# Parks on the Air



### Parks on the Air (POTA)

POTA is a 501(c)3 radiosport program that encourages communications to and portable operations from state, provincial and nationally managed public lands.

POTA has a large set of references and a short set of rules. You are welcome to join as an activator, hunter or both!

Over 500,000 unique hunter call signs

#### Park Counts

- US 11,870
- Oregon 353
- California 392
- Washington 314
- Idaho 347
- Nevada 109

### Hunting

Hunters search out activators and make a QSO. Can be done by scanning the bands (spin that dial) or going to a spotting page like <a href="https://pota.app/">https://pota.app/</a>

Hunters do not submit logs for POTA but should still log to their favorite logging program and upload to sites like QRZ and LOTW.

Hunters earn <u>awards</u> for unique parks hunted, DX, early/late shift, seasons, park-to-park, operator, and many more.

Hunting is great radio practice and a good way to meet people from all over the world. Contacts are easy and quick. Exchange call signs, and signal report.

## Activating

Choose a park. Bring your kit (radio, battery, tuner, antenna, etc.). Setup. Call CQ.

Where in the park are you activating? From vehicle? Park bench? Setting up with table/chairs?

All bands are available. POTA is not a contest. Use any simplex mode including satellite, FT8, etc. No repeaters.

It takes 10 QSOs during a UTC day to "activate" a park. That means, you can technically activate a park twice in an afternoon.

### Activating Cont'd.

Many activator awards available including number of parks, rover, DX, early/late shift, geographic, and more.

Research the park. Some have rules against antennas in trees and ground spikes.

Use Google Maps to help scout locations.

Spotting lets others you where you are and what frequency/mode.

Activators are responsible for logging and uploading to <a href="https://pota.app/">https://pota.app/</a> website. Upload those logs. That's how you and the hunters get credit and awards. Upload to QRZ, LOTW, etc.

### **Antenna Considerations**

- Antenna Types
  - Dipole (resonant, linked/trap)
  - Vertical
    - Requires counterpoise
  - Delta Loop
  - End-Fed (half-wave, random wire)
- Ease of deployment
  - Deployment options
    - End-fed in a tree
    - Mast
      - Height, weight, guy wires
    - Tripod
    - Ground spike

- Other antenna options
  - Mobile
  - o Yagi
  - Hexbeam
  - Magnetic Loop
  - Moxon

### Coax

Bring some.

Consider deployment. Heavy coax impacts a hike to an activation spot.

High visibility coax is helpful for you and others who may wander through.

Chokes are good.

Connectors and adapters depending on antenna and radio choice. SMA, PL259, BNC.

### Radios

Bring a field/portable friendly radio. Taking your \$5,000 Elekraft may not be the best choice.

Are you operating QRP or 100W?

<u>FT-891</u> is a very popular option. Adjustable to full 100W, digital friendly. No tuner so would need to add or have resonant antennas. Basic display, no waterfall.

<u>Icom IC-705</u> is a popular 10W QRP radio. No tuner. HF/VHF/UHF all mode. Nice display.

<u>Xeigu G90</u> (20W), <u>X6100</u> (10W) and <u>X6200</u> (8W) are popular QRP radios as well. Excellent internal tuner on both. External 100W amp available. Very portable with small screen and waterfall.

Lab599 TX-500 s a rugged 10W option. No tuner.

### Radios Cont'd.

Elekraft KX2 and KX3 are both popular 10W options.

Icom 7300 and Yaesu FT-991A are popular options. Less portable and more weight than other options.

Have a good carry case plan. Harbor Freight Apache cases are popular. <u>Armorloq</u> rails and a manpack are a nice option.

Bring appropriate cables for power, tuner, coax, digital, etc.

### Power

LiFePO4 battery of appropriate size for activation. More amp-hours means more radio time but also more weight. 100W uses battery quicker than 5W or 10W. Charge it!

Operating with solar? Make sure you have all connections and chargers.

Bring appropriate cables.

Generator is OK for POTA, not for SOTA.

### Miscellaneous

There are other things you may want to bring.

- Food and water
- Cover to protect from sun, rain, etc.
- Paracord
- Extra coax, power, etc.
- Tools to fix coax, power, etc.
- First Aid kit
- Flashlight
- Extra clothing
- Table and chairs
- Copy of FCC license

### Logging

Efficient logging is key to working in the field. Paper or electronic logging each have their benefits.

Paper logging won't run out of battery. Bring a notebook and a few pencils and you're set. Paper logs need to be converted to electronic format so they can be uploaded.

Electronic logging has many options. You can use the pota.app site with their new manual logging entry feature, app on your phone/tablet like <u>HAMRS</u> or an application on a laptop.

### Logging Cont'd.

#### <u>HAMRS</u> (\$1.99/month, \$19.99/year)

- iOS, Android, Windows, MAC, Linux
- Supports POTA and SOTA
- QRZ upload
- Rig control using FLRIG
- Log sync between devices

#### Smart Logger (Free)

- iOS, Android, Windows, Mac, Linux.
- Sync between devices.
- Offline mode.

#### Ham2k Portable Logger (PoLo) (Free)

- iOS, Android
- Supports POTA and SOTA
- Field Day
- Winter Field Day
- Open Source

#### World Radio League (Free)

- iOS, Android, Web
- POTA/SOTA
- Rig Control
- Log Sync

### **Spotting**

Hard to spot before you go as you don't know what frequency you will be using. You can schedule an activation on <a href="https://pota.app/">https://pota.app/</a>. Use social media (Facebook, Slack, etc.) to announce. Get more QSOs

If you have internet at the park, you can live spot at <a href="https://pota.app/">https://pota.app/</a>.

Without internet, you can spot using **APRS**. Supports POTA and SOTA.

Another spotting option is <u>SOTAMĀT</u>. This is an Android and iPhone mobile app that will generate FT8 tones and send your spotting information via FT8, FT4, PSK31 or RTTY. Tune to frequency, key mic, play tones from phone app.

Get a hunter or buddy to spot for you.

### Calling CQ

SSB: CQ POTA CQ POTA This is K7AKT CALLING CQ POTA at park US-0000

CW: CQ POTA K7AKT K7AKT US0000 K

Utilize a voice memory keyer. This makes it easy to record your CQ message then just press a button to call CQ. Don't use during a pileup or between QSO. Good for times when you're working to get noticed on someone scanning the bands.

After the QSO, it's popular to just say QRZ. A better way would be "This is K7AKT QRZ" or maybe "QRZ. This is K7AKT". You can even mix it up with "QRZ. This is K7AKT at US-0000". The idea is to be consistent. End the QSO the same way and it will help with your hunters. Also, giving out the park every QSO or two helps the hunters.

Watchf or park-to-park. You get hunter, they get hunter and you both get activation QSOs.

### **Basic POTA Rules**

- 10 QSO to activate
- Activation day is 0000 through 2359 UTC. 5 QSO then crossing UTC means no activation.
- All equipment and operator must be inside the park boundary
  - Within 100 feet for trails, rivers

### Other thoughts and links

- Something to hand others helping them understand what you're doing
  - What the Heck Card
  - https://docs.pota.app/assets/documents/brochure.pdf
- Be courteous to other park visitors and staff.
  - Follow any ranger or staff instructions
  - People are curious (are you talking to aliens?)
- Leave no trace
  - Take lines out of trees
  - Pick up trash (even from others)
- Read the POTA rules and documentation
  - O Docs Home Parks on the Air Documentation
- POTA Book
- Watch other operators (K8MRD, KB9VBR)
- <u>Fast Log Entry</u> (FLE) (Free)
  - Quick and dirty text logging