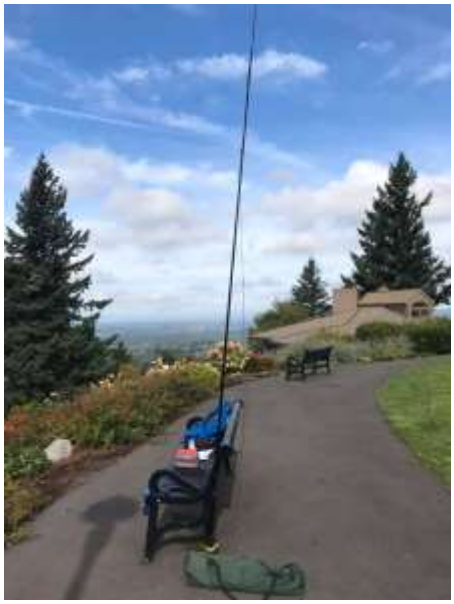
Pacific Northwest SOTA Newsletter

November–December 2019

Photo by Andrew-K7AHR on South Cinder Peak

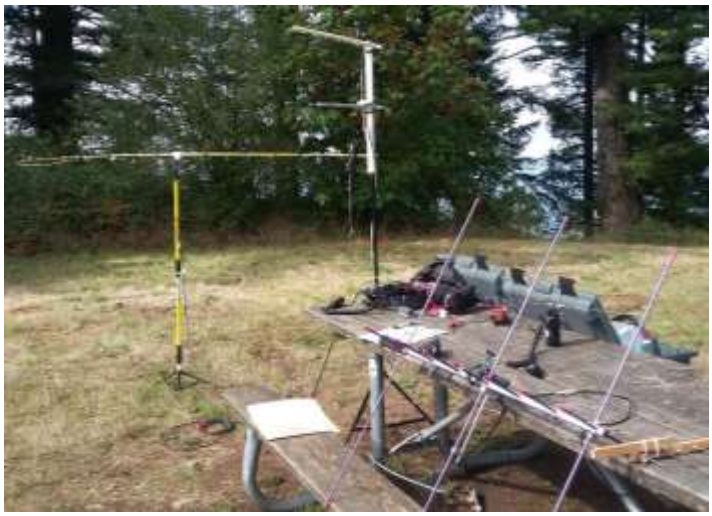
Upcoming Events – The rains will begin - Soon! And those farther inland will have snow in their mountains. There are no big operating events coming up, but **Bonus Season** starts for most PNW Associations on December 1st – and remember that is UTC time, so Saturday afternoon after 4pm local Pacific Time on December 1st would put you in bonus territory…



Pacific Northwest 2m FM Distance Event – Ryan-W7RMR organized a regional Distance Event in September – here's Ryan to tell us how it went:

In the September SOTA newsletter, I announced the PNW 2m FM Distance Event. When I came up with the idea for the event over the summer, I'd hoped to get people spread out on some of the more remote summits around the region with the goal of getting some real long-distance contacts. With close to 20 activators on nearly as many summits, I'd say it was a great success. I hiked with my wife and our three-month old to the summit of Fuji Mountain-W7O/CM-015, arguably the easiest to access six-point summit in the middle Cascades. From our perch, I was able to make 11 S2S contacts, the furthest being 164 miles to two activators on Bandwidth Mountain-W7W/LC-112 in SW Washington. The longest of the day that I know of was between Tower Mountain-W7O/NE-058 in the Blue Mountains in eastern Oregon and Keechelus Ridge-W7W/CW-063 near Snoqualmie Pass, a reach of 205 miles, a very impressive distance.

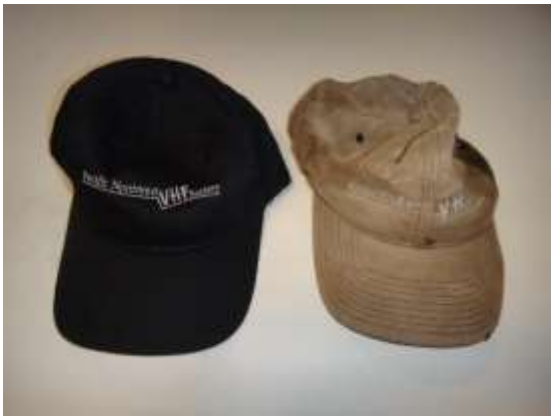
I want to thank everybody for turning out, it made the day a great success. I hope we can do it again next year!



Pictured right – David-AG7TW and his roll-up j-pole on Mt. Sylvania-W7O/WV-096 and on the left, The antenna farm for Etienne-K7ATN on Bald Peak-W7O/NC-051.

SOTA Lost & Found – There are likely many more stories about "Lost" items than there are "Lost & Found" and I'm sure lots more that don't involve Darryl-WW7D. He's just a prolific activator. With a lot of gear to keep track of. Lost & Found could be an ongoing series if I heard enough from folks around the SOTA World – with pictures please.

Goat Date: 08/Jul/2018
Josh took Quinton-NU7Y and his son to Mt. Fremont-W7W/RS-005 for an activation and found an OR brand gaiter. Josh checked the log to see who the last activator was - it was Tim-KG7EJT. Tim reported that the gaiter belongs to his hiking buddy, who lost it due to heavy winds during their activation the week before. Gaiter has been returned to its owner.



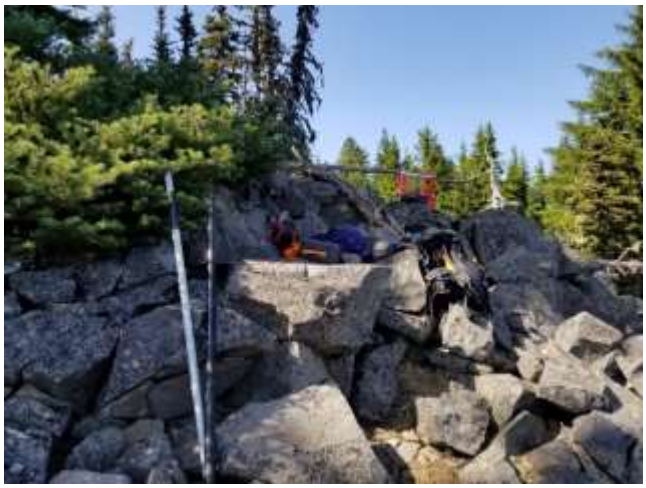
Goat Date: 02/Aug/2018
Darryl loses his PNWVHF Society hat on the summit of Big Chief-W7W/CH-192.
Goat Date: 29/Aug/2018
Bill-WA7NCL and Rich-AC7MA find a PNWVHF Society hat on the summit of Big Chief. After riding around in Rich's car for a couple of months, it eventually found its way back to Darryl and is one of his favorites – it's broken in!
Left: The hat at it came from the factory. Right: The hat as returned, sun-faded and with some small sections nibbled upon by rodents.

Goat Date: 21/Oct/2018
During an activation of Huckleberry Mountain-W7W/KG-093, Darryl-WW7D searches for a tiny fingerstock CW paddle he thinks he might have lost the previous year (11/Aug/2017 to be exact). He does indeed locate the paddle after 15 mins of searching. WU7H proceeds to plug the paddle in and make QSOs with it. Needs a little cleaning, but it still works!

Goat Date: 09/Dec/2018
Josh-WU7H finds a coax jumper with SMA connectors left behind by WW7D the previous year on Mt. Aurora-W7W/RS-045. Darryl is happy to have it back.

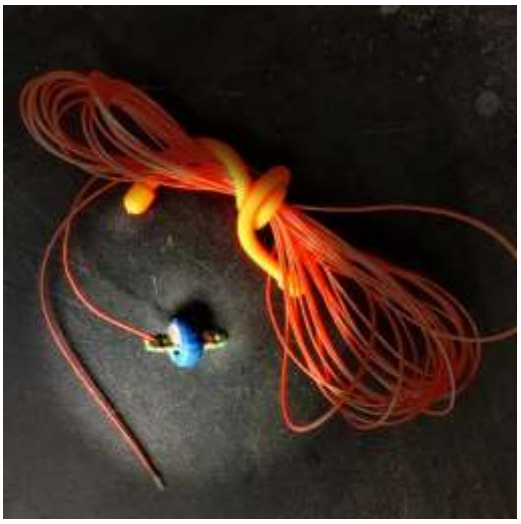
Goat Date: 16/Aug/2019
Scott- KI7EMX activates Linney Butte-W7O/CN-034 on a Friday evening, camping overnight on Peak 4816-W7O/CN-089, activating it the next morning and then did the bushwack to Wolf Peak-W7O/CN-042...

His only fail was leaving his HF and VHF masts on Linney Butte the night before! He surmises that they'll be free to the next activator. But that's not what happened. Roland-K7FOP and Etienne-K7ATN activate Linney the next weekend and find the masts – leaning on a rock. They are now returned to Scott.

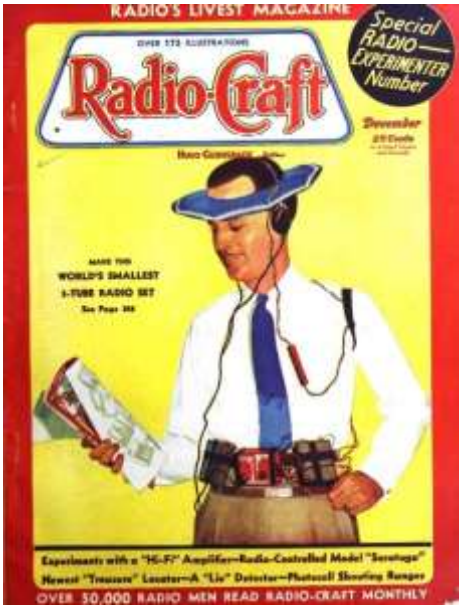


Goat Date: 26/Jan/2019
Darryl-WW7D unknowingly drops a tri-band (2m/432 MHz/1296 MHz) antenna (the stock antenna on an Alinco DJ-G7 HT) on the summit of Taylor Mountain-W7W/KG-118.
Goat Date: 01/May/2019
K7JRO activates Taylor Mountain-W7W/KG-118 and finds a small "rubber duckie" antenna. Curious as to what it might be, he texts a photo of the antenna to WW7D, who claims it.

Goat Date: 21/Sep/2019
Eric-VE7NX tells the story of retrieving Ralph-VE7OM's throwing rope on their activation of Grant Hill-VE7/GV-025: https://www.scenicart.ca/content/return-grant-hill?fbclid=IwAR0l7M0D7tQQZGO1jA8Q_m3DSrrYLeIjTckUikf1OG_M39wAr7RuvcXGuPk



Goat Date: 30/Nov/2018
Steve-WGØAT tells the story: Today was a good day! On my Lost & Found SOTA hike I found several items. My camera that I left behind the day before on Mount Herman-W0C/FR-063 and also several months ago one of my EFHW traps broke off in a tree and was unreachable. I left it thinking maybe the wind and weather would eventually bring it down. Today was the day! As I stood resting to catch my breath almost to the top, I saw my antenna wire dangling within reach! Woohoo!

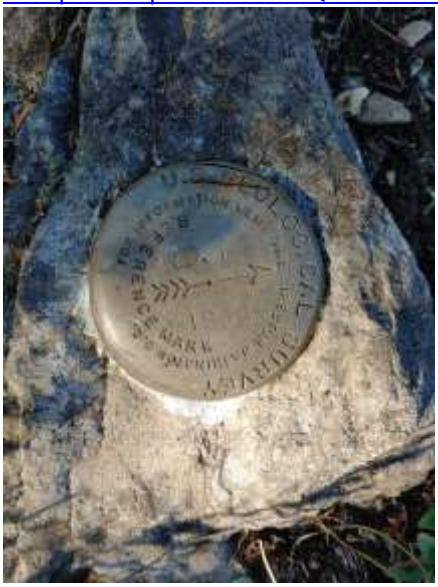


Three-tube Radio Set – We all enjoy compact electronics – it's a miracle what they can do these days with tiny radios and here's one that will blow your mind: https://antiqueradio.org/RadioCraftDecember1936.htm.

HT Antenna Comparison – What antenna are you using on your HT? Here's some ideas of what is most effective: https://reflector.sota.org.uk/t/ht-antenna-comparison/21422

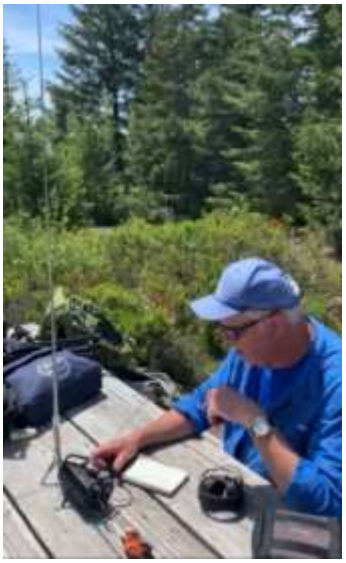
Antenna Summit Setup – Being always considerate of other hikers when we set up, we make sure that our antennas are out of the way. SOTA Activators in Europe have an additional issue, whether to use the summit cross or the trig point to support antennas. Their summits are often bare of trees or anything else to support antennas. This is an interesting discussion that may get you thinking about how you setup on a summit: https://reflector.sota.org.uk/t/do-you-fix-your-antenna-to-the-summit-cross/21370

Trig Points – Where here in the North America we sometimes find USGS markers on a summit, in Europe they often have more significant markers called trig points. Here's a story of the history of those markers in the UK and a few pictures to help tell the story that we were on a summit…
https://www.bbc.com/news/in-pictures-49760110?fbclid=IwAR1en-1aXY-BbbqEsHdBqT1sV9kUd9FQsz5xMD5eVP84yYz4m2fOZ8tN6V0

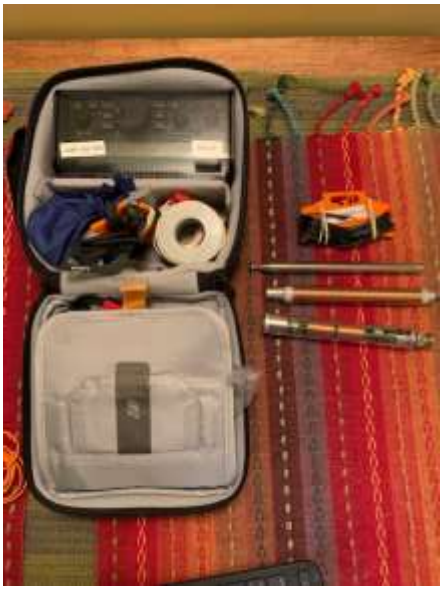


Hawk Mtn W7O/CN-025 by K7FOP, Bald Peak W7O/NC-051 by K7ATN and F6HBI et al on Chastillon F/AM-563


K7ATN and his cousin on Gerakovuni SV/ST-023 and a pic of the trig on Wendover Woods G/CE-005 by M1EYP

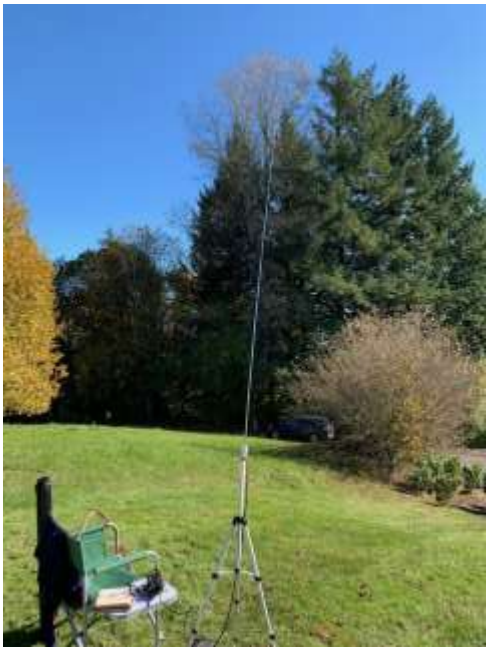


Short HF Verticals – Dan-N7CQR writes about some fun antenna options:
One of the things I love about SOTA is the chance to experiment with various portable lightweight antennas. As you may know, there's seldom one antenna that fits all situations you might encounter on an outing. I think we're all looking for the perfect solution of one compact antenna that will always fill the bill, but until that's invented, I keep collecting more and more options! In addition to the various wire options I use (end fed random wire; dipoles and end fed half waves) I also have been experimenting with magnetic loops (AlexLoop, W4OP loop) and lately with portable shortened verticals. These tempted me as they are usually lightweight, small and don't require supports such as poles or trees, which is ideal if you're on a summit that's pretty bare. After acquiring a KX2 with the 'shack in a bag; system, it really increased my desire to get out and do more portable/SOTA/ QRP events. Then last year Elecraft came out with a new very small vertical for 20, 17 & 15 meters called the AX1.The AX1 has a couple of different mounting systems depending on what you might have handy. The slickest one is a small two-legged mount that allows you to set up the antenna right next to the rig. It has a BNC connector that connects to the radio and a rugged clip that the vertical snaps into. No coax needed.



They also will supply a tripod mount that attaches to a standard camera tripod. You would need a suitable length of coax with this setup. I use a lightweight light stand that attaches to my backpack and extends about 6-7 feet. This will also help the performance in certain situations. The vertical is a helically wound base loaded unit with an extendable whip and the counterpoise/radials can be attached to the radio case using a thumbscrew or a mini banana plug jack designed for this purpose (also used for pedestrian mobile counterpoise, so if it should snag on something it pops out-these guys think of everything!). It comes with one counterpoise 13 feet long. Like everything from Elecraft it's very well made and quite sturdy. Instructions are excellent with good drawings and tips for deployment. If there's a downside, it's not the cheapest option. They also just released the 'AEX1' 30/40-meter extender coil which attaches to the AX1 and includes a 33-foot counterpoise. If you get both units it's around $150.

So-how does it perform? All shortened verticals are compromise antennas compared to a full-size unit and of course a lot depends on how it's deployed and propagation. One thing we've found helpful is to add extra radials which increases efficiency and makes it easier to tune. I should add that this (and most short verticals) will need a tuner to get them to resonance. The built in KX2/3 tuners have had no problems matching to under 2:1 SWR. The other variables that can make the antenna perform better is the placement of the radials. It does make a difference if you can elevate them even just a couple of feet (Max and I have put alligator clips on the ends so we can attach to a bush, tree or whatever is handy). If you're just using one or two radials direction can matter a lot. Try to orient one in the direction of stations or regions you're trying to work-you don't have to be precise, just a general placement. The other helpful placement is if possible, on a downward facing slope in the approximate direction you want to work. This can help the radiation to get reflections off of near ground to increase lower angles of takeoff. So-sometimes the very top of the summit may not be ideal, but possibly 20-30 feet down if that's accessible. I've used this antenna on four outings this summer and I've always managed to get at least 10-20 contacts in short order from all over the US (mostly 20m CW @5W). Setup is about 5-minutes max, depending on whether I use the bipod or tripod and I like not being dependent on trees or erecting a pole, especially if it's windy!



In early October myself, Max-K2MAX and Nick-KI7PTT attended the Pacificon ham fest in San Ramon, CA. One of the events we attended was a QRP antenna build class conducted by Doug Hendricks (KI6DS) of NorCal QRP and QRP Guys fame. What we built was Doug's' version of a short lightweight vertical primarily for 20 meters. The cost was $10 for parts. It uses a base loaded coil of #22 magnet wire wrapped around a small PVC pipe and a 5-foot whip.

Both Max and I have taken this antenna on SOTA outings to test it out and we were both able to make a number of contacts on 20, so it's a viable option for a portable vertical. It's not as compact as the AX1/AEX1 but the price is right. Doug has promised to publish a 'how to' article soon. He also gave me permission to share the parts list and brief manual from Pacificon, so if you're interested contact me and I'll send a copy. I'd definitely recommend considering a short vertical as another option for SOTA. Feel free to contact me if you have questions or comments.

Your ideas for this newsletter are welcome – many contribute including Ryan-W7RMR, Josh-WU7H, Dan-N7CQR, Steve-WGØAT and Darryl-WW7D for contributions to this newsletter…I appreciate every word. Share the newsletter with others or subscribe or unsubscribe by email to climb2ski@gmail. This newsletter is brought to you by the W7O Association Manager, Etienne-K7ATN. Find back issues here: www.pnwsota.org/content/pacific-northwest-sota-newsletters.