

2016



National Parks ON THE AIR

www.arrl.org/NPOTA

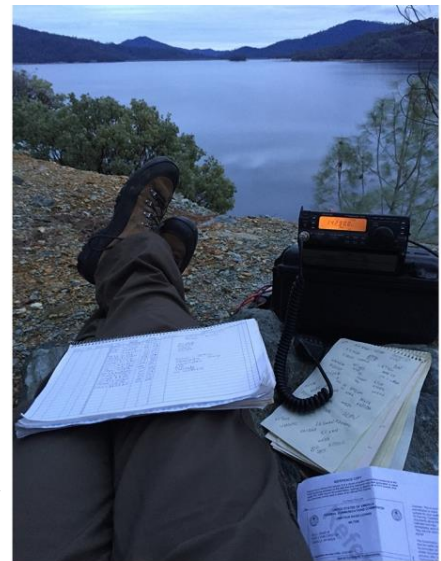
Amateur Radio's Contribution to the NPS Centennial

May 2016

Welcome to the premier issue of the National Parks on the Air newsletter. Each month, we'll be publishing news and updates for National Park Service staff and volunteers on how Amateur Radio -- sometimes called Ham Radio -- is highlighting the NPS Centennial and showcasing over 480 NPS units throughout the country in a way no other group can: real-time, person-to-person communication with NPS units to other hams across the country and around the world.

"NPOTA" was created by the American Radio Relay League, which is the national association for Amateur Radio in the United States. We've been

around since 1914, and recently celebrated our own Centennial. Amateur Radio is simply using two-way radio to communicate, without the need for traditional communications infrastructure, like cell phones or the internet. Hams are known for providing communications during natural disasters, but also take part in many educational and recreational activities.



David Noll, WL7DN, set up his portable ham radio in the Whiskeytown National Recreation Area, in California. (David Noll, photo)



Hopewell Culture National Historical Park rangers Melinda Repko (L) and Nissa Salvan (R) proudly display the NPOTA banner. Hopewell Culture purchased the banner to loan out to any visiting hams who transmit from the unit. Many thanks, Melinda and Nissa! (John Myers, photo)

Excitement within the ham radio community for the NPS Centennial is high; since January 1, hams have transmitted a radio signal from over 380 of the 484 qualified NPS Administrative Units, communicating with all 50 states and nearly fifty countries. Like birders and their "life lists," hams worldwide will try to "talk to" as many units on the NPOTA list as possible in 2016. Over 315,000 two-way radio contacts from NPS units have been made during the NPS Centennial so far.

Learn more about Amateur Radio at <http://www.arrl.org/what-is-ham-radio>.

Numerous NPS units have embraced NPOTA as a fun, creative way to bring extra attention to their parks during the Centennial. Thanks to these NPS units for supporting NPOTA:

- Yosemite National Park
- Dry Tortugas National Park
- Biscayne National Park
- Springfield Armory National Historic Site
- Jefferson National Expansion Memorial
- Marsh-Billings-Rockefeller National Historic Site

- Petrified Forest National Park
- Pipe Spring National Monument
- Montezuma Castle National Monument
- Tuskegee Airmen National Historic Site
- North Country National Scenic Trail
- Homestead National Monument
- William Jefferson Clinton Birthplace National Historic Site
- Dayton Aviation Heritage National Historic Park
- Saint-Gaudens National Historic Site
- John Muir National Historic Site
- ...and many others!

A Message From an NPS Superintendent

"North Country National Scenic Trail is extremely excited to get our nation's longest scenic trail on the ARRL map! We anticipate dozens of NPOTA activators/operators positioning themselves along our 4,600 mile-long trail, and linking with radio operators all over the world during our Centennial year. I highly encourage other components of the National Park System to do the same. I'm happy to share our enthusiasm for this ARRL project. Just call or email me!"



Mark Weaver
 Superintendent, North Country National Scenic Trail
 (616) 430-3495
mark_weaver@nps.gov



Ranger Paula at the Lincoln Boyhood Home got on the air for National Parks on the Air! (DX Engineering, photo)

NPOTA FAQ

Q: What certifications do Amateur Radio operators have?

A: Amateur Radio operators are licensed by the Federal Communications Commission, and are required to pass an exam which demonstrates knowledge in electronics theory, along with rules and regulations. There are over 750,000 licensed Amateur Radio operators in the US, an all-time high. Amateur Radio operators are chartered by the FCC to be a public service; they are non-profit and prohibited from receiving any kind of payment for their services.

Q: Why are Amateur Radio operators doing NPOTA?

A: Both Amateur Radio and the National Park Service have been around for over 100 years. Both serve to raise awareness of and appreciation for a natural resource: the radio spectrum and important natural and historic areas of our country. Both are used by hundreds of millions of people each year, both are part of the natural world, and both require care and supervision. We are thrilled to use our “natural resource” to help promote another. It’s also fun to take radio equipment and transmit from different geographic locations.

Q: Will Amateur Radio interfere with communications in my park?

A: No. Most internal NPS communications at a park unit occur in the “VHF” portion of the radio spectrum, near the commercial FM radio band. Most Amateur Radio communications occur on frequencies much

lower in the radio spectrum. In a January 20 conference call with the NPS Radio Program and Spectrum Management Division, ARRL representatives discussed this issue, and concern of interference from Amateur Radio operations among NPS staff on the call was quickly negated.

Q: How large is an Amateur Radio station?

A: They can range from very large, to very small. Many Amateurs have the ability to transmit directly from their vehicle. Some can carry an entire station capable of worldwide communication in a daypack.

Q: Will Amateur Radio disrupt my park and other visitors?

A: Not if you don't want us to. Whether operating from a car or setting up a small, temporary station in a more isolated area, an Amateur Radio station can be established with minimal impact on your unit. ARRL's literature on NPOTA stresses the Leave No Trace philosophy, and advises participants to adhere to all NPS rules and policies. See the NPOTA Activator's Guide at www.arrl.org/npota-docs for specifics.

Yosemite's Common-Sense Approach to NPOTA Operations

ARRL was asked to help craft a rules and regulations document for NPOTA activations at Yosemite National Park. We appreciate the opportunity, and hope the Yosemite document will be of help to NPS units across the country. Read the Yosemite Document [here](#).



Ham Radio from John Muir NHS



Ham Radio operator Klaus Berkner, K6KHB, along with four of his colleagues, transmitted from John Muir National Historic Site on Sunday, January 9. They made 302 two-way radio contacts around the globe in just four hours - more than one per minute! (Lew Jenkins, photo)

On Sunday, January 9th, four colleagues and I transmitted from John Muir National Historic Site, NPOTA unit designator NS42. Our activity was evenly split between voice and Morse code. We operated for slightly over four hours and made 302 contacts, or about 75 contacts per hour. That's more than one contact a minute! The park Rangers were incredibly supportive and helpful from start to finish. They gave us exceptional access to an important area of this Historic Site and were around during much of the setup, where they asked many questions about Ham Radio. When we began talking to hams in Europe from California, they were quite impressed. A special "thank you" to Jim MacDonald, the Lead Park Ranger at John Muir National Historic Site for his kind understanding and support for this operation.

Lew Jenkins, Amateur Radio operator N6VV
Carmel, CA

NPOTA Article at NPCA



The National Parks Conservation Association recently penned an article on NPOTA. They spent time talking with NPOTA creator Sean Kutzko, as well as the Harris family of Texas, who have used NPOTA and the NPS Centennial as a way to get quality “family time” from several NPS sites this year. You can read the NPCA article [here](#).

Tweet Out!



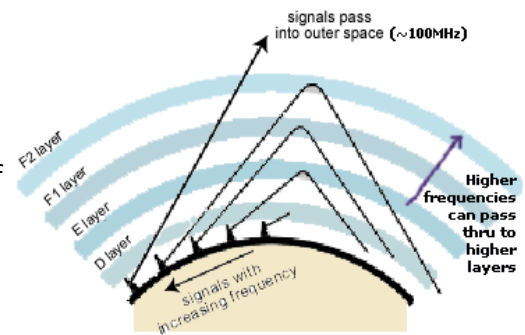
These NPS units have engaged with NPOTA on Twitter. Thanks!

[@JohnMuirNPS](#), [@MontezumaNPS](#), [@PecosNHP](#), [@GoParks](#), [@NPCA](#), [@NPamericansamoa](#), [@DryTortugasNPS](#), [@HopewellOhioNPS](#), and many others!

Follow [@ARRL NPOTA](#) on Twitter!

Did You Know?

Radio waves can travel around the world thanks to a layer of the atmosphere called the ionosphere. The ionosphere acts as a sort of mirror, reflecting many radio signals back to Earth. You can experience the effects of the ionosphere with any AM clock radio. During the day, AM radio stations can't travel very far... maybe 50 miles or so. At night, AM radio signals travel much farther; tune around about an hour after the sun sets and you'll be able to receive signals from stations hundreds of miles away!



How the ionospheric layers refract different frequencies

Questions about NPOTA? Want to be featured here? Drop us a line at npota@arrl.org, or call 860-594-0200 Monday-Friday 8A-5p Eastern Time.

