

LWC Community Radio Service (CRS)

Electrical Upgrades to the Crow's Nest

(Bill Albright - January 23, 2026)

Work Completed

1. New **Electrical Circuits in Crow's Nest**: 60 amp feeder to new **Subpanel**; (3) new **Quad Receptacles**; new **Internet Cable**. Will allow CRS radio operators to:
 - Recharge the 23.8 lb Jackery power banks without carrying them down stairs
 - Use the AC-to-DC power source for our Yaesu 50 watt HAM radio
 - Operate a PC, a scanner, a printer, a space heater
2. New **Electrical Outlets in Yoga Room** will facilitate ICS operations
3. New **LED Overhead Lighting** in Crow's Nest provides:
 - A separate circuit from the existing lighting on stairwell to 2nd floor
 - A separate light switch inside the door to the Crow's Nest
 - Better lighting for radio operators working in the Crow's Nest
4. New **Grounding Bar**: is tied into the building's Ground Electrode System (GES) as per code

5. A **Sliding Window** to replace the fixed window on landing in the Crow's Nest will allow:
 - Fresh air in the warmer months
 - Access to the mast and antenna for adjustment and servicing

Work Still In Progress (materials on order)

1. Install our existing Diamond Antenna on a **Telescoping Mast** with better grade of Coaxial Cables
 - Based on our tests, we expect our Diamond antenna will work well for both our 20 watt GMRS radio and our 50 watt HAM radio
 - A Telescoping Mast will allow the antenna to be raised above the roof line for optimal transmission and reception, and to be lowered below the roof line in case of extreme wind events
2. Build and install a weather-proof **Wall Pass-Thru** for the coaxial cable
3. Install a **Lightning Arrester** on the coaxial cable
4. Install a **Coax Switch** that allows the operator to switch the antenna between our GMRS and HAM radios
5. Ground All Components to Grounding Bar