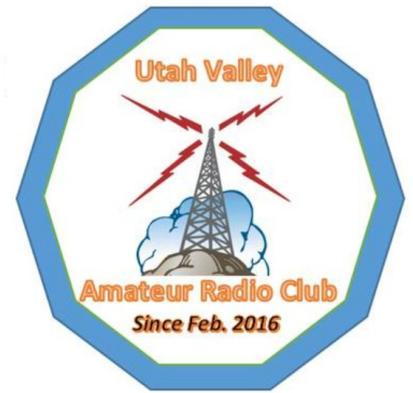


# Hot Tips

*Good info for the new ham, and old stuff to refresh your memory*



## Lessons learned in the desert

I spent much of this past weekend (15 October 2022) doing public service for the [Pony Express 50 and 100 Trail Endurance Run](#). Here's a report of some of the lessons I had learned.

**Getting there** I tried to take the recommended route to Black Rock Pony Express Station. It looked like it would bypass the route where all the runners were, and take me directly to my destination, but some of it seemed to go through the military base at Dugway Proving Ground. So, I took back roads that connected with the Pony Express trail the runners were on, but progress was slow as I tried to get around everyone without kicking up too much dust. If I do this again, I'll take the long way around to avoid driving through the runners.

**Ham radio signal** We used the [Vernon VHF repeater](#) for this event. I could already hear and be heard from my truck-mounted antenna, but the signal was scratchy. I decided to put up a short mast on my trailer hitch and my [Comet GP-6](#) antenna. This cleaned up the signal beautifully. It worked so well that I was able to keep my transmit power to the minimum, preserving battery life for the long event. I powered the mobile radio with a dedicated 20 Ah battery, which was more than enough for this event. There was very little actual radio traffic.

**Starlink** A big key to the success of my station was having the Internet to send and receive runner tracking data via an app so I didn't have to say it all over the air. Miles from civilization, nobody could get a signal on their cellphones on any carrier. I brought my [Starlink RV](#), whose WiFi was fast and reliable for all 11 devices that I shared it with.

**Starlink battery** I was curious whether my large [100 Ah battery](#) had enough capacity to

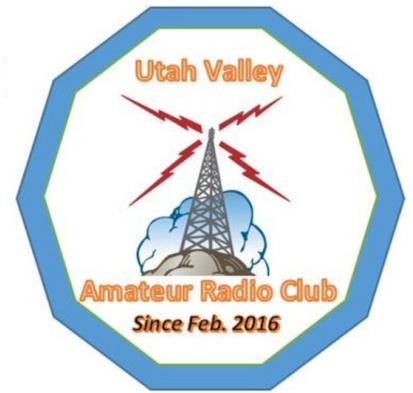


serve the Starlink RV for the whole event, because an unmodified Starlink RV draws something like 100 W to run its tracking motors. I streamed music the whole time to help me notice if it ever failed. My alternate plan was to switch to another battery, then turn it on and off, only as needed. I was delighted to see it had more than enough capacity, powering the Starlink for the full 12 hours that it needed.

**Baofeng radios** Two other less-experienced ham operators spent time at my station before they moved on to their own assignments at Fish Springs. They had some Baofeng handheld radios that weren't working. I noticed they didn't have the correct transmit offset or tone. After getting those parameters fixed, the radios still weren't getting through the Vernon repeater. With a [pigtail adapter](#), I connected their radios to my big antenna and they worked fine. With that knowledge, they went to Fish Springs and got an antenna up higher and had success. I showed them how they could transmit "on reverse" if they needed, so I might at least hear them from my station, if they couldn't get through the repeater.

# Hot Tips

## Continued



**Packed light** Although it didn't look like it from all the gear in my truck, I left a lot at home. I didn't bring a canopy, all my guy lines and antenna mast sections, and I didn't even bring my go-box. My plan was to bring just enough mast sections to get some height with the big antenna, and spend most of my time using the radio in the truck. I set up a table and chairs beside the truck so I could hear any radio traffic through the window. I also brought a pair of FRS radios so someone hearing radio traffic could let me know about it in case I had wandered too far away.

**Camping toilet** I didn't know if there would be a porta potty there so I brought my own camp toilet, just in case. At first, there was a set of porta potties there, but they were removed before the event was over! Many were grateful that I brought mine.

**Chromebook** I brought my Chromebook without any real plans to use it. Eventually I put it to work as a runner lookup station. Its larger screen was much easier for viewing the columns of data than viewing it on my phone.

**Food** I didn't bring more than travel snacks because the staff provided so much food already. They cooked regular and mushroom burgers, brats, made chimichurri sauce, and even a delicious pot of chicken noodle soup.

**Long hours** My waking hours were 5:00 am Friday to when I finally went home to bed at 5:30 am Saturday. The event alone went 12 hours from 1:30 pm to 1:30 am. That was too much for me. I was dangerously fatigued and shouldn't have tried to drive home, which took around 4 hours. I should've followed my first plan to stay the night.

**People** I brought a friend with me. I met hams Kyle and Curtis, plus Ryan Simpkins N2OW, who was there to support his wife Heather KI7ERW, in the race.

**Chem lights** I brought chem lights and shared them when it got dark. They were helpful to mark the finish line and the location of the turn-around point for the 50-milers.

**Tire deflation** When I reached the washboard dirt roads, I stopped and let half the air out of my tires. With four-wheel drive and softened tires, I was able to move a fast 55 mph over the rocks and bumps, and it felt remarkably smooth. I re-inflated the tires after returning to the pavement. I used a welder's 10-lb CO<sub>2</sub> tank to inflate them, which was fast compared with using any kind of pump. The Jeep Gladiator was well-suited to this event.

**Battery vs. generator** I've avoided getting a generator because I prefer the silence of batteries. Now that I know 100 Ah was more than enough capacity for even these longer events, I feel like that was enough power for me.

**Vibrations unscrewing nuts** One thing I've learned is that vibrations are great at unscrewing things. I lost a screw from my mobile radio mount from vibrations. I also lost two nuts from my antenna's radial elements just from the vibrations in the cargo bed. I'll be looking for ways to mitigate that going forward.

**Bib overall** There was no snow this year, but I got cold. The [Carhartt Biberall](#) and jacket combination kept me comfortable when the temperatures dropped.

You can see a [video of my trip right here](#).

*Roger Brown AG7YV*

