

Boone County MO ARES SET 2018

Boone County ARES (BCARES) in conjunction with Boone County Office of Emergency Management (OEM) held the Simulated Emergency Test (SET) on November 3, 2018.

Objectives for this year's exercise:

1. Assess coverage of the 146.610 MHz repeater from its new installation.
2. Assess fill-in coverage of the county using 444.175 MHz repeater.
3. Assess Winlink application email by RF from mobile operations.
 - a. Utilizing Forms in Winlink Express
 - b. Attaching files for delivery via Winlink
4. Practice sending formal traffic via voice utilizing message formats from Radiogram and ICS213 forms.
5. Track mobiles utilizing APRS.
6. Exercise the WX0BC radio capacity in the Boone County Emergency Communications Center (ECC).

Seventeen operators participated in the exercise; thirteen Rovers, two Monitor Relay stations, and two at the Emergency Communications Center (ECC) as Net control operators. OEM identified eighteen points across the 685 square mile county (see map, Figure 5) for the communication exercise. OEM placed surveyor's flags and data packages at each drop point the day before the exercise. Radio operators, after a roll-call check-in net, were assigned Tactical call signs and deployed to

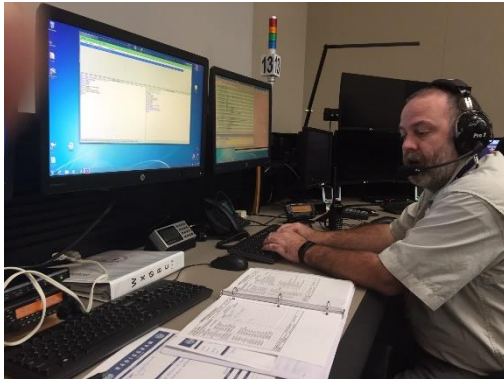


Figure 2 NCS, KM0R, operating from ECC Boone County, MO

their assigned drop points. Instructions in each data package directed the radio operators to create and deliver test messages that had been created by OEM as a simulated natural disaster event.

Messages were to be created in the form of Radiograms and ICS-213s. Eight operators had Winlink mobile capabilities and 7 ICS-213s were received at ECC via Winlink from this group. We have three local VHF RMS nodes and two local HF Winlink nodes, but not all were satisfactory in the Missouri River bottoms. One operator was

successful in relaying the Winlink traffic via a digipeater in Jefferson City from the Missouri River bottoms. Three Radiograms were received as attached Excel files created from VHF voice messages and sent via Winlink Messages from the Relay station in neighboring Callaway County. Thirteen Radiograms were received on voice using UHF and VHF repeaters. All but one operator were in contact with NCS over the UHF repeater and all but two more had coverage from the VHF repeater.



Figure 1 Data package found at each Drop point

The UHF repeater is more centrally located and at a higher elevation than the VHF repeater in the exercise.

Six Rovers were followed with APRS trackers and displayed on a monitor at the ECC. Coverage in southern Boone County in the Missouri River bottoms was actually relayed via APRS digipeater in Jefferson City, Cole County.

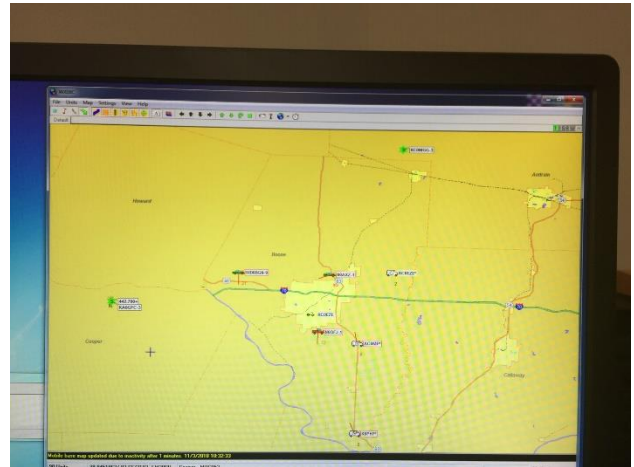


Figure 3 APRS map displayed at ECC showing our operators mobile positions during the SET



Figure 4 ATV display at ECC HDTV feed from Two Mile Prairie Elementary School

Amateur Television (ATV) was demonstrated between two sites and ECC with HD video over UHF. Full motion HD television was displayed at ECC from Two-mile Prairie Elementary and from Battle High School.

BCARES operates five radios (2 TS200s, IC 880, V71, and D710G) within the Joint Communications Center in the ECC. This facility provides a Winlink VHF Packet RMS node, a Winlink HF ARDOP RMS node, a SHARES Pactor4 station, a D-Star station, and all-mode, all-band Amateur radio HF/VHF/UHF services.

SET 2018 was a fine success accomplishing the design objectives set out. Communications was established and message traffic passed from all areas of the county. More training in formal message traffic handling is needed to improve our efficiency in this area.

Figure 5 Boone County MO Map showing 18 Drop points for SET 2018.

