

Pacific Northwest SOTA Newsletter

Jan-Feb-Mar 2023

Roscoe, SOTA Pup (SB) by Tim-N7KOM

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 crazy mountain/radio adventures? If so, **"Tag-Alongs Welcome!"** is what to watch for on the [SOTAWatch](#) alerts page. If you would be glad to have another activator (or two) along, please put **"Tag Alongs Welcome!"** in your alert comment with "meet at trailhead" or "RSVP by email" or whatever might work for you and the summit you have in mind.

We Depend on the Internet – How Does the Internet Depend on Us?

<https://www.newyorker.com/tech/annals-of-technology/the-thorny-problem-of-keeping-the-internets-time/amp>

SOTA Logging Methods and Applications by Guy n7un/nSOTA

For new SOTA activator participants, the recording of QSOs in the field can be a daunting process, especially if you're not experienced in ham radio field operations. There are many elements to a "successful activation" but the upload of your QSOs is the final step. Most folks log QSOs with pen/pencil and paper to later transcribe (or perhaps, decipher...) that info into a computer log that can then be uploaded into the SOTA (or POTA) database. But the actual logging process requires practice to manage the pileup, log the contact, and operate the CW key or microphone.

Field Logging Methods: Notwithstanding all the logistic issues, the entire activation process (SOTA alerts and spots, band selections, CQ calling, 2m FM or HF) can be overwhelming to a new SOTA participant. There are a lot of steps that can "ruin you day". Experienced SOTA activators generally have learned "the hard way". Generally, a joint activation with more experienced SOTA activators, where best practices can be learned, is recommended. And immediate assistance can be helpful. This SOTA-mentoring process is a proven road to success for new participants.

Starting out, most SOTA activators use a pen/pencil and paper (waterproof paper for "high humidity" events) to record a QSO. Some folks use an audio recorder or cellphone to record the QSO information either as the primary recording or as a backup to the pencil-paper method.

There are some cellphone-based SOTA applications that you can record the QSO directly but that can be too-much for a new activator. In a subsequent article, perhaps we can investigate several of these applications (VK4 Port-a-Log, Outd, etc.), their strengths and weaknesses, and best practices for successful field logging.

Post (at-home) Logging

There are a number of PC-based logging programs, each with differing functionality. Many are “general loggers”, meaning they can create upload files suitable for SOTA, POTA, WWFF, contests (LOTW), eQSL, or general logging. Most can create a .csv or ADIF formatted file suitable for upload. Your logger choice depends on your activity: SOTA only, SOTA & POTA, or additional general logging requirements.

1) SOTA direct database entry

After establishing your [SOTA account](#) and then logging into the SOTAWatch website, you can link (upper right tab called “Links”) to the SOTA Database and then the MENU tab where a drop-down menu for “Submit Logs” will let you select your next step. I often enter 1 or 2 QSOs directly instead of creating a file for upload. This SOTA database direct entry process is cumbersome and certainly not fast. There are many logger programs that can create a SOTA database compatible file.

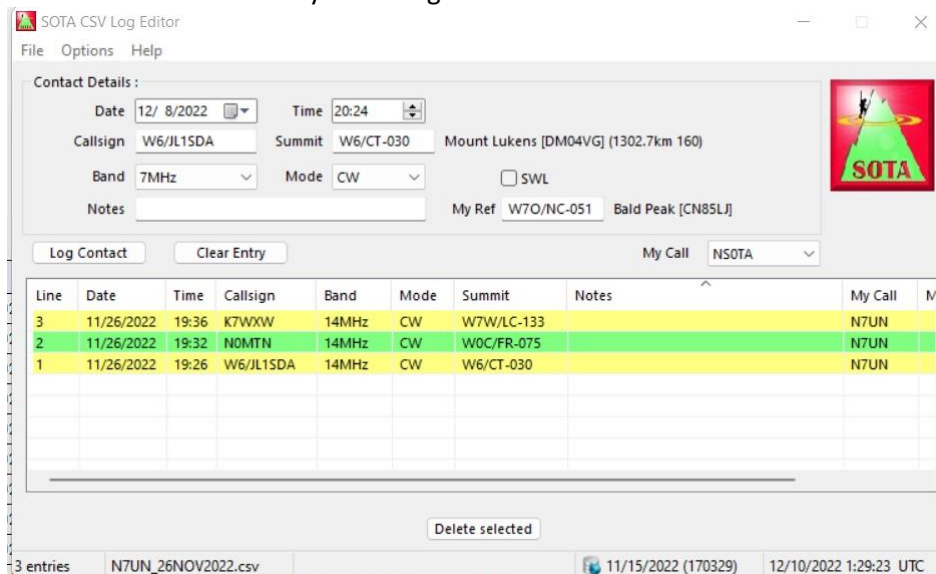
1) [Text Editor/Excel](#)

It is possible to create a .csv SOTA file directly in any text editor (like Notepad) or even Excel (save as a .csv) then upload that file, as a .csv, into the SOTA database. Be aware, the SOTA database requires the date to be in the International Date Format, i.e., dd/mm/yyyy. See the [SOTA text field requirements](#). In my opinion, this process is cumbersome, error-prone, and not particularly “fast”, especially if you have a lot of QSOs. I would encourage Activators to use one of the following programs for QSO data entry.

2) [SOTA CSV Editor by GOLGS](#)

This is my personal favorite as I have been using it for many years. Very straightforward and easy to setup and use. And very fast and easy to create a SOTA .csv or .adi file for upload into the SOTA database. **But it is SOTA-only**. It is a field-based data entry application, meaning you navigate to each field in the application for logging a QSO. The good news: the minutes field update, the QSO callsign, the S2S info, and <enter> are the only mouse-click (or a tab click) fields required. All other fields (date, your call, etc.) are copied forward after the first QSO entered. Then save your file then click on export (choose .csv or .adi) and export locally then upload that file the SOTA database.

Here's a screen shot of my SOTA Log Editor:



3) [SOTA FLE \(Fast Log Entry\) by DF3CB](#)

FLE is a general logging program suitable for SOTA, POTA, and WWFF activations. Fast Log Entry (FLE) is available on the DF3CB website, df3cb.com/fle/. Note that this is a Windows-based program although recently Linux and Mac versions

are available. The application is well-supported and hosted on GitHub, a web-based Git or version control repository and Internet hosting service, meaning that you download from this webservice.

You can read several years of [FLE program discussion](#) on the SOTA Reflector. The program is pane-based as opposed to dedicated data-entry fields. The log is created in one pane, a header pane for common data fields (like your call and reference number), and a data entry pane.

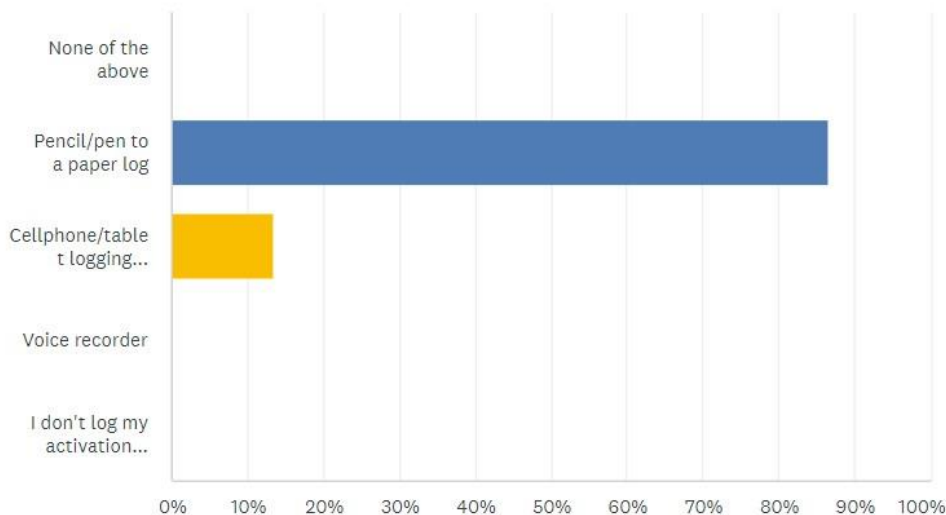
I found the FLE program to be very capable, especially for SOTA activation QSO entries. Likewise, the same would be true for POTA. The documentation was relatively straight forward and easy to follow. Certainly, there are some time saving steps in data entry like only having to enter the change that has occurred. For instance, instead of typing in the UTC time for each QSO, like 2036 for the first QSO then a 7 for the next QSO instead of 2037. Cool! FLE helps with context sensitive highlighting like a “yellow” for **callsigns** which is very helpful.

It was easy to save my log file as a .txt then equally easy to create an .adi file for upload into the SOTA database. Certainly, if you are SOTA and POTA active, this would be my recommendation. The program capability to create an upload file for eQSL or LOTW is a plus.

A simple two question survey hosted on the [PacNW SOTA Facebook Group](#) revealed that 3 folks record QSO data directly into the SOTA database, 1 person uses their cellphone/tablet and the remaining 13 respondents use a pencil/pen and paper.

If you field log your activation QSOs, what is your method?

Answered: 15 Skipped: 0



Of these 15 respondents, most (11 persons) create a post log (.csv or .adi) suitable for upload into the SOTA database. Also, statistically, this is not a representative survey but it does confirm that “most” folks field log with pen/pencil and paper. What we don’t know is what percentage of Activators don’t upload their log.

ANSWER CHOICES	RESPONSES
Direct QSO entry into the SOTA database	20.00% 3
Upload file created by cellphone/tablet	6.67% 1
Create a computer post log CSV or ADIF file	73.33% 11
Don't upload my QSO info to the SOTA database	0.00% 0
TOTAL	15

Conclusion: Within the SOTA awards program, activation and chase QSO information must be uploaded to the SOTA database for either the Activator or the Chaser to score award points. Often times, especially for new SOTA Activators, recording this information and subsequent upload, can be a burden/challenge for participants. Hopefully this discussion will be helpful for new Activators, removing some mystery as to this process. And I certainly invite discussion, perhaps on the PacNW SOTA Facebook Group. I know there are “other” solutions; let’s share so our SOTA community can benefit.

In the Pacific Northwest, most SOTA activators are now in winter “hibernation” mode, awaiting sunny and warmer days. But don’t overlook the low-elevation summits for an activation. And for the more experienced SOTA activators, invite and mentor new SOTA interested folks on your outings. Sharing your experiences is value-added for ham radio in general and SOTA specifically.

Xiegu X6100: SOTA Rig Review

by Jeff Langford - KJ7VDP

When I first got into SOTA a couple of years ago, I was strictly a VHF/UHF voice operator. Initially this was never an issue since there are so many peaks in the Pacific Northwest region within reach of population areas so it was quite easy to obtain enough contacts on 2m FM alone. Additionally, with the number of Summit-to-Summit (S2S) parties available even outside of population areas I could frequently make S2S contacts. However, when not participating in a S2S party remote areas are difficult to activate on 2m FM. As such, it was time to seek out and purchase a portable HF rig for those times when I wanted to go to those remote areas.



I purchased the Xiegu X6100 after a long decision period where I compared several different portable HF rigs. The decision came down to features and capabilities rather than cost alone, but cost was one of the overall considerations. Naturally the Elecraft KX line was at the top of the list as was the Icom IC-705. When it came to the end of the decision period, I chose the X6100 for several reasons:

- Complete HF+6 band coverage – 160m to 6m
- Built-in antenna tuner
- Built-in panadapter (waterfall and spectrum scope)
- Open Linux based O/S with root access
- Customization available by the user/owner community
- Bluetooth and WiFi
- USB-C CAT control
- Built-in battery (to operate at 5 Watts or at 10 Watts with external power)
- \$600 total cost

The decision to go with a “cheaper” Chinese radio doesn’t sit well with some folks who simply wouldn’t entertain the thought of purchasing from an inferior manufacturer, but after reading so many great reviews and hacks posted from the user community, I decided that this rig had everything that I needed and more. This is not the same low quality as a Baofeng HT and even though Xiegu has had some questionable products in the past, this one is of a very high quality. With each new firmware release there are new features added as well as bugs that are fixed.

With the root access to the O/S available, it is amazing to see what some folks have accomplished. There are some folks out there that run FT8 directly on the radio itself. The rig has two USB-C connectors (DEV and HOST) that allows you to

connect the O/S to the radio CAT control using a loop back. When packing your gear to a mountain top weight is a factor and this allows you to leave the PC behind if you want to digital from the peak. I am not a digital guy myself and find FT8 and other similar modes to be novel at best. I simply prefer direct voice communication, so I stick to SSB mostly. That being said, I do have WSJT-X installed on my desktop in my shack at my QTH, and I did hook up the X6100 to it using the USB-C connection. It works flawlessly and I encountered no issues using it in that manner.

You may ask “What about CW?” I have seen many YouTube videos of using this rig for CW and the reviews are pretty solid overall. As a strictly voice guy, I do not use CW myself—at least not at this time. It does have a built in CW decoder that works as you might expect. I’ve had it work (mostly) many times with other times not so much. It really depends on the quality of the signal that you are receiving. Suffice it say that if you are a CW ham then you aren’t really concerned about that anyway.

OK, now I know that you are thinking that everything so far in this review has been positive. There are some negatives with the X6100 as there are with every rig produced. Here is a few that I have found:

- Noise blanker is not really functional. I’ve tried through all of the different firmware updates and it really doesn’t do anything. I’m confident that it will be fixed at some point.
- Noise floor is difficult to overcome at certain times on certain bands. Atmospheric conditions can be blamed some of the time, but I’ve also been out with other activators running different rigs that didn’t have that problem on the same bands that I was operating.
- Controls can be difficult to understand at first, so the learning curve is a bit steeper and experimentation is required to understand what works best in a given situation.
- Internal battery is a very nice feature to have, but it doesn’t last long enough to be the sole power source. Additionally, you only get 5 Watts out of the internal battery while you get 10 Watts with an external one.
- If you have a big pile up and are transmitting a lot to get through it, the unit gets very hot—especially on warm summer days. There are external heatsinks that you can purchase that help to overcome this problem.

My SOTA activation load out consists of the following:



- Xiegu X6100 transceiver.
- Short 18” mic cable rather than the long (and heavy) coiled mic cable that comes with the rig.
- Bioenno 4.5 Amp-hour battery.
- SOTAbeams Bandspringer Midi, end fed antenna (60m – 10m).
- Buddistick PRO (only used for POTA as this is a bit big and heavy for SOTA).
- [Bracket Stand holder for XIEGU X6100 HF Transceiver Side Handle Mount.](#)
- [BOVKE hard GPS case for 8-inch Garmin.](#) This is the perfect size for the X6100 plus mic.

In the end I am very pleased with this rig and would recommend it. The load out is quite small and light since just about everything you need for the X6100 is built-in. If you have any questions our would like to know more about this, feel free to contact me at KJ7VDP@outlook.com.

NY Times article provides insights into public land and access erosion that hunters and SOTA Activators encounter:
[It’s Public Land, but the Public Can’t Reach It.](#)

Josh-WU7H hits double Mountain Goat – by Darryl-WW7D: Josh, WU7H, earned his 2,000th point as an activator on a New Year’s Eve/Day double-activation.

Josh needed exactly 18 points to hit the landmark. So, we went out on New Year’s Eve and activated South Lookout Mountain (W7W/WH-206) for 6 points, plus 3 winter bonus points times two (2022 and 2023). Exactly what he needed.



Our adventure started with a three-hour drive north towards the Canadian border to the Glacier Creek Sno-park in Washington State. There we unloaded a couple of snowmobiles and motored about an hour in the general direction of the summit on a forest service road that frequently was covered in actual snow. As we gained elevation, the snow became “full time.” The best-case scenario would be snowmobiling right into the activation zone on groomed snowmobile trails. Alas, there was no evidence of trail grooming whatsoever.

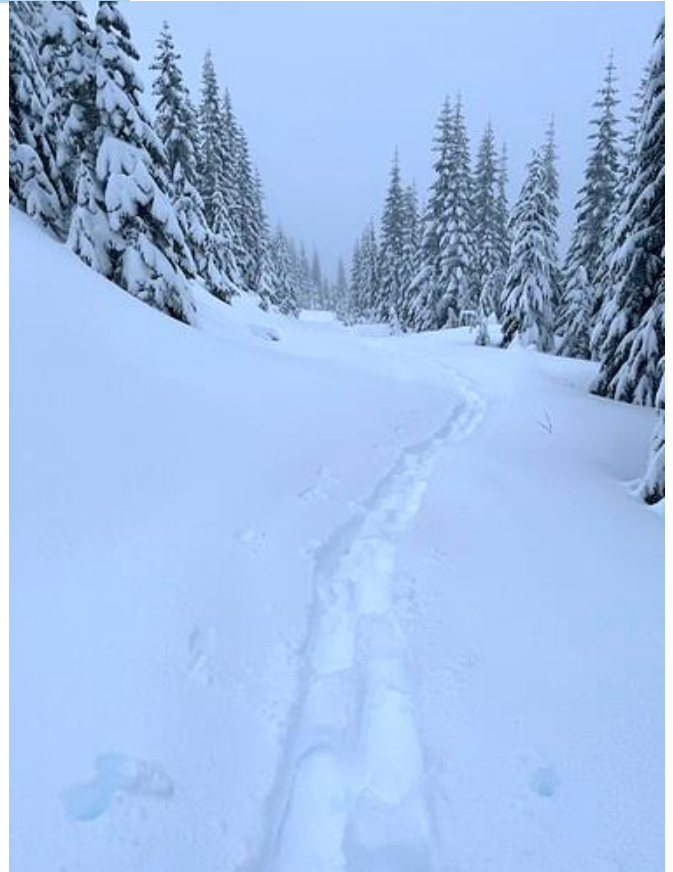
We proceeded until the snow got too deep for our machines and we were taking turns getting stuck. So, we turned the

machines around, strapped on snowshoes, and hiked the final 2.3 miles and 1,100’. It was something of a struggle in the deep snow.

We arrived with about 25 minutes remaining for a 2022 activation. Josh set up his KX2 and random wire antenna while I pleaded and begged on 2m simplex for QSOs. We did manage to work a few folks on 2m, but a couple of CQs on 20m provided Josh with a great big New Year’s Eve pile-up, that included a couple of S2Ss for both of us.

At the stroke of Midnight-Zulu, Josh started again and worked a handful of stations—enough for an activation with points—and handed the paddle to me. Altruistic? Yeah, sure. But really, Josh decided he needed to get some feeling back in his fingers before things got ugly. Besides the cold, we were in something of a snowstorm. I worked the pile-up until nobody replied to my “QRZ?” We packed up and high-tailed it out of there, back to the machines, and motored back into the rain. It took a couple of hours to get back to the truck and trailer; we arrived cold, wet and pretty much exhausted.

Several hours later, back at my house, we cracked a couple of local winter ales and toasted our adventure and Josh’s Double-Goat. Josh was keen to point out that we didn’t do this because it was easy. No...we did this because we THOUGHT it would be easy.



Congratulations, Josh!

Things to do this Winter – WRITE UP SOME TRIP REPORTS

Most folks will be activating a bit less this winter – so why not write up a trip report or two to help your fellow activator find their way to a new peak? The PNW is fortunate to have one of the best places to post trip reports: pnwsota.org. "Blogs" are for summit activations – or something you know about a particular summit, even if it's just that it's posted "No Trespassing." A title with clarity for summit name and state/province is a useful way to start, as is the month and year of activation. There are many summits with the same name, and the state can help ease confusion, and the month indicates the season and the year would tell folks if this is recent information or something that may not be current. A descriptive trip report title might be, "Larch Mtn, WA | October 2019."

The content of a trip report should help others activate the peak. Directions to the trailhead, condition of the road, necessary permits are a great start. Then information about the trail distance and elevation gain, any issues with following the trail, and what one will find in the activation zone for antennas, views, etc. Contact the Newsletter editor for more information about contributing Trip Reports.

Things to do this Winter – LEARN CW

[CW Academy](#) and the [Long Island CW Club](#) are two often recommended resources for learning CW.

Things to do this Winter – BUILD A KIT

A kit could get you a complete transceiver or maybe a dummy load/Wattmeter to see what your rig puts out. There's nothing more ham-like than assembling your own gear – and few things more SOTA-like to use it in the field.

Things to do this Winter – MAKE A NEW ANTENNA

End-fed half-wave, trapped dipole, or a 2m Yagi? Tune it with Nano VNA, antenna analyzer or SWR meter.

Things to do this Winter – FIX SOMETHING

Around here I am caught up on repairing fiberglass poles (I always buy two to hopefully make one from two that are broken) and there are antennas to fix and a few power cables to assemble.

Things to do this Winter – LOG YOUR CONTACTS!

Let's get caught up this winter and have our SOTA log reflect our SOTA activity. This goes for Chasers too!

Things to do this Winter – READ THE MANUAL

For all those times when you can't find the right menu setting in your transceiver, or can't turn off "LOCK" on your HT, or want to change your CW speed – maybe you (and I) will sit down with the radio manual and practice a few things.

Things to do this Winter – UPDATE YOUR PNWSOTA BIO

Not that many folks read the bio notes you provide when signing up for <http://www.pnwsota.org/>. HOWEVER, many of you have something like "Just getting started!" that you entered five years ago. Make it real for your activity today!

Guy n7un/nSOTA says that this is a great mountain wx forecast tool, particularly for summit wind forecasts:

<https://www.mountain-forecast.com/peaks/Larch-Mountain-Clark-County-Washington/forecasts/1061>.

Battery Fires Are Making Electric Cars and Bikes Look Bad – be safe with your radio power too:

<https://www.youtube.com/watch?v=R2oMkXB2xQE>.

Choosing A Field Radio: How to Find the Perfect Transceiver for Your Outdoor Radio Activities

<https://qrper.com/2022/07/choosing-a-field-radio-how-to-find-the-perfect-transceiver-for-your-outdoor-radio-activities/>.

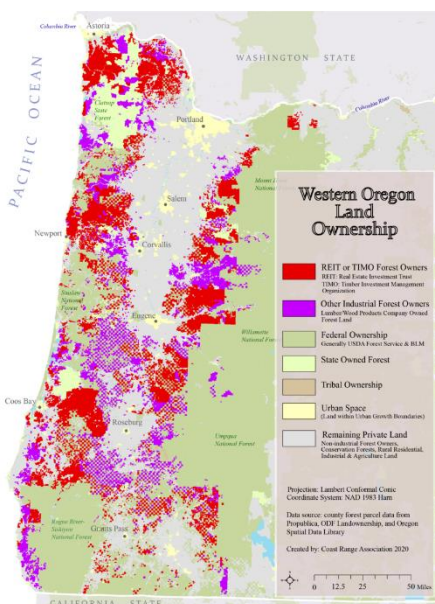
SOTA Goals and Achievements – most folks are satisfied with the “standard” issue SOTA recognition of Mountain Goat and Shack Sloth, but there may be other ways to make your SOTA activity your own. Your goals could include doing an activation by bike or by snowshoe, making an alpine climb of a ten-pointer, becoming a SOTA Elmer to newbies, or [building and using a radio on a summit](#). If you are thinking of goals for 2023, include SOTA! Here are some ideas:

- Elliott-K6EL is on his way to make 35,000 S2S points.
- Bill-WJ7WJ has activated over half of the W7O/NC summits and is working on doing an activation from each W7O county that has a SOTA summit.
- Rob-AE7AP achieved a long-term SOTA goal in 2022 by activating the “most remote” summit in Idaho. It was preceded by two Wyoming “most remote” summits in 2017 and a Montana “most remote” in 2015.
- Amy-AG7GP has been working towards 200 uniques and 100 First Activations.
- Greg-K7AGL has been working diligently on his Mountain Goat with only UNIQUE summits.
- Etienne-K7ATN set a goal to activate ten percent of the nearly 2000 summits in W7O – achieved in 2020.
- Kim-K7IMA boosted her score in 2019 with a flurry of activations to (briefly) be in the top ten Activators in W7O.
- Rusty-K7RMO did his Shack Sloth all V/UHF, and Rich-N4EX did his Mountain Goat all HF.
- Andrew-KD5ZZK made Mountain Goat in 2013 using SSB only – a substantial achievement for its time.
- Bill-N0DNF’s immediate SOTA goal is Goat by July 2023. Currently at 746 points so it should be doable!
- Tim-N7KOM achieved "Mountain Sloth" in 2022 with 1,461 Summit-to-Summit points. He made 811 CW QSOs in 2021 and 2022 and is looking to make an additional 1,000 CW QSOs in 2023.
- Roland-K7FOP has Mount St. Helens and Mount Adams on his to-do list, but activating with friends is always his real priority for SOTA fun.

International Operating – For those thinking of SOTA activations along with international travel, this QST article [HERE](#) would be a good place to start. There can be great rewards in taking portable operation to an entirely new locale and potentially meeting up with other hams that share our enthusiasm for SOTA but not our language or culture.

To begin, know that each country would have their own rules regarding operating, callsigns to be used, and documentation requirements. Some countries require a formal license application, might restrict what radio equipment is “imported” and others may not have any kind of reciprocity arrangement. For most of Europe under CEPT, a US Extra Class license is necessary – full privildges here are thus full privildges elsewhere.

Here’s information that should help our VE7 neighbors: <https://www.rac.ca/operating/operating-internationally/>. This reference from the ARRL has some insights: <http://www.arrl.org/us-amateurs-operating-overseas> and here are some useful details from Wikipedia: https://en.wikipedia.org/wiki/Amateur_radio_international_operation.



Western Oregon Land Ownership – Many SOTA summits are on private timberland – some is conditionally accessible while over time some peaks have been essentially “closed” to our particular recreational activity. Understanding ownership and the “checkerboard” of private/public lands can be insightful.

[Overall Western Oregon Land Ownership Map](#)
[County by County Land Ownership Maps \(Western Oregon only\)](#)

Comic from <https://dashtoons.com/>



Q.R.Oscar and Q.R.Pete by Wayne A. Burdick, N6KR

It happened in September, on a cold and stormy day;
The mother of all contests was now nearly underway.
Before the day was over, ears from Bonn to Surinam
Would hear a battle rage between two different breeds of Ham.

Oscar, a distinguished man of wisdom (and of wattage),
Lit his pipe and surveyed his substantial shortwave cottage.
"Let the games begin!" he cried, aglow with pride and power;
And with a grin he swung his twenty-ton rotating tower.

Not far away a man named Pete crouched low inside a tent, His
sleeping bag was soggy and his penlight made him squint, yet
as he worked he smiled, twisting wires, tweaking pots, and
soon his rig was bristling with two hundred milliwatts.

Just after zero, zero, zero, zero (UTC),
Both men tuned up on twenty and they listened carefully,
But neither could believe his ears, and both began to pray:
On 14020 they heard "DE Zed-A-1-A".

Now Oscar moved up five Kc with dignity and class;
He gripped his paddle deftly and prepared to pound some
brass. The heterodynes were screeching, hungry birds caged in
a zoo, but he could snag Albania in one call--maybe two.

Pete took quite a different tack. He scanned for open space,
Listening to the bedlam with a frown upon his face;
He tugged his random wire to improve its ERP,
And finally, he found a place to sign "slash QRP."

Well Oscar's monster, fire-breathing signal was the best,
But Zed-A-1-A knew him, and felt sorry for the rest.
With this in mind he listened for the meager and the brave, and
ignored the QRO boys (who began to rant and rave).

Soon the DX station heard a wimpy "QRP";
He fired off a "599" and waited patiently.
But Pete was eating trail mix, now, and feeling quite dejected;
Being called by rare DX was not what he expected.

Oscar heard the call and moved in closer for the kill,
Yet when he thought his turn had come the Q-so lingered still:
"So how much are you running?" "A quarter watt or less."
"A homebrew rig?" "My own design, or mostly, I confess."
"Well, I'm a QRP fan, too; good attitude to foster,"
Then ZA1A signed and said, "OK, it's your turn, Oscar."

On Sunday Pete packed up his gear, his low-watt mission done.
(Birds who'd perched upon HIS wire would live to tell their
young.) Pete surveyed the hills and fields, a wondrous sight to
feast on; Then he stuffed himself into his trusty, rusty Nissan.

And Oscar? He had ruled the night with clear, demonic vision;
Slicing QRM with his unleashed atomic fission.
But near the stroke of twelve, he cut his drive by two dB,
Then worked some rare DX and said, "Not bad for QRP!"