



# Parks on the Air <sup>SM</sup>

# Activator Guide

Summer 2020 Edition

Parks on the Air <sup>SM</sup> (POTA) is an ongoing program, it encourages amateur radio operators in developing their skills, fostering community and demonstrating the hobby to the public.

There are thousands of parks available in the program and each will present a unique experience. Operating styles and seasons will also affect the nature of your experience.

Good luck!



## Table of Contents

Disclaimer.....	4
Before you go .....	4
Read the POTA rules.....	4
Read the POTA FAQ Section .....	4
Register on the POTA website .....	4
Keep your QRZ.com profile up to date.....	5
Your station's footprint .....	5
Backpacking station .....	5
Picnic table station.....	6
Mobile station .....	6
Campground station .....	6
Large field-day station.....	6
Researching and selecting a park .....	7
Easy and low difficulty activations.....	8
Moderate difficulty activations.....	8
High difficulty activations .....	8
Failure to Plan .....	8
Get your gear ready .....	9
Advertise your planned park activation.....	10
Setup at the park .....	10
Check in .....	10
Safety.....	11
On the Air.....	11
Ready, set, go! .....	11
Exchanges .....	11
Search and pounce.....	12
Running .....	12
QRT and packing up .....	12
Break down your station .....	12
Safekeeping of logs.....	13



Check for left items .....	13
After your activation.....	13
Repair your gear.....	13
Process your logs.....	13
Follow up on social media .....	14
Hints for maximizing your QSOs.....	14
Multiple operator activations.....	15
Park permits.....	15
Logging.....	15
Multiple overlapping park references .....	15
Logging of multi-location activations .....	16
Special considerations for trails .....	16
National Historic Trails (NHT).....	17
National Scenic Trails (NST) .....	17
Linear Trails .....	18
Resources .....	18
Glossary.....	19
Feedback.....	19
Acknowledgments.....	19



## Disclaimer

This document is intended for amateur radio operators interested in participating in the Parks on the Air <sup>SM</sup> (POTA) program. It is not meant to be a complete checklist or procedure.

Avoid relying solely on GPS to navigate. Use paper maps and check with park staff for current conditions.

## Before you go

### Read the POTA rules

POTA is about having fun, but we do have some rules. Make sure to read the rules and understand them, they are available on the website <https://parksontheair.com/rules>.

If you have questions, please engage the other POTA community members. POTA is available on social media at Facebook (<https://www.facebook.com/parksontheair>) and Slack (<https://parksontheair.slack.com>). There are many excellent videos available on Youtube as well.

### Read the POTA FAQ Section

The FAQ section contains a lot of answers to common questions about POTA. Please take the time to read this webpage <https://parksontheair.com/faq>.

### Register on the POTA website

Create an account on the POTA website. It is best to use one of your existing accounts on Amazon, Facebook or Yahoo when signing in. The POTA system does not store any passwords.

Once you have your account established you can add any callsigns to your account you've previously held, including 1x1 calls. If you use modifiers add them to your account as well. For example, N3VEM activating a park in Canada would add VE3/N3VEM.



## Keep your QRZ.com profile up to date

Not everyone uses social media and won't know anything about you or your station. Sign up for an account on QRZ.com and enter some information on your profile. If you don't want to receive paper QSL cards make a statement to that fact on your QRZ.com profile.

## Your station's footprint

The size of your station will determine the impact you have upon the park. Be courteous to other park patrons and avoid setting up your station in ways that block or restrict their activities. Make sure your planned footprint is acceptable to the park staff. For example, many parks prohibit wires or ropes to be put into trees. Don't get a fine or a ticket.

### Backpacking station



This is a minimal station: a backcountry hiking with a small QRP radio. Here W8MSC is at a backcountry shelter, Isle Royale National Park, K-0039. Photo courtesy of W8MSC



## Picnic table station



K8ERS activating River Raisin National Battlefield Park, K-0714. Photo courtesy of W8MSC

## Mobile station



## Campground station

Reserving a campsite may be a good way to operate after a park's normal closing time. Observe quiet hours and don't disturb other campground users.

## Large field-day station



A large multi-operator station will probably require a permit or group camping reservations.



W8RP operating from a cabin at Brighton Recreation Area, K-3384. Photo courtesy W8TAM.

## Researching and selecting a park

Researching parks that you've never been to can range from being a simple matter all the way to an exhaustive endeavor. The more information you gather prior to travelling to the park increases your chance of success.

The POTA website contains all the parks available in the program. Use the "Activator Locator" on the POTA website to find parks near you, also the "Parks by Location" pages can give a list of parks in your location.

Estimate the county and grid squares where you expect to operate—some hunters will ask for them. They will also be useful for your logs and creating LOTW stations.

Not all parks are equal in terms of accessibility or difficulty. Administering agencies will differ by location. Some may not be as amenable to amateur radio as others.

Check current conditions at the park. Weather, construction, detours, etc. Check with park staff if you have questions. Some parks have entrance or use fees.

Consider other on-the-air activities: Check the WA7BNM contest calendar website at [www.contestcalendar.com](http://www.contestcalendar.com) to see if there will be any contests that may impact your chosen bands or modes. Remember, POTA is not a contest—you may wish to avoid major contests and utilize the WARC bands, other modes for HF, or use VHF/UHF, or satellites.



## Easy and low difficulty activations

Go to parks that others are already familiar with-- ask other activators for recommendations about parks in your area.

Join another experienced POTA activator on an activation and learn from them. POTA activators: take your new club members out to a park and elmer them in portable ops!

## Moderate difficulty activations

Scout the potential locations for your station. Use Google Earth or similar tools to help choose areas within the park that would be suitable for your station. Compare the overhead view with maps of the park to locate parking lots, picnic area, campgrounds or other such structures. Check with park staff if there are any seasonal closures or limitations.

## High difficulty activations

Some parks in the program such as national or state forests may be comprised of many parcels of land, with limited access or signage. To determine boundaries, you may need to use detailed maps available from the park's managing agency, property plat maps, or electronic ArcGIS maps. GIS files may be available from state government agencies. Acquiring or using GIS data is an advanced skill and outside the scope of this document.

Some parks may be so small as to limit your station to a very small footprint. Coordinate with park staff to select a location.

Seasonal closures may limit or prevent access. Check with park staff to inquire if the parks are still accessible, even if facilities have been shut down, or if any roads or entrances are blocked.

Permits may be required—submit with plenty of time for park staff to review your application.

Be willing to take "NO" for an answer. Some parks may not approve your permit.

## Failure to Plan

Do no or minimal research and risk being turned away because of season closures, restrictions, or construction. This method will give you experience, but probably not the kind you were hoping for.



This park was closed for seasonal bird nesting.

Photo courtesy of WT8J

## Get your gear ready

Make sure your vehicle is well maintained and you have the ability to access your intended parks.

Have paper maps and a compass to navigate in case GPS is not accurate.

Take manuals for your radio and other gear. Have them on printed paper and in PDF versions when possible.

Take printed operating aids: band plans, park maps, grid square map, ARRL section map, etc.

Have an accurate watch or clock and make sure it is synchronized with the correct time. Accurate time is critical to correct logging. This is especially true when logging P2P contacts and at the end of one UTC day and the beginning of another UTC day. Make sure your computers are correct as well.

Double-check your gear. Make sure you have everything. Make checklists and use them! Bring spares where possible.

Make sure your batteries are charged.

Be ready to engage with non-hams and park staff. POTA encourages its activators to be ambassadors for the hobby. Your activation may be someone's first exposure to amateur radio. Handouts such as the ARRL "What is Ham Radio", QSL cards, etc. are good ways of providing information. Be aware though some parks may consider distributing handouts to be an activity requiring a permit. Be discrete and use common sense.



Consider personal comfort items. Bug spray, sunscreen, water, snacks; hats and seasonally appropriate clothing. Head lamps are excellent for hands-free lighting.

Double-check your gear. Do you really have everything?

## Advertise your planned park activation

Advertising your planned activation will generate more QSOs for you and more parks for the hunters to chase. Posting on the POTA social media sites and on the POTA schedule page with details about your station, approximate times, etc. will help the hunters plan their schedules too.

Engage with others on POTA social media on Facebook and Slack.

You can use local repeaters to announce your activation once you get to your park, however contacts via repeaters do not count for credit. Use simplex modes if you want to use VHF or UHF bands as part of your activation.

## Setup at the park

### Check in

Check in at the park with staff, if possible. See if there are any changes to conditions and/or limitations to access your proposed operating location. A brief chat describing your amateur radio setup with a park ranger upon your arrival may save you an interruption later. You may also find out about unadvertised locations for overflow parking, group camping spots, or maybe even receive special access beyond what the general public would normally receive!

Verify with local maps or online tools the actual grid square and county.



## Safety

Mark your guy lines, stakes, feedlines, etc. with high-vis (florescent) flagging tape or small traffic cones. It helps people from tripping on your gear, as well as making it easier to see when you are operating at night.

Be aware of your surroundings. The weather can change quickly: be ready to shut down your activation if conditions threaten your safety.

Darkness can also make packing up challenging. Use headlamps to keep your hands free.

Animals may be interested in food: remove the temptation and store your food away. In areas such as campgrounds animals can be acclimated to humans, put your gear away to avoid chewing damage or being carried off.

## On the Air

### Ready, set, go!

Have a snack and visit the restroom. You might not have another chance for a while!

Verify that your watches or clocks are set correctly.

Make sure you have your logging software up and running and have backup paper logs and pencils ready.

## Exchanges

POTA does not require a formal exchange, though many activators will wish to receive real signal reports, names and locations.

P2P contacts will need each activator to provide their park reference to each other. Do make a point of recording the other activator's park reference.

You may wish to give your park information as part of your CQ, or as part of the QSO. Giving your location helps hunters with beam antennas to rotate for a better signal.



## Search and pounce

Tune around and test your gear. See if you can work another station or two. This is a good time to find other activators and get some P2P contacts!

## Running

POTA does not have recommended frequencies. Find an open frequency, in a portion of the band for which you have privileges.

Start calling "CQ POTA"! CW ops should send "CQ POTA CALLSIGN" for the reverse beacon network to recognize your call.

Self-spot on the POTA network at <http://pota.us> if you have access to the internet. Post to your social media pages to announce you are on the air, and what frequency you are on. Try to stay on the same band at or near your spotted frequency and give the hunters time to find you.

Control your pile-ups. It's your activation, so you call the shots. Run by numbers, call for QRP, other parks, YLs, mobile stations, etc. Listening to experienced operators will give you an idea of how to handle the hunters. If things get busy consider using an abbreviated exchange and keep the chattiness to a minimum—remember, POTA does not require any specific exchange, so long as you log your contacts.

## QRT and packing up

### Break down your station

After you are done with your activation pack up your gear in an orderly manner.

Put all your items back where they belong so you don't lose anything. Don't be tempted to take shortcuts when packing up. "A place for everything, and everything in its place".



## Safekeeping of logs

Computers crash or run out of power. Use your logging software to save your contacts to a cloud-enabled folder. Copy your log file to a USB drive for backup.

Take pictures of each page of your paper logs with your camera or smart phone. Paper doesn't crash, but it can get ripped, water-soaked, or lost!

## Check for left items

Check your operating area after you are done. Pick up your feed lines, radials, etc. Leave the park in as good of condition as you can. Following "Leave No Trace" principles works well in amateur radio as well as camping.

## After your activation

### Repair your gear

Clean and replace any worn gear or broken items before you put your gear into storage.

### Process your logs

Process your log files and send them to your area representative in a timely manner. The hunters will appreciate you.

LOTW users should create a station in TQSL for your activation with relevant state, county and grid.

Upload your logs to LOTW. Your activation may be someone's missing state for WAS or a band or mode specific award.

Your logs are precious! Store them in a safe place: Paper logs can be filed, and electronic logs can be stored on a cloud service such as Dropbox or Google Drive.



Watch your email: Some chasers may send you electronic QSL cards. Be ready to respond with paper QSL cards or requests for LOTW specific state, band, or mode confirmations. If you don't do paper QSLs make sure you note this fact on your QRZ.com page.

## Follow up on social media

You may find talking about your activation is just as fun as operating. Share your experience with other POTA members by posting pictures and summaries to social media or blogs.

## Hints for maximizing your QSOs

Once you get on the air and make your first contact ask the hunter to spot you. Ask again later if you think any previous spots may be getting stale.

Call "Last Call" a few times before QSY or QRT. You may pull in some stations that may be waiting for the bands to improve. Work them to the best of your ability, some may get away.

Listen for "Park to Park" in response to your CQs.

If you work a special event station or a 1x1 station ask for the operator's personal callsign.

Some hunters may give you a club callsign as well as their own callsign.

Double-dip when in areas which qualify for other OTA programs. Make sure you know the rules for other programs before calling for them. Some programs may not be compatible with your station or your style of operating. Some other events such as QSO parties may prohibit an activator from self-spotting, or other programs such as Summits On The Air (SOTA) must be done from a human-portable station. Don't jeopardize your other activities by failing to understand their rules.



## Multiple operator activations

### Park permits

Large field-day style stations will likely need coordination with park staff. Permits may be necessary for towers or generators.

### Logging

POTA logs use the ADIF log format for records. The current version is available at the website [www.adif.org](http://www.adif.org).

The ADIF specification allows the callsigns of the both the on the air station and operator to be recorded in a QSO. Your logging software needs to support multiple operators. Make sure your operators log in and log out of the logging software to give proper credit to the right operator.

Once a logfile is scored by the POTA system an operator will receive credit for any QSOs they make as well as the club call receiving credit.

The on the air callsign is to be recorded in the field "STATION\_CALLSIGN". This is the callsign given over the air. Use the ADIF field "OPERATOR" for your personal callsign.

### Multiple overlapping park references

Activators who participated in the ARRL 2016 NPOTA activities might remember "two-fers". Simultaneous activations of multiple references ("Multi-loc" or "two-fer", etc) are possible with POTA. This should be considered an intermediate level skill as putting a multi-loc on the air may generate significant interest by hunters. Activators should be comfortable with running pile-ups and proper logging of single references before attempting one.

- All standard POTA rules apply to park boundaries for each reference area being activated. It is the activator's responsibility to determine that operating location for their activation is valid for each reference area being activated.
- Separate log files must be submitted for each of the references being activated.



## Logging of multi-location activations

Your logging software will probably not support more than one POTA reference, so additional work will be required on your part to create separate log files for each of the park references.

You may wish to create one log file and create multiple copies of it. Doing so will require text file editing of your ADIF file with a global search and replace function changing all occurrences of one park reference for another.

Example: W0ZAP activating three historic trails, California NHT (K-4566), Oregon NHT (K-4576), and Santa Fe NHT (K-4579) would use PC logging software while at the park and record all their contacts with the first park. After the activation is over, use the logging program to generate an ADIF for the first park. Using notepad or similar text editor, search for the first parks' reference and replace with the second. Each QSO's ADIF field **<MY\_SIG\_INFO:6>K-4566** in the first log file would be replaced with **<MY\_SIG\_INFO:6>K-4576** and so forth.

Save the new file with a new filename as to not over-right the first one. Repeat for the third park.

Alternately an activator could record contacts in each park simultaneously, either on paper or in a separate instance of a logging program.

Once log files for each park is created, they would then be submitted to the area representative as normal.

## Special considerations for trails

Activating a trail takes extra creativity in locating your station. Do not block access to other users of the trail.

POTA allows an activator to be located no more than 100 feet from the trail in areas where parking lots or trailheads area available. Your station must be located completely within 100 foot of the trail.

Trails can be hundreds or even thousands of miles in length! There will be many possible access points.

Trails may pass through other POTA parks. Creative selection of operating locations may give you the opportunity to run two or more park references without moving!

Trails in the POTA program may exist in more than one state. Make sure you let your area representative know which state your activation took place in when submitting your logfile.



## National Historic Trails (NHT)

The National Trails System Act of 1968 classifies historic remnants of some trails for public use. These parks may be operated by state and local agencies in partnership with federal agencies. POTA considers these NHT locations as valid as these parks are authorized by federal law. As the historic trails do not have specific boundaries you will need to check for local city, county, or other parks that are certified by the NPS. The rounded triangle shields for the NHTs are copyrighted by the NPS and their use is only authorized for certified sections. Look for official signage to confirm the NHT(s) for your operating location.



## National Scenic Trails (NST)

In the United States, National Scenic Trails are authorized by the National Trails Act of 1968. These trails are recreational in nature—literally. They are designed for long distance hiking and backpacking. A famous NST is the Appalachian Trail. Others include the Pacific Crest Trail, Continental Divide Trail, and the North Country Trail.

POTA has less restrictive requirements on the methods that a NST may be activated as compared to the ARRL NPOTA 2016 event. You are welcome to activate an NST at trailheads or campgrounds, so long as your station is completely located within 100 feet of the trail.

NSTs may have an association separate from the federal agencies for administration of day-to-day operations and coordination with the various volunteer organizations. These associations have detailed resources available either on their websites or on their stores. The trails are under constant maintenance due to weather and construction. Check with the association for information on trail reroutes. Trail segments can be considered “Certified” when they meet criteria to become permanently designated as official routes. Certified sections of NSTs are excellent locations to scout for potential POTA activations.



## Linear Trails

Old railroad routes are being converted to recreational use. By their nature trails are more difficult to activate than a typical park. They are usually no wider than the original railroad right of way and have small or limited parking lots.

## Resources

Parks On The Air <sup>SM</sup> website	<a href="https://www.parksontheair.com">https://www.parksontheair.com</a>
Parks On The Air <sup>SM</sup> statistics	<a href="https://stats.parksontheair.com">https://stats.parksontheair.com</a>
Parks On The Air <sup>SM</sup> spots	<a href="https://pota.us">https://pota.us</a>
POTA Facebook	<a href="http://www.facebook.com/parksontheair">www.facebook.com/parksontheair</a>
POTA Slack	<a href="https://parksontheair.slack.com">https://parksontheair.slack.com</a>
Qrz.com	<a href="http://www.qrz.com">www.qrz.com</a>
Google Earth	<a href="https://earth.google.com">https://earth.google.com</a>
Trails50 website	<a href="https://www.trails50.org">https://www.trails50.org</a>
WA7BNM Contest Calendar	<a href="http://www.contestcalendar.com">http://www.contestcalendar.com</a>
ARRL	<a href="http://www.arrl.org">http://www.arrl.org</a>
Logbook Of The World	<a href="http://lotw.arrl.org">http://lotw.arrl.org</a>



## Glossary

Term	Definition
Activation	An activator will “activate” a park when they set up their station and make the required number of contacts.
Activator	The amateur radio operator located in a park.
ATNO	“All Time New One”, used to describe either the first activation of a park, or used by a hunter for the first time they’ve contacted a park (“Thanks for the new one”).
Hunter	The person trying to contact the activator. Synonymous with chaser.
Late Shift	An activation taking place after dusk or dark. In North America the late shift occurs between 0000 UTC and 1200 UTC
Location	A geographic container such as a state or province.
LOTW	Logbook of the world
NHT	National Historic Trail
NST	National Scenic Trail
P2P	“Park to park”, used to refer to a QSO between two activators. It can also be used when calling another activator.
Reference	The code used by POTA to uniquely identify a park. It is comprised of a prefix, followed by a dash, then a four digit number.

## Feedback

Send any suggestions you may have about this document, use the “Contact Us” link <https://www.parksontheair.com/contact>

## Acknowledgments

Thanks to all the activators and hunters that participate in the program.