

Pacific Northwest SOTA Newsletter

April-May-June 2021

Little Grayback Mountain by Amy-AG7GP

Upcoming Events – ARRL June VHF Contest June 12-13 – SOTA-style!

The most 'BASIC' equipment is a 2m/70cm roll-up j-pole and a two-band HT. Besides that, plan to make yourself comfortable for a few hours while not in the vicinity of a motor vehicle from the AZ of a SOTA summit. If you want to submit a log for the contest, it's important to [read the Contest Rules](#) and select an operating category in advance. The Portable category is where most folks will end up – QRP and portable gear from a remote location – SOTA-style!



BASIC 2m/70cm FM VHF Contest Set-up

- 2m/70cm HT with 146.5xx and 446.00MHz ready to use
- Roll-up J-pole and a pole or way to get it up in a tree
- Extra feedline to get antenna higher
- Logbook and UTC clock
- Necessary adapters/bungee or strap to secure pole

SEMI-OPTIONAL Items

- Perhaps (low loss) feedline instead of RG-174 or RG-58
- Clipboard with logsheet plus favorite pen
- Extra HT battery or 12V battery
- Snacks, water, chair, sunshade, extra clothing (ten essentials are not actually extra!)

The exchange for VHF Contests is Callsign and [Four Digit Grid Square](#). You should avoid extra details in your exchange and limit chatting so more stations have a chance at working you and others – it can be busy! You'll be using the simplex frequencies from 146.40 to 146.58MHz per the [ARRL Band Plan](#), plus 446.00MHz. There are 20kHz between channels, therefore all the even frequencies of 146.42, .44, .46, etc.

The contest starts at 1800z (11am Pacific, 10am Mountain). If you've [read the Rules](#) you'll note that the only operating category that can change location is a Rover – if that's you, you will need to sign all your QSOs as /Rover and submit your log that way. Whatever you do, please END EACH QSO WITH YOUR CALLSIGN so that others can figure out if they've worked you already (besides, it's required for ID). If you plan to submit a log please recognize that other ops will have their score penalized if you (or they) record callsigns or grid square incorrectly. So, use good phonetics and clear exchanges every time. And be sure you can open your squelch to hear any weak stations calling you.

Set a good example near urban areas by not using 146.52 to make contacts, RATHER, use it as needed for solicitation. For example, on .52, make a short "CQ CQ W7MYCALL – I am listening on 146.56." Don't use modifiers like "Portable" or "SOTA" or "Mountaintop" – only Rover /R should be used for those planning to operate from two or more different Grid Squares. Provide your Callsign and Grid Square for EACH exchange - even if the other operator already knows it

from a previous QSO on another band. Don't call CQ SOTA as that's not the focus. Don't give out your SOTA Summit Reference unless the operator asks for it or you know that they are on a SOTA summit. Overall, with FM you'll work several dozen stations in first hours up to perhaps 100 miles away and fewer as the Contest goes on.

You might take a [printout of this Grid Square map](#) so you can help others determine their Grid Square. If they are home, they can look it up on QRZ. It's best to have the op say their grid square rather than interpret it from their location.

One contact per station on each VHF/UHF band counts for points, so ask folks if they can to QSY to work you on 446.00MHz (the 70cm FM Simplex Calling Frequency). Note that Yaesu radios think 446.00 is a repeater frequency – other ops (and you) may need to turn repeater shift OFF and/or save the unshifted frequency to a memory channel.

For an antenna, a small vertically polarized Yagi could be used, but a roll-up j-pole rigged up high is simpler and very effective. You might use extra feedline for more elevation (avoid RG-174 or RG-58 if you can - losses are high, especially on 70cm). A fiberglass telescopic pole or throw bag and line can help get it up in a tree. A quality two-band HT that can easily change frequencies is a good choice. You might take an extra HT battery pack or even a 12V battery for slightly higher power output (my testing suggests +20%). Remember to bring sufficient pencils/pens/logbook pages. I prefer a clipboard with card stock log sheets for my messy handwriting. Snacks, water, layered clothing, and shade or rain protection could make your stay more comfortable.

For some Drive-Up summits, you may get Rovers stopping by to operate for a time. It is customary to give them space to operate so you may want to choose a spot that would give any Rovers a place to set up far from you. If you are interfering with each other, just take a break and have a snack – they will eventually move along. Since you are doing the Contest “SOTA-style” you can post an alert in advance for your summit and spot yourself too.

How about ‘ADVANCED’ SOTA-style set-up for the upcoming June VHF Contest?

An ‘ADVANCED’ set-up would include the FM HT approach above, plus a radio that does SSB on VHF/UHF frequencies AND horizontally polarized antennas. Radios like the FT-817, IC-705, and, if you don't mind carrying extra weight of radios and batteries, the IC-706, FT-100, FT-857 – any radio that does VHF/UHF SSB that can be set to 10W or less for the Portable category. Especially on 2m and up, the frequency readout on these radios may not line up with other signals – assume that experienced operators know where 144.200MHz is and remember to tune your radio to 144.2xx or whatever seems to be the ‘actual’ calling frequency.



SSB VHF Contest Set-up

- Portable SSB radio with 6m/2m and maybe 70cm
- Mic and Paddle – QRP CW can go far!
- Battery for hours of operating
- Horizontal dipole for 6m and small Yagi for 2m
- (You could rely on FM HT for 70cm contacts)
- A tripod or guyed paintpole for antennas
- Good feedline
- The Basic Set-up described above for FM contacts

For weak signal SSB modes, horizontally polarized antennas are standard and can offer gain, but they need to be pointed. The simplest approach could be to have dipole antennas for 6m and 2m, and perhaps even 70cm, tuned to the lower portion of each band where SSB is used. You'll be using frequencies of 50.125MHz and up, 144.200 and up, and 432.100MHz. A Moxon can be a compact portable antenna for 6m or 2m that can be assembled on a summit, and Yagi antennas on 2m and up are straightforward to build (there are many descriptions on youtube and the internet).

Below is a simple “Fan Dipole” for 6m and 2m. The 6m element is supported by two scrap fishing poles, the 2m elements are made of piano wire. They are connected to feedline with a BNC/banana post adapter (inset) that is held in place with a Velcro wrap to take the feedline weight.



A tripod with Yagi antennas or a guyed paint pole with antennas perhaps a wavelength off the ground will help a lot. The Arrow two-band Yagi for satellite is good if you can easily rotate it into correct polarization for each band. The Arrow gamma match may need tweaking to be most effective at the low end of each band where weak signal work happens. For VHF/UHF, short and low loss feedlines like LMR-240 Ultraflex or RG-8x will keep your transmitted signal from loss, and improve what you can hear. Avoid RG-174 and RG-58 if you can.

Most activity will be at Contest start on June 12 through the afternoon. For the first few hours some operators won't be interested in working you on other bands, but feel free to say that you are only there until "xxx o'clock" to encourage them. Ops often QSY as a group, so be prepared to follow if you hear "QSY 144.240" while working 6m. Overall, with QRP SSB on VHF with a three-element antenna you might work 30 to 40 stations in the first few hours up to perhaps 200 miles away – especially if they are on a high point or have a good station. And most ops are good with CW at about 13WPM for when you are one of the really weak ones.

Saturday, April 17th 2021 - Willamette Valley (Oregon) Summit-to-Summit Party

We hope to be dodging sunshine instead of raindrops! Save the date in your calendar - plan on being ready to go (QRV) before 1800z (11am). Let others know your summit of choice with a SOTAWatch alert, QRG 146.54-fm, comment "Willamette Valley S2S Party."

If you are not yet sure where you'll be but are planning to join, use W7O/WV-XXX for your intended summit and update it later. If there are a lot of folks on summits that day, we will have a directed net to maximize the S2S for everyone. (With 15 ops it can take 90 efficient minutes to work through all the permutations.) For the net, listen for instructions beginning around 1745z and join the fun! (And only a few hours later is the [Trans-Pacific S2S Event!](#))

For those in other areas of the PNW – Lower Mainland BC, Puget Sound WA, Boise, Central Oregon, etc., if you want to organize a Summit-to-Summit Party in your neighborhood, let me know and I can help with publicity. Etienne-K7ATN

Updating Trip Reports! – Sharing your summit experiences can be **fun**. Helping others with SOTA summit trip reports so they can also have a good experience – that's **priceless**.

Facebook reports don't get updated, and you can't update the SOTA Reflector. And of course, you can't update someone else's personal blog. What we **CAN** do is post **NEW** trip reports with more recent dates to www.pnwsota.org (helpful are trip report titles that use Summit Name, State | Month Year). Recently I've added "No Trespassing" notes to three summits that had been accessible in the past. If you've made a post to the SOTA Summit Pages, you can change your own post or add a new one with a more recent date. If you want to suggest an update to someone else's pnwsota.org trip report, let me know. Etienne-K7ATN

Fans of Star Trek Rejoice! Listen for a 'secret message' in the soundtrack starting around 1:05

<https://www.youtube.com/watch?v=Qrgif4lentk>

YL Have Their Own "73" – Contributed by Kathleen-W7KLLK: <https://yrlr.org/wp/the-birth-of-33/>



From Outside Magazine: Inside the Summit-Obsessed World of Ham Radio – “It’s like biathlon, but for geeks”
<https://www.outsideonline.com/2421479/ham-radio-hobby-summit>

Featuring everyone’s friend, Steve-WGØAT and other well-known activators.

More on CW – by Wayne-N6KR (founder of Elecraft)

My son is an avid birdwatcher. As his understudy, I’ve learned the names of the birds that hang out in our yard and gather at local wetlands.

On a recent walk we saw one of our favorites, an American kestrel, a small raptor that terrorizes lizards and mice in the foothills on both sides of the San Francisco Bay. The bird’s coloration is a surprising mix of blue, brown, orange, yellow, and white, adorned with an array of black dots.

Finding a kestrel in the wild is like stumbling upon a rare gem, lying on the ground.

The bird reminded me that when I was a kid, I often hunted for gems of a different sort: DX. I was a novice, and in the early 1970s, novices were limited to working DX Of The First Kind. CW.

Like brightly colored birds, each CW signal arriving from a distant land was unique.

Several factors were involved. In those days most ops used bugs or straight keys, so each operator had an identifiable fist. Rigs were not as stable as they are now, yielding timbres with a motley mix of buzz, drift, and chirp. Add fading and noise to the mix, and you had no shortage of audible intrigue.

In fact -- trust me on this one -- RST reports haven’t always ended with a dependable "9." I once gave out an RST of 332. I’ll never forget that poor soul’s chaotic whoop, best described as a singular blend of yodel and kazoo.

Over time I became something of a CW pathologist, keenly aware of each station’s affliction, including my own. These variations were useful. You could tell who you’d already worked. If you were a regular on the novice bands, you’d even get to know fellow travelers by their frequencies, since many, like me, were "rock-bound" -- slaves to a handful of crystals. VFOs were starting to make an appearance in novice gear...but see "chirp," above.

Now, in 2021, the chirp is gone.

CW signals still have many distinguishing traits, though. These include speed, keying weight, the operator’s affectations and favored prosigns, and direction-specific propagation anomalies.

Here’s where we stretch the central metaphor to just about max.

If randomly occurring CW signals on our bands are creatures of the wild, then...are FT8 stations the occupants of an urban zoo? Don’t get me wrong: It’s a pleasant place, with free tram rides, open 24 hours a day. The diversity of species is unprecedented.

But imagine, on a given day, that you’ve sampled the zoo’s exotic offerings, memorized the brochure, bought the t-shirt, and partaken of the sumptuous snack bar. What next?

Take a walk on the wild side.

Yank the cord and jump off the tram at an unmarked stop. Hop the fence. Work your way down the unpaved trail from the upper mesa to the open savannah, then sit on the ten-foot wall and dangle your feet over the edge.

Welcome to the ecosystem of beings who are free to roam. They may be camouflaged, blending into the background. And if you listen carefully, you’ll hear a hundred variations on their timeless song...CQ.

Wayne-N6KR

So Many Poor Decisions – How Many Can You Identify? – Let's hope our fellow SOTAters will never end up this way.

<https://www.wweek.com/outdoors/2021/02/23/what-its-like-to-get-lost-in-the-columbia-river-gorge/>

2020 Fire Closures Will Continue this Summer – Be sure and check ahead for trail and road access this spring. It may be years before some areas open again – there's danger in hiking through burn areas – please obey closure orders.

Willamette National Forest overview:

<https://www.fs.usda.gov/detailfull/willamette/home/?cid=FSEPRD835361&width=full>

Detroit Area Map:

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd879241.pdf

Holiday Farm (east of Eugene) Map:

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd879242.pdf

MAJOR UPDATE FOR VE7 ASSOCIATION! – by John-VA7JBE

For almost a year I've been working with the SOTA management team to address some of the shortcomings of the VE7 Association. As a result, I'm proud to announce that we will be going live with two major updates in the next few days: 1) The points banding in VE7 will change to better reflect the statistical distribution of summit elevations in BC. This means that you no longer have to climb above 4,000m to score 10 points (now it's only 2600m, full banding table below) 2) To accommodate all the new summits we'll be putting into the database (**28,000!!!**) several regions (mostly in the North) have been split up into several different regions. A strong effort was made to accommodate the unique geography of the coastal islands, specifically the lower elevation summits on South Vancouver Island. Several solutions were proposed and explored (including splitting the islands off into their own association), but in the end we were unable to lower the 2-point threshold below 500m. This would have had the most profound effect on operating in these regions and unfortunately it was not something that could be done. We will also be needing some more Regional Managers to go with the new regions so if you're interested please feel free to get in touch with me.

Cheers, John Bell – VA7JBE

VE7 Association Manager

A Request to SOTA Activators for Fire Lookout Documentation – from Mike-W6MVT

As a reminder to my SOTA friends, our organization is always looking to update info and photos of fire lookouts and sites of former lookouts for the [National Historic Lookout Register](#). When activating at such a site, please consider sending a photo of the structure or relics for addition to the [Forest Fire Lookout Association](#) files. Thanks so much – [Mike W6MVT](#)
<https://www.facebook.com/groups/37631909313/permalink/10158785885834314/>

We All Need More Friends Like This to Join Us on Activations - - - Right?

<https://www.newyorker.com/humor/daily-shouts/a-non-hikers-terms-and-conditions-for-hiking/amp>

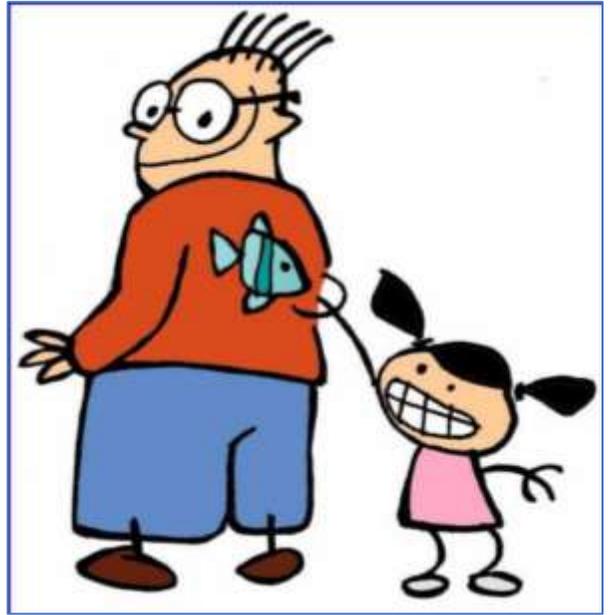
Trail Keepers of Oregon – Trail Keepers of Oregon have rolled out an interesting way for people to help improve our trails that might dovetail nicely with SOTA activities. They want people to make reports on the conditions of the trails they hike so that they can relay it to land managers, prioritize the work, and maybe use it to get more funding for repairs and maintenance. They've put together some short videos that explain how to do it and have an online form for reporting trail problems. <https://www.trailkeepersoforegon.org/scout-school/>

“TESTING-TESTING” SPOTTING SYSTEMS – How to Test Your Spots Without Driving Chasers Crazy – Lots of Chasers and some Activators like to have [SOTA Spotter](#) or [SOTA Goat](#) give a little beep or bleat to alert them to an activation in the neighborhood – like on 2m FM. When you are testing APRS or SMS spot features, or some other app, PLEASE use a non-sensical frequency and mode – for example, “144.000 AM” would do the trick – something that just doesn't make sense – legally or otherwise. That way no one gets out of the easy chair to go over to the rig when you are making sure your spotting system works for your next remote activation. And delete it right after posting, if you are able. Thanks much...



<<Here's a MG greeting from Packwood, Washington !

Happy
poisson d'avril ! >>



AND to those of you that have read this far in the newsletter, **Thank You!** I'd love to hear YOUR stories of Chasing or Activating for Summits on the Air in the PNW – please let me know if you've got something to share for July 2021...

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