

HOTERA WXN and APRS Upgrades January 18, 2012

This afternoon, a group of KE5RCS D-Star users gathered at the repeater site to make several improvements. Jim, WA1KMA, Barry, N4QW, Ken, K7MAL, Lloyd, K1LGJ, and Brad, KV5V, assembled to install a Kantronics Weather Node and replace the aging antenna on the APRS system.

The APRS transceiver had used a Ringo AR-2 antenna since January, 2011, when the system was first put on the air. Today, the old antenna and feedline were replaced with a Diamond D-50 antenna (now mounted slightly higher on the tower) and LMR-400 feedline. The antenna has a clear view of the valley between Rabbit Hill in Georgetown and the ridge north of Jarrell, which descends into Salado Creek in Salado. The changes should considerably improve the coverage of the system.

The Kantronics Weather Node was installed mainly to remotely monitor the AC power in the equipment building and report the status of the batteries which back-up AC power. As an added bonus, the Weather Node also reports wind speed, wind direction, and indoor and outdoor temperatures. Most of the wiring, as well as the wind speed and outdoor temperature sensor, was installed today. The installation will be completed on Friday.

When the software and hardware parts of the project are finished, visitors to the HOTERA Web site will find a window on the introductory page showing the following:

- Outdoor Temperature
- Indoor Temperature
- Wind Speed
- Wind Direction
- UPS Battery
- D-Star System Battery
- AC Power Status (on/off)

We believe this information will be useful to those of us who must keep the repeater equipment operating during weather events. Visitors to the HOTERA Web site should also find it useful.