

# Pacific Northwest SOTA Newsletter

**October-November-December 2023** W7O/SC-108 by Amy-AG7GP

**One More Event this Summer/Fall Season – October 14: Oregon Eclipse Campout – hosted by Tim-N7KOM – [click here for more info.](#)**

**Central Oregon Do-Si-Do Party –** On August 27 Chris-W7MTB, Randi-N7OLE, Bryan-K7AMM, Amy-KC7JNU, Etienne-K7ATN, Nora-NW7CQ and Bob-W7SCY took part in a Do-Si-Do event (plus friend Jake and three dogs). Thanks to those who activated and chased during the 2023 Central Oregon S2S Do Si Do Party! We had eight operators on three summits, plus two surprise activations of Eureka Peak and South Sister for extra Summit-to-Summit contacts.



## **Summit Furniture – Getting Comfortable – SOTA-style**

Most of us are happy to sit on a log, stump or rock for our activations. Or sometimes we kneel over our radios, or sit on the ground. Another option is the rare “standing desk”, when a rock or a fence post presents just the right height. There are also options you can carry, from the Z-fold foam, the inflatable pad, the lightweight tripod stool, and a deluxe summit recliner. There’s also the basic tarp, keeping you off the ground and better yet, keeping your radio gear clearly visible in the clutter of the forest floor. Follows are some options for your consideration...



Above, four of the mentioned items ready for packing, the minimalist foam pad (0.15 pounds), and the tripod stool (1.1 pounds). Below, the basic tarp (0.18 pounds), an inflatable cushion (0.22 pounds), and the deluxe recliner (1.04 pounds). Is it time to upgrade from your usual ant-infested log? Here are some ideas!



## 12 Ways to Leave Your Spot – Darryl-WW7D and Josh-WU7H

Every regular SOTA participant knows the importance of landing a spot on the [SOTAWatch](https://sotawatch.sota.org.uk/en/) web site (<https://sotawatch.sota.org.uk/en/>). Activators rely on spots to attract chasers, and chasers need spots to find summits to chase. An activator who cannot get spotted may struggle to get at least four QSOs for summit points.

Regular activators usually have no difficulties getting a spot on [SOTAWatch](https://sotawatch.sota.org.uk/en/). But sometimes the usual methods don't work. For example, cell service may be nonexistent or a gateway goes down. Fortunately, there are numerous alternative spotting methods available to the prepared activator. Here is a collection of twelve ways to spot. We have employed almost all of these methods at one time or another.

First, let's clear the air about self-spotting...is it okay to do? For many other ham radio activities like contesting, self-spotting discouraged or not permitted. For SOTA, it is not only encouraged, but can be considered a "best practice." Even if you want to do a quick activation on 2m near an urban center where QSOs are easy and plentiful, a spot will make SOTA chasers—you know, the folks who are participating in the same activity as you—aware of your activation. So give chasers some love by spotting yourself.

Let's start the list with a simple assisted spot:

1. Ask one of your contacts to spot you on [SOTAWatch](https://sotawatch.sota.org.uk/en/). "pse spot on w7w/cw-023" on CW. Just be sure they have the correct reference. This, of course, raises the issue of how to get that contact in the first place. One way is to call CQ on a commonly used SOTA frequency. On HF, 14.062 is sometimes monitored by SOTA folks. On 2m, local stations may monitor a popular frequency, like 146.58 MHz in the Portland area or

146.56 MHz in the Puget Sound area. And 146.52 MHz will usually raise somebody. Although any ham can look at [SOTAWatch](#), one must log into an account to post a spot.

### When you have good SMS or data service

The best-case self-spotting scenario is when you have good cell phone SMS (text message) or data service. You have many options:

2. Cell phone apps: These are quite convenient. On iPhones, the *SOTA Goat* app does this, and on Android, *SOTA Spotter* and *SOTA Activator* apps work well. Simply fill out an on-screen form with your call sign, reference, frequency, mode, and any comments. Hit the send button and off it goes. For some apps, you may have the choice to send using the internet or using SMS. If the latter, you must be signed up for using SMS spotting (see 4 below).
3. Spotting by web browser: Start up a web browser on your phone and spot directly from [SOTAWatch](#). This method is probably a little slower than using an app, but may be familiar and comfortable. Other web sites, like [SOTL.AS](#) (<https://sotl.as/>) do this, too. From the [SOTL.AS](#) map you can hit the compass icon and the app will use your phone's built-in GPS to place the map on your current location. Click on the summit, select *More* and select *Spot*. The spotting form will be pre-populated with your call and SOTA reference. Fill in the frequency, mode and comments and hit *Add Spot*. You must be logged in to your SOTA account to spot via [SOTAWatch](#) or [SOTL.AS](#), so make sure you know your login credentials.
4. Spotting via SMS: You can spot by sending a properly formatted text message to the SOTA SMS gateway. Pay careful attention to the message format: <call> <association> <summit> <freq> <mode> <comments>. For example:  
WU7H W7W CW-010 14.062 CW with ww7d S2S pse work us both  
Note that the spot will fail if you send the reference as "W7W/CW-010". The messages are sent to a phone number that you will receive when you register for this service. See <https://www.sota.org.uk/Joining-In/SOTA-SMS-Format> for information on registering.  
An alternative to the official SOTA SMS gateway is the [SOTAmāt](#) (pronounced "SOTA mate") site. Here again, registration is required. See <https://sotamat.com/sms-services/> for more information.
5. Spotting by email: [SOTAmāt](#) provides an email gateway for SOTA (and POTA) spotting. You must register to use the service. From there, it is a simple matter of sending an email to <your-callsign>.<your-PINcode>@GO.SOTAMAT.COM. The body of the email contains commands like  
SOTAspotMe WU7H W7W/CW-010 7.062 CW; listspots 5  
This text spots WU7H, but also replies with the most recent 5 spots. You can also request other information like current alerts, summit information, and the weather report for a summit.  
Any device that can send email (phone, computer, satellite messaging device) can spot by this service. See <https://sotamat.com/sms-services/> for the particulars.
6. Call (or text) a friend on your cell phone and ask them to spot you!  
Some additional ideas when spotting via cell phone  
Ideally, your hiking party would include a variety of cell phone providers. So, if you use Verizon service and have a companion who uses AT&T or T-Mobile service, you maximize the chance that at least one of you gets good data or SMS service.  
When we do joint activations, we frequently use a single HF radio and take turns operating. The person who is not operating spots for the other person. That works well when we both have good data service. Darryl as Verizon and Josh has AT&T, so sometimes only one of us gets reliable data service on a summit. Then, the person with good service enables a Wi-Fi hot spot on their phone to provide internet access (and spotting capability) for the other.  
We have had situations where only one of us gets service, but the service is accessible from an awkward spot away from the radio. It gets tedious repeatedly running over (or climbing up) to the "reception zone" for each spot. Instead, we leave the "good" phone in that zone, set up as a hot spot. Now the other phone can be used to spot over Wi-Fi from the operating position.  
Have you ever experienced spotty data service on a summit? Sometimes it helps to put your phone in airplane mode, wait a few seconds and take it out again. Sometimes restarting a phone can clear up phone-related issues as well.

## Spotting with RBN

7. RBNHole: Set an alert before your outing and then the Reverse Beacon Network (RBN) will likely pick up your CW CQs. RBNHole will see the RBN spot and spot you on [SOTAWatch](#). This is, perhaps, the easiest way to get spotted on CW and digital modes. This doesn't work as well if you don't know what summit you are going to. And it doesn't work at all for HF SSB or VHF-only operations. Also, if you are doing multiple summits in a day and your alert times don't match your activation times, you may be spotted on the wrong summit. Setting alerts can be done over the Web using [SOTAWatch](#) or [SOTL.AS](#). It can even be done in the field using cell phone apps like *SOTA Spotter* (Android) and *SOTA Goat* (iPhone).
8. Have a friend monitor you via *HamAlert* and spot you on [SOTAWatch](#) when you show up. You must let your friend know, in advance, your summit reference.

## Satellite, APRS and HF spotting

9. APRS is an excellent way to spot when you can't use a cell phone. You must have gear for APRS messaging and you must be within range of an APRS iGate for this to work. To send a spot, compose an APRS message in a specific format: <reference> <freq> <mode> <call> <comments>. For example:  
W7W/CW-010 14.062 CW WW7D with wu7h S2S pse work both  
Note that this format is quite different from the SMS message format (see 4). Address the message to either "SOTA" or "APRS2SOTA". For more information see: <https://www.sotaspots.co.uk/>  
You can also receive the latest spots using APRS. Send the message "/SPOTS" to SOTA and you will receive the last three spots as APRS messages. Additional options are found on the web site.
10. APRS using SMS: You can also use the APRS SMS gateway to send SOTA spots. To do this, you must register first. Then you can send an SMS-formatted SOTA spot to SMSGTE. Note that the format is different from using the APRS to SOTA gateway. It uses the SMS format (see 4):  
WW7D W7W CW010 14.062 CW with Josh s2s pse work both  
As of mid-July, 2023, the gateway is temporarily closed in order to conform to new rules affecting SMS service providers. For more information about this gateway visit <https://smsgte.org/>
11. Satellite spotting: Many SOTA operators carry an InReach or Bullitt satellite messaging system. These devices can be used to send spots and are a great option for remote summits that lack cell and APRS service. SOTA provides a gateway for InReach users. You must be registered for SMS Spotting and you must add specific text to the comment field of your message. There is other set up work involved, so it's best to email Andy at [andy.mm0fmf@gmail.com](mailto:andy.mm0fmf@gmail.com) to discuss the registration steps required.  
Bullitt Satellite Messenger users can send SMS spots via [SOTAmāt](#). You must be registered for this service. [SOTAmāt](#) also provides an email gateway for email spotting over satellite messaging devices. Check out <https://sotamat.com/sms-services/>.
12. Spot via FT8 with [SOTAmāt](#): From Brian AB6D comes an ingenious new way to get spotted using a mobile phone app, your HF rig, and FT8. Brian has devised a way of generating special FT8 messages that are decoded via the PSKReporter network of monitoring stations and turned into SOTA spots. In short, you use a mobile phone app to choose your summit/frequency/mode and then transmit the generated FT8 message over your HF radio. No connection between your radio and mobile phone is required. We've field tested it by simply holding the mobile phone speaker up to the mic (internal KX2 mic in our case) and keying the radio manually at the right times. It was very easy to use and totally reliable—a spot was generated each and every time we tried it. Some set-up work is required—head over to the [SOTAmāt](#) website to register and learn more: <https://sotamat.com/>

## Spotting Etiquette

Finally, we offer a few pointers on SOTA spotting etiquette. Spotting is good, but don't over-do it. Post only the number of spots needed to get the job done. There may be hundreds of hams who receive notifications through computers, tablets, phones or smart watches each time you post a spot. Be kind to your potential chasers and avoid unnecessary interruptions.

One way to minimize unnecessary spots is to make sure a frequency is clear before spotting. Send a couple of "QRs" (or ask "is the frequency in use?" on SSB) on your target frequency before you spot. Even better, follow up

your QRLs by calling CQ as you post a spot. The memory keying or voice function found in many radios makes this easy to do.

Sometimes activators send out “spots” that are not spots at all. Rather they are messages that are contained in the spot’s comment field. Typical messages are “Setting up”, “QRV 5 minutes” or “QRT”. Spot comments are not always easy to see. For instance, spots coming in through phones or smart watches may not display comments without additional actions. Therefore, be kind to the chaser community and only post these “message spots” at a band-edge frequency. That is, use 14.000 instead of 14.064 or 14.327. Consider also using “OTHER” as the mode.

This advice applies to test spots, as well. While it is good to test a new spotting method before you need it on a summit, minimize the burden on others by using a band edge frequency and include “test ignore” in the comments. Some software, by default, will skip sending a local alert for spots that contain one of these two keywords.

Finally, if you send out a spot with the wrong summit reference, don’t edit the existing spot. Rather, send out a new spot with the correct reference and include a comment that this spot has the correct reference. The reason is that edited spots do not propagate to other spotting applications. Therefore, only users of [SOTAWatch](#) will see the correction. Given the importance of chasers having the correct reference, this is an exception to the “minimize spots” principle.

With a little advanced preparation and, perhaps, some extra equipment (APRS or InReach), spotting should be possible from almost anywhere in the Pacific Northwest. The ability to spot rewards activators almost immediately with an abundance of chasers. So, take the time now to learn a couple of new spotting techniques, and mountain-top happiness will be yours.

[Alternative Battery for the Mountain Topper?](#) Troy-KF7SEY contributes to the lightweight challenge.



**Tag-Alongs Welcome!** – Have you wanted to try Summits on the Air but don’t know where to go? Does your S.O. tell you that you need to have someone go with you on your mountain/radio adventures? If so, watch for “**Tag-Alongs Welcome!**” on the [SOTAWatch](#) alerts page. If you would welcome another activator, please put “**Tag Alongs Welcome!**” in your alert comment with “Meet at trailhead” or “RSVP by email” to activate the summit together.

“[Reflections on a Rescue](#)” appearing on page 17 of the Mazama Bulletin, and [this video by Homemade Wanderlust](#), both provides insight into what happens when the SOS button is pushed...

[This article from a past Newsletter is worth revisiting](#) – How to make the Activator/Chaser codependency even better.

[Meeting the FCC RF Exposure Requirements](#) – this makes sense for the home shack...being portable, our set-ups are different every time – another challenge.

## The 2023 W7O SOTA Campout – by Amy-AG7GP



I just wanted to send a thank you to all who came and helped out with the W7O Campout at Broken Arrow Campground near Crater Lake. It was an amazing experience that I think many of us will treasure, remember, and look forward to the next time we all get to meet again. We had about 58 ops and families and I am guessing close to 300 activations, creating chaos never before heard on 2m! This is about twice as many folks as last year. Many said it sounded like air traffic control, but a bit less organized, ha! That is absolutely incredible, especially for this area. Etienne-K7ATN putting together the regional summaries, carpooling with whomever had room even if you just met, the evening snacks, the kegs of beer, live banjo music, and all-around great company. We lucked out as access to Mount Scott opened the first day of the Campout, weather was pretty good with no smoke, and the bugs weren't near as bad as we anticipated. Couldn't ask for a better time. Best of all no one got hurt, sick, or lost. We had a couple vehicle breakdowns, the bathroom issue at the campground was a bit frustrating, but overall, everything went very smoothly.

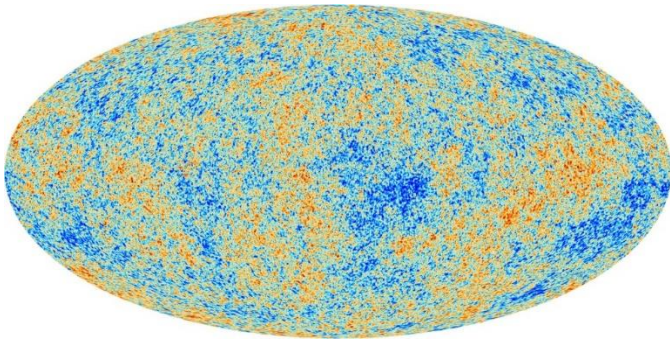
Some personal achievements and highlights that I will remember are Bill-NODNF achieving Mountain Goat on Cinnamon Butte with company, many newer ops were able to explore some "virgin land" by doing some First Activations, expanding the options for all of us to explore next time, and the YL activation at Cinnamon Butte.



We had eight YLs activating at once which was not only rare (a World Record??) but special to many, including some that were not at the Campout but heard about it later. I'm sure there are many other highlights I am not aware of since SOTA is uniquely filled with personal goals and achievements.

It was quite a week. I look forward to next year as it looks like we have a great tradition started. It couldn't happen without all the great people that come and make this happen. Below is a link to a slideshow of pics, mainly of our great family at the Campout. W7O SOTA Campout 2024 or Bust! 73! de Amy-AG7GP  
[https://youtu.be/ZQFTL-L\\_pxo](https://youtu.be/ZQFTL-L_pxo)

## The Holmdel Horn Antenna – Exploring Cosmic Microwave Background Radiation



With a peak frequency for the Cosmic Microwave Background of 160.4 GHz, most of us won't be "reading the mail" for these weak signals. But a [NY Times article](#) tells a great story of "RFI" that gave insight into the 13.8 billion year story of the universe. (BTW, Crawford Hill is not a SOTA summit.)

### SOTA Alerts...and Why Activators Should Use Them – Josh WU7H

Quite simply, SOTA Alerts are a way to let the SOTA community know your plans. By posting alerts you increase your odds of being chased, making S2S (Summit-to-Summit) contacts, and getting enough QSOs to qualify the summit for points. Many chasers and activators (myself included) frequently consult the list of alerts and plan accordingly. Posting alerts is a courtesy to chasers, and without chasers there is no SOTA. For special events like S2S parties, posting alerts can help with coordination and choosing a summit to activate. Posting an alert with a comment 'tag-alongs welcome' can help new SOTA ops in your area find someone to show them the ropes. An Activator might have recently seen a closed gate or blocked road that's not yet written up in a trip report and would have an opportunity to let you know.

If you are a CW operator, posting an alert is a great way to get spotted on summits with no cell service. RBNHole leverages the Reverse Beacon Network (RBN) and matches against active SOTA Alerts. RBNHole works very well and many SOTA ops rely on it exclusively to get spotted. There is some nuance to correctly formatting your alerts so that they will generate spots via RBNHole. I recommend reading over the documentation if you are interested in this use case: <https://vk3arr.wordpress.com/rbnhole/>.

Posting an alert is simple:

- Go to SOTA Watch: <https://sotawatch.sota.org.uk/en/> and log in.
- Click on the 'Alerts' tab, then click the 'Add Alert' button.
- Fill in the details: Your callsign, Summit Reference, date (dd/mm/yyyy), ETA on summit in UTC, frequencies in MHz and modes you expect to use, plus any comments.
- Click 'Add Alert'

In addition, some popular mobile apps like 'SOTA Goat' can be used for viewing and posting alerts.

Why do some activators not post alerts?

"I don't know when I will be on the summit" – just take a guess, it doesn't matter if you are off by a couple of hours.

"I might not make it to the summit" – stuff happens, it isn't a big deal if you don't make it. Many alerts have comments such as "Depending on access" or "WX dependent".

"I might go to a different summit" – You can post a summit REF like "W7W/CW-XXX" or even "W7W/XX-XXX". Add a comment listing the likely summit candidates if you like. Chasers will ask you for the correct REF.

"I am doing multiple summits" – Feel free to post multiple alerts, or just post one alert with a comment like: "First of 3 or 4 summits Today".

"I don't know which bands/modes I am going to do" – Just post what you are likely to do. I often only post a few bands but end up doing many other bands and modes.

"I don't want RBNHole to post an incorrect spot for me" – this only applies to CW ops. Put the comment "NoRBNHole" in the comments section of the alert and RBNHole will not spot you.

In short, don't worry too much about getting every detail right in your alert. Things happen and even the best laid plans can go sideways. Use the alert comment field to convey pertinent information.

I hope this short introduction to SOTA Alerts has persuaded you to give them a try. See you on the next summit!

## ARTS PAGE

**MAX:** Why should you always carry a root beer on a hike?

**SAM:** I dunno, why?

**MAX:** Because you never know when you need some SOTA!

**MAX:** Why is it so hard to say goodbye to a SOTA operator?

**SAM:** I give up, why?

**MAX:** Because 73 is such a big number!

Jokes by Max Dolphin, with Sam (in green), his straight man



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