

NEW
FOR
2020

PREVIEW SAMPLE

Successful

POTA

The WV1W Illustrated Guide to
Parks On The Airsm
by
Don Dickey



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This book is dedicated to the volunteers
who make POTA work.

The author would also like to thank
the trusted friends who helped with
tips and suggestions to improve the
book during its creation and evolution.

Visit the author's website:
wv1w.us
for color photos and more.

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Portable Station at a Park

Chapter 1 – Background

June 2019: I have been a licensed amateur radio aka “ham” operator since 1975. Likely with many others, hobbies ebb and flow. Twelve years ago, I wasn’t on the air much and donated my Yaesu HF station to the Red Cross. For reasons I have yet to discover, the ham bug bit me again, and I ordered a new radio for myself for Fathers’ Day. I wanted to be able to enjoy it outside on the deck in our backyard as much as in the shack, which led me to choose the Yaesu FT-891. I will share the reasons for this decision later.

Before even ordering the rig, I had been busy getting an antenna up and ready, a very simple center-fed 80-meter dipole, made from materials already on-hand. I had a good bench supply for the shack and a 12-volt battery from a weedwhacker for portable power. The afternoon the rig arrived, it took less than a half hour to put it on the air. Most of that time was soldering Powerpole® connectors onto the power cord.

My first QSO with the new rig was with long-time friend Chuck, K1DFS. After over a decade off the HF bands, I was like the proverbial kid in a candy store. A few days later I met Chuck and Fred, W1CKV (now SK) at a local park for coffee. The timing was perfect as there was a U.S. contest running called 13 Colonies at the same time our neighbors to the north were celebrating Canada Day! Putting out about 25 watts powered by the small battery, we made ten contacts in as many minutes before switching into coffee club mode to catch up on each others’ lives since our last get-together over a decade ago.

My POTA journey began the following month on August 13 when I answered a CQ from Patrick Gearty (W0YES). He was operating at K-2497, Judge C.R. Magney State Park in Minnesota. I had never heard of POTA, and Patrick gave me a brief description and suggested I check it out.

Patrick and I have subsequently talked with each other several times, mostly on the air but a couple times by phone. This is what differentiates POTA from regular HF operation: you will likely talk with other POTA hams multiple times. Some contacts will be so consistent you actually expect to hear them every time you operate at or to a park!

Generally, I have found the folks doing POTA have better than average on-the-air manners. Sure, there will be an occasional operator who forgets to move off your calling frequency when tuning up, but these are, fortunately, in the minority.

Because over half of the contacts I make at a typical POTA activation are hams I've spoken with previously, I make a point to log their names and locations. That way I can reply to their calls in a more personal manner than is typical on regular HF operations. Unless you have an exceptional memory, electronic logging makes this possible even without internet access to QRZ.com, and I will discuss this later in the book.

There are a wide range of ways to operate POTA from just sitting in your car with a regular mobile setup to elaborate portable stations with more efficient antenna systems. I'll explore several of these options, and you can pick and choose which ones suit your personal operating style. Let's get started!

Chapter 2 – POTA Basics

POTA operators fall into two basic pools: activators and hunters. Operators who go to a park are called activators. The operators who contact parks, usually from home, are called hunters. Many activators also hunt parks as well, especially when the local weather is not conducive to being outside.

All POTA activities are run by volunteers, almost universally fellow licensed amateur radio operators. Anyone activating or hunting parks must give these folks the utmost respect for their tireless efforts in setting this system up and keeping it running. It has to be a labor of love, a very tedious one at that, when they have to process dozens of logs every week.

After reading the Rules and Frequently Asked Questions (FAQs), you begin your POTA journey by registering. All participants, whether activating or hunting, register at the official POTA website: parksontheair.com

Activators can then optionally schedule a POTA activity. After the activity has completed, the activator submits their log in the specified format to their Regional Coordinator. Hunters do not submit logs. Hunting is passive, meaning hunters get credit for contacting parks entirely from the activators' logs.

It can take some time for logs to be processed. The logs need to be scrubbed for dupes and entered into the online database. Remember, the folks processing POTA logs are volunteers! They have jobs and vacations like the rest of us to work around. If you want to help the process along, volunteer some of your time. I'm guessing they'll find something you can do to help.

Finally, check out all relevant guides at parksontheair.com under Help/Getting Started. These have useful advice not replicated in this book because it is updated as required.

Chapter 3 – POTA Activation Options

A POTA activation can be as simple as driving your car into a park and tuning your FM HT or mobile rig to a simplex frequency. This might work in a metro setting like Washington DC, New York City or Boston, but the majority of parks are in more rural settings.

It should be noted that not all parks are viable. Before planning a POTA expedition, you should begin by checking the POTA website for official parks near you. The POTA map tool make this process very easy. Note that each park has a unique identifier. Parks in the U.S. begin with “K-” followed by a four-digit number. You should write this down before heading out to the park!

Also note that the list of available parks is dynamic, meaning that new parks are sometimes added to the list. It’s great to be the first to activate a newly authorized park since hunters are attracted to them like moths to a naked light bulb in the dark.

Most people activating parks fall into two camps. One would include those with a mobile HF setup, on a car or RV, using a standard mobile antenna. HF antennas can be fairly tall. You can attach the antenna to the mount when you arrive so you’re not banging overhanging trees along the way.

The other camp uses a portable antenna of some type, hung from a tree or portable mast, ground mounted on a post or tripod, or secured to something else like a picnic table.

The type of operation you choose will likely depend on your physical ability and/or the time you allot to POTA. You might use a mobile setup for quick lunch break activations and more elaborate setups for a full day outings.

Chapter 4 – Rigs for POTA

Success feeds enjoyment. This is a basic premise of this book on POTA. If you are the type of person who relishes a challenge, you can take portable operations to the next level: SOTA, or Summits on the Air, where you typically hike up a mountain with ultra-light gear.

That said, I would discourage you from limiting yourself to low-power operation, usually referred to as QRP. I would pick a transceiver with a 100 watt output. If you feel the need for a challenge, you can always lower the output, but 100 watts is enough for consistently reliable communications even with the mediocre band conditions common these days.

An obvious option would be to begin your POTA journey with your current shack rig. This might be far from ideal if you have a large transceiver, but would allow you to get your feet wet without spending a large sum of money just to try it.

Looking at currently available new models, one stands out as the perfect POTA rig: the Yaesu FT-891. It is compact, covers 160 through 6 meters in all modes (including FM), has output adjustable from 5 to 100 watts, and is relatively affordable at around \$600 shipped. It also boasts one of the best digital noise reduction systems in any rig as of this writing.



Yaesu FT-891 HF Transceiver

If choosing a used rig, the Icom IC-706MKIIG would be a good choice. It is similar in size to the Yaesu above and might be found for around \$450 used.



Icom IC-706MKIIG
compact HF/VHF/UHF transceiver

While slightly larger, an Icom IC-7200 is another viable option:



Icom IC-7200
rugged HF transceiver with optional handles

The only major feature lacking in these three radios is a built-in antenna tuner. That's OK because external tuners typically have much better ranges of SWR they can handle as well as different antenna types like long wires. Plus, you can choose between a manual or automatic tuner. See the Useful Accessories chapter.

There are also low-power rigs like Elecraft's KX2 and KX3 and Yaesu's FT-817 / FT-818. Icom is now shipping the new IC-705 which is their first portable SDR rig. Again, I would caution you about limiting yourself with a QRP rig unless you plan on adding an amplifier to your kit.

Sample Pota Checklist

Transceiver
Transceiver Power Cord with Powerpoles®
Transceiver Hand Mic
Antenna Tuner with cables
Morse Key
Headphones
Netbook Computer with updated log
Clipboard with:
 FCC License
 Blank Log Sheets
 ARRL Band Chart
Pencils & Pen
POTA Sign with holder
12v Battery, charged, with Powerpoles® Pigtail
Battery Clips to Powerpoles® Pigtail
40/20m Linked Dipole
Dipole Support Rope with Throw Weight
Dipole End Ropes with Tent Pegs
Vertical Antenna with Loading Coils for 40m & 80m
Loading Coil Jumper
Counterpoise Wires
Tripod with Tripod Mount
Clamp Mount
Ground Pipe Mount
20-foot Coax Cable x2 with Barrel Connector
Antenna Analyzer, charged
Mallet
Leatherman Multi-Tool
Spares: antenna wire, crimp connectors, rope
Electrical Tape
Folding Chair & Folding Table
Thermos (with hot coffee) & Cup
Water Bottle (with fresh water)
Cap & Sunscreen
Bug Repellent



Parks On The Air can breathe new life into your amateur radio hobby! This book will give you the information you need to get started with this exciting new adventure. The great outdoors is ready. So, what are you waiting for?