a day long event with prep in the morning, a potluck or hotdog/hamburger lunch and then the 'hunt' after lunch. Ideally everyone would be on their way home by 4 or 5 pm. Let me know what your thoughts are at coolman1987us@gmail.com. Ps, if its not apparent yet this is a vehicular fox hunt, you wont catch me *walking* to find a Baofeng.

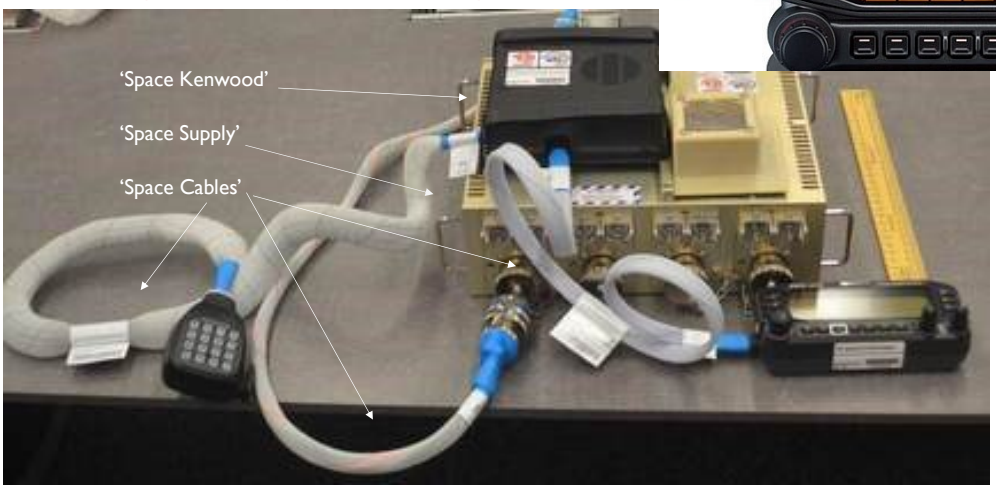
What's New With Amateur Radio

The ISS Is once again alive with the signals of amateurs from all over the world. As of the 2nd of September the ISS carries a cross-band repeater payload with a whopping 5 watts of transmit power! A specially modified 'Space Kenwood' D710 dual band mobile rig has been strapped to a specially modified 'Space Power Supply'. Along with specially shielded 'Space Cables' these pieces of hardware make up what is referred to as the Interoperable Radio System (IoRS).

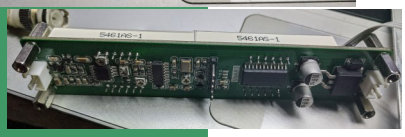
As of right now only the x-band repeater is in operation but future upgrades to the IoRS are already in the works. The FM cross band repeater ('Space Kenwood') has an uplink frequency (your radio's TX freq) of 145.990 MHz with CTCSS of 67 Hz, and a downlink frequency of 437.800 MHz.

"Altogether 4 flight units and 10 total units will be built by the ARISS hardware team to support on-board flight operations, training, operations planning and hardware testing. Future upgrades and enhancements to the next generation system are in various stages of design & development. These include a repaired Ham Video system (currently planned for launch in mid-to-late 2020), L-band (uplink) repeater, ground command operations capability, LimeSDR signal reception, a microwave "Ham Communicator" and Lunar Gateway prototype experiment." -AMSAT

https://amsat-uk.org/2020/09/02/iss-fm-repeater-activated/



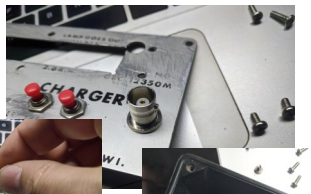
Club / Member Projects

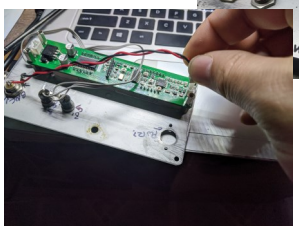


Another toy from Gyina came in the mail a few weeks ago and I've managed to find a few extra components in the scrap bin and a small project box from an old battery charger. With a couple push buttons, a slide switch from an old radio, and a bnc connector I now have a frequency counter good up to 2.4 Jiggahertz.

I drilled the four corners of the hole for the display with a 3/16 drill bit and cut between the holes with a Dremel and cutoff wheel. The holes for the bnc connector and the power switch were already there. The bnc is a panel mount so it was just a matter of threading the nut on from the back and soldering the wires to the input of the frequency counter. The power switch needed two small holes for screws to hold it in and I just centered it over one of the existing holes in the cover. Eventually I will have a 3D print of a new cover made with the correct holes. The counter comes with standoffs and I found some screws with the correct thread in the salvaged screws bin that were just the right length.

Search 'frequency counter' on amazon.





I added a couple lithium cells from an old laptop battery, two in series for a total of 8.4v fully charged. The counter has an lm7805 on the input so when the batteries get low, around 6v, the counter starts acting up. This is my indication to get to the chaaajaa. Four screws hold the cover on and there we have it! I've fed it with a CB directly, four-ish watts AM, and it worked great. The amazon listing is vague on specs but its designed to be tacked on the output of a CB for a channel frequency display so I would imagine five to ten watts would be ok. I plan to make an attenuator to protect the front end anyway. Stay tuned for a step attenuator build. -kb1zpp

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

To submit your project send an email to sjvarafk@gmail.com Attn: projects

Reader Submission

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!

A Bangor native died on September 2nd in Union, Maine after falling from a communications tower he was doing maintenance on. James Larner (n1ato), a part-time engineer at News Center Maine, was attempting to service an antenna on an *amateur's* tower located on Olson Farm Lane just before 1pm. A friend, who was on scene on the ground, said James had the appropriate climbing gear and was clipped in to the tower. OSHA as well as the Maine Medical Examiner's Office will be investigating the incident.

"He worked for us for many years, most recently in a part-time capacity. Jim was 74. I know that he was a loving husband and primary caregiver for his wife. Jim loved talking about his granddaughter, too. He is going to be missed as a co-worker and friend." -Judy Horan

http://wirelessestimator.com/articles/2020/maine-station-engineer-dies-after-falling-from-a-ham-radio-tower/

While these events are always tragic, this is only the second death this year related to tower falls. This is a substantial decrease from years past. Most recently 2019 had eight total deaths and in 2018 there were five. As most of these cases go, the deceased were trained individuals using the proper safety and fall preventative gear.

This is a grim reminder that tower safety should never be taken lightly. Always check your gear before every trip up the tower as well as when you put it away for the season. Make sure all straps, shackles, and D-rings are in the proper locations and in good operating condition. You also need to make sure that the fall preventative gear is donned in the right manner, as a harness that is improperly fitted can cause severe bodily harm in the event of a fall. All straps should be in the correct position and as tight as

If you would like to submit something, email it to sjvarafk@gmail.com Attn: reader submission

Reader Submission cont.

possible without restricting your breathing. Never buy used gear. You have no way to verify the history, for example if it was stressed in a way it wasn't designed for. Also always buy gear from reputable dealers and of quality brands, your life isn't worth saving a few bucks with eBay.

Inspect the structure you're climbing before you begin any other work. If the tower is free standing, make sure all the legs are reasonably straight and mostly rust free. If you're not sure about the condition of the tower, don't climb it! If it is a guyed tower, make sure all the guys are in good condition and reasonably tight. All of the guys should be tensioned the same. You can give them a shake to test the tension. Never climb a tower that has guys removed. If dismantling a tower use temporary guys to supplement. Look up the tower from the base and make sure it's not leaning, bowed, or bent. Even if you're not climbing past a bad section, it still poses a threat to your safety and everyone else on site. Towers, especially guyed ones, are only strong under compression. This means if it's straight, it's strong. If it's bent the possibility of failure is high and adding any additional load, such as you and your tool belt will most likely end in catastrophe.

Never climb alone, always have at least one person on the ground with a way to contact emergency services if needed. If possible make it a group excursion, have a partner to climb with (if the tower can handle it) and two or three people on the ground to assist if necessary.

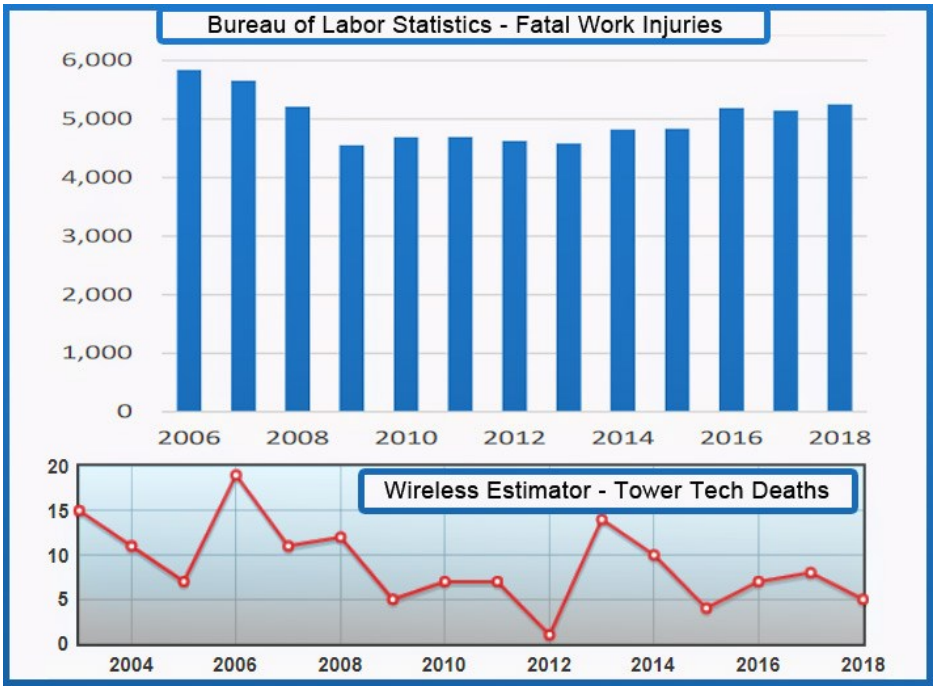
Take your time, do not rush. Plan your day according to the height and nature of repairs. If you have a 100 foot tower I would suggest planning at least 6 hours from first man on tower to last man off. This doesn't include site prep or clean up. Climbing a tower isn't like climbing stairs, it takes a massive amount of energy, especially if you're carrying tools.

Weather is something few people plan for and can make a simple climb a day of hell. If the wind is 5-10 miles an hour down here on the ground you can bet that it's at least twice that at 50 feet. A 20 mph wind can cause all sorts of problems 50 or100 feet up. Rain can also wreak havoc on your maintenance mission. After tools and parts get wet they become slippery and hard to handle. The tower itself becomes slippery and you become less able to keep a good grip.

This should be common sense but I'll say it anyway for those of you in the back. Do not climb a tower before, during, or after a thunderstorm. Check your local forecast and use your judgement. Look around when you get on site. If you see storm clouds, rethink your climb before you get stuck in a storm 100 feet in the air.

Money and time spent on educating yourself on climbing practices and safety is well spent. Never do anything you're not comfortable with and never climb a tower you're unsure of. You are 100% responsible for your own safety. Don't become a statistic. –kb1zpp

Check out RCR Wireless for tips on climbing your tower. rcrwireless.com/20160607/opinion/reality-check-top-communications-tower-climbing-tips-tag10



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Upcoming Events

The first annual Fox Mike Hotel Portable Ops Challenge, developed by Frank K4FMH, is set to kick off on Friday afternoon the 2nd of October.

New Contest!
October 3 & 4, 2020
foxmikehotel.com/challenge/
Portable Operations Challenge

This new contest aims to level the playing field between the "million dollar" home stations and the not so fortunate, smaller ones.
"The scoring metric is the distance-per-power metric with multipliers for portable operators and the difficulty of the transmission mode," said Ed Durrant DD5LP, a member of the Steering Committee for the POC. "We are using kilometres-per-watt as the score for a contact. But those using a more difficult transmission mode such as phone will get a higher multiplier than those using the more efficient modes of CW and digital. Being a portable station will receive an additional multiplier, especially when contacting another portable station."
Check out K4FMH's blog for more information and rules.

The annual Jamboree On The Air / Jamboree On The Internet is on schedule this year for the 17th of October. Since it isn't really a contest there is no designated start or end time, when your ready to go just get on the air.

"JOTA is the largest Scouting event in the world. JOTA uses amateur radio to link Scouts and hams around the world, around the nation, and in your own community. This jamboree requires no travel, other than to a nearby amateur radio operator's ham shack. Many times you can find the hams will come to you by setting up a station at your Scout camporee, at the park down the block, or perhaps at a ham shack already set up at your council's camp." -BSOA

Check out the Scouts of America website for more.

To submit an event, email the description, date, and other pertinent info to sjvarafk@gmail.com Attn: events

Quick Tips

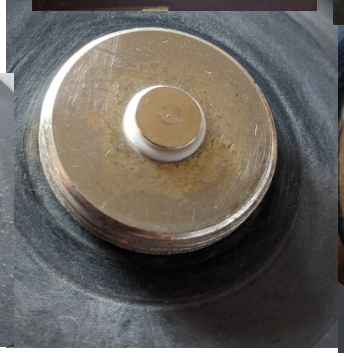
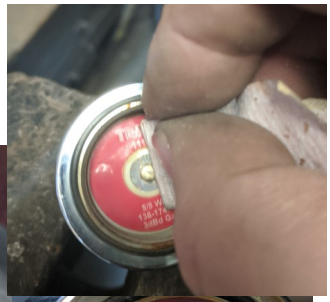
If you're running any kind of mobile radio I'd be willing to bet you have an antenna also. I'm too lazy to go through all the hassle of pulling the headliner down and drilling holes in my roof, so I run three magnet mount antennas. One dual band VHF/UHF and two VHF only, all 5/8 wave, NMO style magnet mounts. These were all bought brand new and taken care of but no matter what you do, short of leaving them inside your house, water ingress is unpreventable. I cleaned my antennas this weekend and dropped half an SWR point in the process.

Here is what to look out for and how to combat it.

For NMO mounts most of the water ingress happens at the loading coil. Water runs down along the whip and makes its way into the coil. What your left with is the scaly corrosion or rust pictured below. I can only imagine what it looks like inside the coil.

The good news is, this is a pretty simple fix. The best thing to use to clean up this corrosion would be brass wool. Most people, myself included, don't have brass wool. I didn't even have steel wool. I found a piece of emery paper, somewhere around 250 grit. Run the paper or wool over the areas lightly, until the rust and corrosion are gone. Careful not to take off too much brass.
When you're finished the brass should be nice and shiny like the pictures below. Don't be tempted to coat the brass with any kind of corrosion preventative! Even dielectric grease can cause intermittent contact and drive you nuts. They only good long term fix I've found is to do this once a year or whenever it looks bad. –kb1zpp




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

Send Us Your
Tips & Tricks
Hacks & Mods

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.

We need gear to fill this section! If you have anything to sell or give away, are looking for something to buy, or just looking to see what's out there let us know!

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

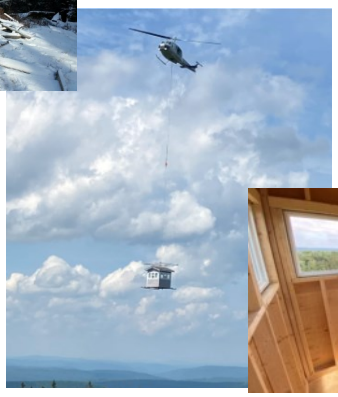
Random Stuff

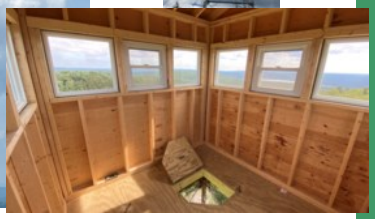
You'll find anything unrelated or off topic here.

Deboullie gets a new cab!

Late in 2019 we had another wind storm which subjected the Deboullie cab to the same fate as Rocky Mtn. It took the entire cab off the floor and deposited it on the ground below. Maine Bureau of Public Lands already had a plan to replace it, although this may have sped up the time table, and the new cab was placed atop the 48 foot steel tower this fall.

In 1919 the original tower was a seat nailed to a big tree and was replaced a mere two years later with a 12 foot steel tower. This tower was used by the watchmen for almost ten years and was replaced by the current 48 foot steel tower in 1929 which resides on the peak today.





Allagash Mtn near Telos, and Round Pond Mtn just north of the Musquacook lakes, also both received an identical cab. Check out the Maine Parks and Lands Newsletter for more info. Check out Red River Camps' website for more info on the Deboullie park and a short history on the tower.

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

Info / Links

Fort Kent Repeater - 146.640- 100hz

Eagle Lake Repeater - 146.715- 100hz

Echolink Node - Not working

Facebook - www.facebook.com/sjvara

Website - www.sjvara.com

Google Drive

Exam Study Guides - www.kb6nu.com/study-guides

Flash Cards and Practice Exams - www.hamstudy.org

Online Meeting App - In Progress - Soon to be Zoom

Affiliates

Aroostook Amateur Radio Association

www.k1fs.org

Maine Amateur Radio Foundation

www.mar.foundation

Amateur Radio Relay League

www.arrl.org

Can Am Crown

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.

Membership Payment Links

PAY WITH CHEDDAR UP

PayPal

Payment Via Snail Mail

SJVARA

Attn: Carl Pelletier

22 Municipal Drive

Fort Kent, ME 04743

Mailing Address

SJVARA

Attn: Travis Devoe

3191 Aroostook Rd

Eagle Lake. ME 04739

Officer Contact List			
	Club Email	sjvarafk@gmail.com	N1SJV
President	Travis Devoe	coolman1987us@gmail.com	KB1ZPP
Vice President	Derrick Ouellette	kw1a@arrl.net	KW1A
Treasurer	Carl Pelletier	cjpmail211@gmail.com	N1EVO

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.