Anatomy of a POTA Rove

A seasoned portable operator explored the natural beauty and history of eastern North Carolina on a 2-day, nine-park radio adventure.

Marc P. Sullivan, W4MPS

At age 78, I still have a desire for adventure. Parks on the Air® (POTA®) fills that need by offering opportunities to visit beautiful locations, many of which I never knew existed. Exploring historic sites and wildlife refuges, coupled with the fun of portable operating, speaks volumes of the richness of our hobby.

I was anxious to hit the road. Several of my ham buddies recommended the Lake Mattamuskeet area in the eastern part of North Carolina. So, I began studying POTA maps in that area and decided on a 2-day, nine-park rove.

The most important part of a POTA activation is planning; there are many ways to set up for an activation, depending on the logistics at the target location. Thanks to the wide array of available online resources, you can easily determine the rig, power source, and antenna that offers the best combination of comfort and signal efficiency for each park.

For my trip, I used the POTA website (**https://pota.app**) to pick locations that I could reasonably activate over 2 days. The nine parks in my planned route varied greatly, from wide-open areas with few other people, to congested areas with limited deployment options.

Marc, W4MPS, operates from Gull Rock Game Land (POTA US-6908) using his elevated 20-meter quarter-wave vertical antenna.

Day 1: The Road to Mattamuskeet

Bonner House Historic Site (POTA US-10263), located in Bath, North Carolina, is just over 2 hours from home along the route to Mattamuskeet — the perfect place to start my rove. Originally owned by a prosperous naval-store merchant in the 1800s, Bonner House is a great choice for combining history with ham radio.

I left home around 8:00 AM and was on the air at Bonner House by 10:30. I operated from the back seat of my vehicle, as there was limited space to set up a freestanding antenna. The best option was hamsticks for 40 and 20 meters mounted on the roof of the car. I used an Elecraft KX3 situated on a lightweight piece of plywood and powered by a small 4.6 Ah LiFePO4 battery. The hamsticks and backseat shack accommodated a quick setup and takedown. I made 27 contacts here over 45 minutes. Several buddies tracked my progress during this trip, and they were ready for me when I called CQ. Chris, W7AMD, and Rich, N4EX, were the first two in my log. The biggest surprise was a call from Chris, F6EAZ, from Dijon, France.

The next stop was Swanquarter National Wildlife Refuge (POTA US-0419), in Swan Quarter, North Carolina. This 16,000-acre reserve borders the Pamlico Sound. My good friend Paul, AA4XX, had previously activated this location, so I was able to draw upon his experience to help with my plan. With his tips and some help from Google Earth, I found a dirt road leading to Bell Island Pier. The road went on for what seemed like forever. When I finally arrived at the pier, my clean car was covered in road dust.

There wasn't another person to be seen. I had plenty of room to erect an antenna, so I deployed my homebrew 40-meter doublet, with the center attached to a 30-foot extendable mast mounted on a drive-on base. I set it up as an inverted **V** with a 300 Ω twinlead feeder attached to a 4:1 balun. A run of RG-8X coaxial cable completed the setup. I was on the air at 12:15 PM as planned. Propagation conditions on this trip were up and down,

and several solar flares were predicted. Conditions were poor, but I still managed 17 contacts running only 10 W. I also logged six park-to-park contacts, including one to Tripp, N4NTO (now SK), who was also on a North Carolina POTA rove.

After 45 minutes, I packed up and made for Gull Rock Game Land (POTA US-6908), also in Swan Quarter, North Carolina. Consisting of almost 30,000 acres, Gull Rock is even more remote than the Swanquarter Refuge. There was not a soul to be seen here either, and it was truly beautiful and pristine.

Marc's "Shack on a Board," consisting of an Elecraft KX3 transceiver, portable key, UTC clock, and 4.6 Ah LiFePO4 battery, mounted to a lightweight piece of plywood.

I set up at the water's edge and tried my third antenna choice: an elevated 20-meter quarter-wave vertical, consisting of a 17-foot extendable whip mounted to a wooden mast on a sturdy tripod. This setup lets me raise the vertical about 5 feet. I attached two tuned radials to nylon fence posts. If you angle the radials slightly downward, the feedpoint impedence is relatively close to 50 Ω. I put a home-wound RF choke at the feed point to block any common-mode current that might run down the coax to the rig. Again, propagation conditions were spotty, but I managed 39 contacts in 30 minutes of operating time!

The afternoon was ending, so I completed my activation and headed to Carawan's Cabins and Campground in Swan Quarter. The accommodations were modest, but it was clean and fully equipped, with charming, helpful hosts — it was a perfect, centrally located base for my trip.

I had one more park targeted for that day: Mattamuskeet National Wildlife Refuge (POTA US-0414), not far from the cabin. This beautiful, RF-quiet site contains Lake Mattamuskeet, the largest freshwater lake in North Carolina. Because the sun was setting, I used my quick-deployment 20-meter elevated vertical and made 15 contacts. Propagation conditions were deteriorating rapidly — signals were fading, and interference was increasing. However, in addition to my trusty spotters W7AMD, N4EX, and W4MY, I logged stations ranging from the Dominican Republic to Nova Scotia, plus one park-to-park contact. That completed my targeted rove for day one, and I returned to my cabin.

When I got back, I noticed several people standing outside, gazing up at the sky. I immediately realized the cause of my atmospheric challenges — the aurora borealis! There is little light pollution in this part of North Carolina, so viewing the Northern Lights was not difficult. What a beautiful way to end a long but exciting day!

Day 2: Radio on Roanoke Island

I targeted five parks on day two. After a quick breakfast, I headed up Route 264 toward my ultimate destination, Roanoke Island. Travel time was about 1 hour to my first stop, and I don't think I saw one other car along the way.

My first stop was a "two-fer": Dare State Game Land (POTA US-6900) and Alligator River National Wildlife Refuge (POTA US-0410), both in Dare County. I found a great spot near a gazebo in a place called Stumpy Point on the Croatan Sound. I used my hamsticks and got on the air by 10:45 AM, making 35 contacts over 60 minutes. Conditions were much better that morning, but for the sake of time I packed up and continued my journey toward Roanoke Island.

My next stop was Roanoke Island Marshes State Game Land (POTA US-3865), in Wanchese. This park is situated along the Roanoke Sound. I found a parking lot near the water and set up my KX3 and hamsticks. Band conditions turned sour again, but I managed to log 13 contacts over a half-hour period. In addition to my usual spotters, I was excited to get a call from another old friend, Carl, W8WZ, who had recently relocated to Louisiana — Carl was a park-to-park contact from Jean Lafitte National Historic Park and Preserve (POTA US-0040), near New Orleans.

Marc, W4MPS, uses his hamstick antenna from Stumpy Point, on the Croatan Sound, to log 35 contacts at Dare State Game Land (POTA US-6900) and Alligator River National Wildlife Refuge (POTA US-0410). Visit **https://youtube.com/watch?v=k8Rk57XG32o** to watch a slideshow of additional photos from Marc's POTA rove.

After a quick lunch, I continued to Roanoke Island Festival Park State Historic Site (POTA US-6850), in Manteo. This park, a popular 27-acre tourist attraction, recreates what life was like for the first English settlers in 1585. This was another easy antenna choice — hamsticks on the car roof. Even with such a benign setup, I had several inquiring visitors wondering what I was doing in the back of my car with headphones on. I am always happy to take a break and explain ham radio, POTA, and the reasons I've been enjoying the hobby since 1964. Reactions are always the same: "That's so cool!" Band conditions turned against me again, but I was able to log 15 contacts, including two park-to-park contacts in Michigan and Pennsylvania.

I had one more park to go: Fort Raleigh National Historic Site (POTA US-0820), another popular tourist attraction in Manteo. After the Civil War Battle of Roanoke Island, a Freedmen's Colony was established here to assist formerly enslaved peoples. The park hosts the famous "Lost Colony" theatrical show. It also has a connection to radio history — Reginald Fessenden, "The Father of Voice Radio," conducted several of his radio experiments at this site from 1901 to 1902.

My KX3 and hamsticks resulted in 22 contacts, including a call from Vlado, N3CZ, from western North Carolina.

Lessons Learned

Over the course of my 2-day, nine-park POTA rove, I learned several lessons that might come in handy for any hams looking to plan a similar trip:

- Bring backups for every important element in your kit! I brought two rigs on my POTA rove — my KX3 and an FT-857D. When I connected the FT-857D to the battery, I discovered a fuse had blown, and I hadn't brought a spare. Without my second rig, the trip wouldn't have happened.
- Many POTA parks are also designated World Wide Flora and Fauna (WWFF) sites, allowing you to claim credit for both programs in a single trip. For example, Swanquarter National Wildlife Refuge is also a designated WWFF site (KFF-0419).
- In remote locations, you never know if there will be cellular and/or internet access. Share your operating plans with others so they can keep an ear out for you at your expected activation times.
- I rarely use my handheld transceiver, but as I traveled across the state for my POTA rove, it occurred to me that I should bring a 2-meter radio with me on trips like this. If I ran into a problem with no cell service, I could hit a local repeater to request assistance.
- Never let poor propagation predictions deter you from getting on the air. I've made many memorable contacts on days when conditions were supposed to be horrible!

I encourage everyone in our community to consider a rove of your own. You won't regret it!

All photos provided by the author.

Marc Sullivan, W4MPS, is an Extra-class operator, continuously licensed since 1964. He is a native of New Jersey and held the previous call signs WB2PRS and WA2S. After a long career in commercial real estate finance, he and his wife, Eileen, retired in 2009 and relocated to North Carolina. Marc is a member of the Raleigh Amateur Radio Society (RARS) and has served as Vice Chairman of the North Carolina QSO Party for the past 12 years. He can be reached at **w4mps@nc.rr.com**.

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