

Turtlehead Peak On the Air

A first attempt at putting a summit on the air has a few ups and downs.

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My December 6, 2013, Summits on the Air (SOTA; www.sota.org.uk) climb up Turtlehead Peak led to my first summit activation, first 20 meter contacts, and my first contacts east of Colorado — ever.

I didn't carry a ton of ham radio experience to Turtlehead. I have 4 years of experience with a General class license in Seattle, where I have a 40 meter dipole hung on a fence, but with only 150 W from an Icom Marine IC-M802 transceiver, my range is limited.

Red Rock Portable

Last summer, I decided on a summit activation of Turtlehead Peak. Located in the Red Rock Canyon National Conservation Area (www.redrockcanyonlv.org), just 20 minutes outside Las Vegas, Nevada, Turtlehead Peak is 6323 feet above sea level. The maps show a trail and 2000 feet of vertical climb in 2.5 miles. Red Rock has a paved 11-mile one-way drive that takes one up into the foothills of the Spring Mountains, just below La Madre Mountain (the skyline just to the west from the Las Vegas strip). Las Vegas also has great 2 meter connections, easily accessible from the Red Rock Drive.

I acquired the backpack-friendly Yaesu FT-817ND transceiver. It runs 5 W and is intended to drive a portable multiband vertical antenna. On July 4, 2013, I tried operating portable at Sawtelle Peak in Montana with the 817ND. Despite long hours, I only got three or four low-power SSB contacts. This gave me a lot of respect for those willing to work low-power operators down in the noise. Many times, it takes high-power operators for low-power contacts to work.

The frustration and difficulties in getting out (I could hear everyone, just not talk to them) led me to the idea of carrying a Tokyo HyPower 45 W amplifier for the 817ND. The puzzle was how to power it. I am not an electronic whiz so, because I had to fly, my plan was to power it with 10 D-cells. My radio budget reached its limit with the



Figure 1 — View of the Turtlehead Peak summit from west ridge.

amplifier itself, so spending \$15 on D-cells for a one-time use was attractive.

My friend Mike Mraz, N6MZ, is an electrical engineer and far more experienced with DXpeditions. He suggested operating on 20 meters, so I cut a new dipole slightly long for 14.252 MHz. I planned on using an automatic tuner rather than cutting to an exact length. I didn't think to ask Mike about the D batteries.

D-cell Dilemma

I again ran out of time running a test of the amplifier and the 817NT, getting a 40 meter test contact in from Tucson, Arizona on the coil vertical, set up short with minimal radials. I didn't even get to try the newly cut 20 meter dipole wires. The HL-45B amplifier ran well on 12 V from a power supply, but *shut down* using the D cells, which couldn't supply the current for the amplifier.

Small 12 V sealed lead acid batteries are available from vendors in Las Vegas, but I was flying in late on Thursday. My plan was to hit the road early to be at the Red Rock park entrance station at 7 AM Friday. I found a chain auto repair store that sold batteries but didn't open until 8. I went to one of the chain's branches in Tucson and learned that their batteries are shipped

empty of acid and *uncharged*. I called the Las Vegas store, who said they "*never charge batteries*" for people.

My planned start of radio operations was 1700Z, which I had posted on the SOTA Watch website (sotawatch.org). I would be 5 W on top of the peak, which was a serious disappointment and, I thought, a recipe for hours of frustration. I had to make four contacts to qualify as a SOTA peak activation. Based on my Sawtelle Peak experience, it would be a push to get even one.

I had to organize and pack the backpack for the hike very early on the morning of the hike. It took some doing to get the radio, cables, vertical, LDG Z-817H tuner, dipole wires, radials, emergency gear, warm clothes, and water in the backpack. The weather forecast was good for December. It would be above freezing, perhaps getting to 40° F, and clear. It took from 4 AM to 6:15 AM to pack!

It was just getting light and there was snow showing on the upper reaches of the Spring Range. I was the second car at the Sandstone Quarry parking area. I was able to hit the trail at 8. The full-size backpack was full to the gills and *heavy*, but the peak and countryside were beautiful.

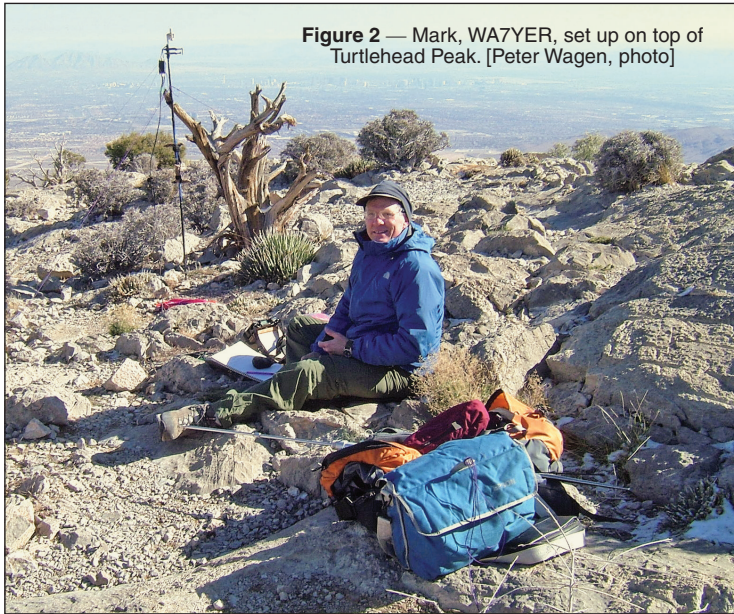


Figure 2 — Mark, WA7YER, set up on top of Turtlehead Peak. [Peter Wagen, photo]

Toward the Top

The trail works its way up a wash, then an alluvial fan, to the base of a gully below the west ridge of Turtlehead Peak (see Figure 1). The peak stands on its own, so it had great view prospects. I kept looking up, trying to see where the trail traversed and switched back to the saddle at the top of the gully, but couldn't see it. As it turns out, when you arrive at the base of the gully, the trail becomes a set of meandering scramble tracks, with more than a few places where hiking became climbing.

As I climbed, snow appeared in the shady areas. By that point, I was hiking very slowly, a step at a time, with lungs acclimated to Seattle's 375-foot elevation. It took me an hour to reach the base of the gully, another hour to travel the ¼ mile up the gully to the saddle, and 45 minutes from the saddle to the top. I arrived at the peak at 10:45 AM, only 15 minutes before my activation time. Conditions at the top were cold and windy, but sunny.

Mike had graciously agreed to be my first contact, so I pulled out my cell phone to set it up. The cell signal was nearly non-existent, and worse, due to the cold, the cell phone battery was dying. I could not get a call through, so I set about raising the antenna.

Time was running short. I moved away from the summit, linked together two hiking poles with hook-and-loop fasteners, and wrapped them to a juniper snag.

I hung an LDG RBA low-power balun at

body level and put in the two new 20 meter dipole wires. I spread the dipole, tying each end to rocks with light cord. The antenna was about 5 feet off the ground at the center, 2 feet at the ends. Not just a cloud burner, a ground burner. Peter Wagen, who hikes extensively and posts trail videos (www.trailvista.com), graciously took some pictures of the setup (see Figure 2). I was as ready as I would ever be. It then occurred to me that I could try to text Mike. I held the phone up and texted "14.342.5."

CQ QRP SOTA

It was about 11:30. I called my first tuning test. Mike texted that he was having microphone problems. I called "CQ QRP SOTA," and had an immediate contact from Kansas, WØMNA. I was 2 × 2. A couple of despairing texts from Mike later, he finally was able to swap equipment and was on the air. He came in clear as day, 59, very strong and clear. I was 56 but above the noise and clear. This was our first HF contact with each other ever as well. The conditions were different than my prior low-power attempts — very different. Mike posted on SOTAWatch that I was live and then things got *really* different.

Now knowing I was getting out, I called "CQ SOTA" again and the contacts started flying. Kansas again, Alabama, Texas, Oregon, Minnesota, Indiana, North Carolina, Ohio, and Arkansas all jumped into my log. I was between 22 and 44, mostly toward the higher end. The contacts were mainly 59 on my end. I made more HF contacts from

Turtlehead than I do in an average year — and on low power. It was fun. I found I didn't miss the amplifier and battery.

I received a request through Mike to try 40 meters. I switched over and loaded up, but I was unable to get on 40. I went back to 20 and promptly worked Washington State twice and then reconnected with Mike. Now I could hear the West Coast noontime net on 7.265.5, but they couldn't hear me. Was propagation shifting? By 1:50 PM, calling CQ on 14.342.5 yielded no further answers. The afternoon was over.

Pack It Up, Pack It Down

I tried monitoring the 2 meter calling frequency, 146.52 MHz, as I was packing up, but heard nothing. The sun was moving lower in the sky. If it took me 2½ hours to get down, I would arrive at the car barely before dark. It was time to move. The whole north slope of the peak down to the saddle was snow-covered, so going down was slow work — but faster than going up. The view down the gully was a bit daunting. The hike was a reverse scramble. My knees were tired, but I was maintaining a good pace. Moving across the wash to the car, it had only taken 1 hour and 45 minutes to get down — just in time to see the sun set.

I was tired, but ham radio-wise, I had never felt better. For my Turtlehead SOTA activation, my first SOTA, as I understand it, I now have 2 points toward the 1000-point SOTA "Mountain Goat Award." That's only 500 more activations to go!

Photos by the author except as noted.

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