Simulated Emergency Test (SET) 2025
Boone County, MO

At 8:30 AM, November 1, 2025 the Boone County Amateur Radio Emergency Services (BCARES) responded to an exercise RAVE Emergency Alert that was issued from the Boone County Office of Emergency Management (OEM). Thus began our Simulated Emergency Test (SET) 2025. The simulated scenario was the tornado event that traveled through northern Boone County and entered adjacent Audrain County MO. The American Red Cross was sending shelter volunteers into the effected areas, and requested BCARES support for communications to the EOCs in both counties. Twenty-four radio operators responded to the alert by checking into the BCARES 2M repeater which has emergency power. Check-ins were asked by Net Control to send a Severe Weather Report to the EOC from our Winlink Express users. This early report served to verify who was responding and what current conditions might exist at the home stations of these operators. Net control was transferred from the home station of our Early Net Control to our amateur radio station at the EOC after

the responding operator arrived at the EOC. A staging area was identified and the responding check-ins were asked to proceed to that staging area for further instructions, where Tactical call signs were assigned and location assignments were made. These initializing procedures were practiced and discussed at the training session we had four days prior. (Just-in-time-training)

Radio operators were dispatched in groups of two or three to seven Red Cross Shelters and

Figure 1 Just-in-time-training on responding and Winlink Express
Photo: KC0BTC, Ben Ross

Figure 2 Forum Christian team, Myron Kern, W0ZH, Taylor Brown, Red Cross, Carrie Clark, KF0ULA and 11-year-old, James Clark, KF0USV. Photo KF0ULA

community sites where the volunteers were waiting for them with simulated data and messages to be transmitted to the EOC via Winlink and our EOC station. The Red Cross also dispatched some volunteers to the EOC's.

Tactical Call signs were used on the voice net, such as "Forum Christian" for the Forum Christian Church site above. APRS tracking was used to provide a map of operators for display in the EOC. The yellow Pelican case above contains a self-contained APRS Tracker for those without APRS in their vehicle.

Some operators deployed portable antennas to ensure connections to our Winlink RMS nodes. We maintain both a VHF Packet node, and a VHF VaraFM node.

Volunteers, including Red Cross, city and church personnel, were stationed at each of the seven designated shelters with simulated messages for delivery by Winlink to the EOC. The EOC received 35 ICS213s while sending, either as Reply, or new request for information, 21 ICS213s to the shelter sites. (56 ICS213 messages in total). These ICS213s included ICS213s to the State Emergency Operations Center (KM0EOC) in Jefferson City and one to the National Weather Service via a St Louis Winlink to voice relay (KC0QMU) for weather reports. This was to demonstrate that we can deliver messages via the Winlink system to any location of interest with a Winlink account or

Figure 3 Portable anenna provides height for Jon Cole N0OFJ. Photo Dustin Rowland, KF0MLB.

voiced relay if Winlink is not available, as with the NWS office in St Louis. Internet email addresses can of course also used in the Winlink system, but not required in this SET. All messages were ICS213s utilizing the Winlink Express Standard Template forms. One ICS213 was sent to the EOC in Audrain County advising their activation. All ICS213 messages were sent and received by 12:30 and the net was closed, dismissing the portable radio operators from their assigned locations. Although available, no paper print outs were created as internal to the EOC operations we were also testing a new self-contained secure chat portal called Bridge4PS to get the information into the EOC floor. ICS309s were then created and printed in Winlink Express to consolidate the 56-message traffic into incoming and outgoing summaries.

BCARES continues to demonstrate the capacity to provide portable Winlink Express email by radio with considerable throughput to and from the EOC. When an ICS213 was received at the EOC (WX0BC), it was saved out of Winlink Express to a PDF file. The PDF file was then inserted into Bridge4PS (a shareable, data collection web-based platform) at the radio operator desk. It was then immediately available in the EOC room on the Bridge4PS platform for display and action as required. This allowed agency representatives in the EOC to read the messages and craft a response or answer to be sent back by radio/Winlink. This response was then scanned and sent by Bridge4PS back to WXOBC for transmission.

As a new venture this year, Boone County also partnered with neighboring Audrain County Amateur Radio group and Audrain County Emergency Management for the conduct of this test exercise. Both counties used the same scenario, staging operations, and distribution of operators to different locations. Communications were then tested between both EOC's to simulate collaboration during the response.

The annual SET exercise was well received by both the Red Cross participants and the Office of Emergency Management for Boone County Missouri. We look forward to continuing to grow and develop our capabilities and set an example for other groups seeking to partner with their local, state, and non-profit partners.