Satellite Roving — 104° Longitude

James Wilson, K5ND

Satellite roving can be a real blast. But, of course, it also has its challenges. My first activation of a grid line began with a fumbling, stumbling approach to finding a grid line. I chose the wide open spaces of Eastern New Mexico, near House, NM, and the grid line between DM74 and DM84, at 104° longitude.

The choice was reasonably simple. I was in Amarillo, DM95, visiting my daughter and son-in-law. Friday, while they were both at work, I got up at zero-dark-thirty and traveled about two and a half hours to the grid line. I allowed 45 minutes to get everything set up and then worked FO-29, XW-2A, AO-85, and another FO-29 pass.

Grid Line Found

Finding the grid line was relatively easy. In Figure 1, you can see the road and lots of shoulder for parking. Then I moved back and forth until I could be absolutely sure that I parked on the grid line. I took photos from the Maidenhead and MyGPS Coordinates apps on my phone for validation — all per the ARRL VUCC Rules.

Station Set Up

My roving set up is an Icom IC-910H, Arrow antenna, Apple MacBook Air laptop with MacDoppler, an XG Comms USB connection to the rig, as well as a 35 amp hour sealed lead acid battery. I also use the AudioNote app on my laptop to record the QSOs. It's not a lightweight setup; it's more in line with my belt and suspenders approach to most things.

I also spent some time testing my portable system before the activation because I didn't want to drive all that distance and then not get on the air. So I tested it all at home outside on the deck and then in Amarillo in my daughter's backyard, providing a few contacts from DM95.

Even with that testing, I still encountered a few problems on the grid line. The first was that the USB connector appeared to be physically broken. Fortunately, it was only the plastic case that was falling off. Electrically it worked just fine. Although, that wasn't confirmed until I booted and rebooted the radio and laptop to get the connection working. That is my normal challenge connecting to MacOS. It happens at home with my IC-9100 as well.

I discovered another problem after the first couple of passes. I was taking a few photos and realized that one of the UHF elements on the Arrow was missing. Fortunately, that didn't seem to pose much of a problem on the air. I later found the two arrow elements and the screw lying on the floor in the car. They had vibrated loose during the drive. I'm glad I found them and that their loss didn't pose an on-the-air problem.

Results

I managed to get 22 stations in the log, and many of them reported at least one new grid for their logs.

Burt, FG8OJ, was the first caller right after my initial CQ on FO-29. He reported that it was at one degree elevation for him. He was waiting for me as he needed that grid. Only Christy, KB6LTY, answered my call on XW-2A.

On AO-85, I listened to a few conversations going on until Patrick, WD9EWK, called me. He needed the grid. I had thought about skipping the FO-29 pass that was at 20 degrees and to the west. But when I got on, I worked as many stations as on the first FO-29 pass. So, that was well worth it.

I had announced my planned operation on Twitter (@k5nd), which is why Burt and Patrick and a few others were ready for the activation. I like Twitter for keeping up with grid activations. I've been on Twitter since 2008 all the while trying to determine its value. Now I've found it — connecting with other satellite operators. Try it.

Thanks to everyone who got up early to work me. It's very satisfying to provide new grids and do some small payback for the very active grid rovers that have filled up my logbook.

About the Author. Jim has been an active amateur radio operator since 1973. He started satellite operating in 2015 with his first contact with Clayton Coleman, W5PFG, who forwarded the recording. You can learn more and follow his ham radio adventures at **www.k5nd.net.**

Figure 1 – Finding the Grid Line at Zero Dark Thirty.

Figure 2 – Wide Open Spaces in Eastern New Mexico.